CTE - CIP Course Details Catalog

Cluster: Agriculture, Food and Natural Resources

CIP: 01.0000 - Agriculture, General. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18001A001	Introduction to the Agricultural Industry	1.00	2011	
18003A001	Basic Agricultural Science	1.00	2011	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18308A001	Agricultural Biotechnology	3.00	2011	
18305A001	Food Science Technology	3.00	2011	
18504A001	Environmental Science	3.00	2011	2015
18306A001	Aquacultural Science and Technology	3.00	2011	
18105A001	Veterinary Technology	3.00	2011	
18051A002	Biological Science Applications in Agriculture - Plants	3.00	2011	
18101A001	Biological Science Applications in Agriculture - Animals	3.00	2011	
18051A003	Agronomy	3.00	2012	
18101A002	Animal Science	3.00	2012	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18203A002	Agricultural Communications	3.00	2011	
18201A001	Agricultural Business Management	3.00	2011	
18449A002	Physical Science Applications in Agriculture	3.00	2011	
18449A003	Physical Science Applications in Agriculture II	3.00	2011	2011
18998A001	Agricultural Cooperative Education	3.00	2011	
22153A001	Cooperative Education	3.00	2011	
18998A002	Supervised Agricultural Experiences	3.00	2016	
18504A001	Environmental Science	3.00	2016	

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0000 - Agriculture, General.

State Course ID: 18001A001 **Course Title:** **Introduction to the Agricultural Industry**

This course provides an opportunity for students to learn how the agricultural industry is organized; its major components; the economic influence of agriculture at state, national and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in animal science, plant science, soil science, horticulture, natural resources, agribusiness management, and agricultural mechanics, will be presented. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18003A001 **Course Title:** **Basic Agricultural Science**

This course builds on basic skills and knowledge gained in the Introduction to the Agricultural Industry course. Major units of instruction include agricultural research, soil science, advanced plant science, biotechnology, advanced animal science. Applied science and math skills and concepts will be stressed throughout the course as they relate to each area. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18308A001 **Course Title:** **Agricultural Biotechnology**

This course examines the agricultural applications of biotechnology, the use of living organisms to solve problems or make useful products. Applications include technologies used in bioprocessing, cell/tissue culture, genetic and protein engineering. Specific units of instruction include: impacts of biotechnology, genetics, and biotechnology in plant, animal, and microbial science. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18305A001 **Course Title:** **Food Science Technology**

This course provides learning experiences in food science and safety which allow students to apply scientific knowledge and processes to practices used in the development and preservation of food products. Issues of food science and safety are examined from a scientific and technological perspective. Students critically analyze information to evaluate and draw conclusions on the appropriate use of technology to implement food science and safety practices. Units of instruction include: principles of food preservation, food processing, biochemistry of foods, and food selection and consumer health. Careers to be examined include meat inspector, quality control technician, food processor, and sanitation supervisor. Students will use scientific and technological information about food science and safety as a part of developing career plans and personal viewpoints on societal issues concerning the development and preservation of food products. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18504A001 **Course Title:** **Environmental Science**

This course examines the relationship of agriculture and the environment. The impact of plant and animal production practices on the environment and the adoption of practices leading to improved air, land, and water quality are investigated. Areas of emphasis include: types of ecosystems, management of waste, chemical use, soil conservation, land uses and regulations, and water and air quality. Encouraging students to be conscious and concerned about the environment and recognizing the need to conserve the environment and its resources will be a theme throughout. Careers of environmental technicians, soil and water conservationists, monitoring field technicians, land surveyor, and related occupations will be examined. Improving computer and workplace skills will be a focus . Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0000 - Agriculture, General.

State Course ID: 18306A001 **Course Title:** **Aquacultural Science and Technology**

This course is designed to develop student knowledge and skills in the area of aquacultural science and technology. Instructional units include basic studies of aquacultural species; reproduction processes, genetics, nutrition and health in aquacrops; ecological balances; and environmental requirements of aquatic plants and animals. Water quality, chemical and temperature analyses will be conducted for a variety of aquacrops. Individual and group experimentation and student research project(s) are required for satisfactory completion of this course. Careers to be examined include fish hatchery technician, production manager, fish nutritionist, and researcher. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18105A001 **Course Title:** **Veterinary Technology**

This course will develop students' understanding of the small and companion animal industry, animal anatomy and physiology, animal ethics and welfare issues, animal health, veterinary medicine, veterinary office practices, and animal services to humans. Career exploration will focus on veterinarian, veterinary lab technicians, office lab assistant, small animal production, research lab assistant, and animal nutrition lab technician. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18051A002 **Course Title:** **Biological Science Applications in Agriculture - Plants**

This course is designed to reinforce and extend students understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of plant growth and management in agriculture and the specific biological science concepts that govern management decisions. Topics of study are in the areas of initiating plant growth – germination, plant sensory mechanisms, enzyme action, absorption, and managing plant growth – photosynthesis, respiration, translocation, metabolism, and growth regulation. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18101A001 **Course Title:** **Biological Science Applications in Agriculture - Animals**

This course is designed to reinforce and extend students understanding of science by associating scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of animal agriculture and specific biological science concepts that govern management decisions in the animal industry. Topics of study are in the areas of growth and development of animals – embryology, ethology, nutrition, immunity systems, and processing animal products – preservation, fermentation, and pasteurization. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus . Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18051A003 **Course Title:** **Agronomy**

This course is designed to provide students with the knowledge and skills necessary for future employment in the agronomy or related industries. Major units of instruction include scientific method, cellular biology, genetics, biotechnology, soil classifications, soil erosion and management, soil fertility, plant classification, plant anatomy and physiology, plant propagation, plant growth, integrated pest management, grain, oil, forage, sugar, and fiber crop production methods, grain quality, grain storage, and grain transportation. Applied science and math skills and concepts will be stressed throughout the course as they relate to each area . Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

CTE - CIP Course Details Catalog

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0000 - Agriculture, General.

State Course ID: 18101A002 **Course Title:** **Animal Science**

This course will develop students' understanding of the livestock (beef, dairy, sheep, goats, and swine), poultry, and large (equine) animal industry. Topics of instruction include scientific investigations, genetics, animal anatomy and physiology, animal nutrition, animal reproduction, animal health, and meat science . Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0000 - Agriculture, General.

State Course ID: 18203A002 **Course Title:** **Agricultural Communications**

Students will analyze current agricultural issues and determine how they affect people on all sides of the issue. The students then learn and enhance their written and oral communication skills by presenting their views and opinions to the class. Students learn how to arrange and present debates, speeches, and interviews to be effective leaders in today's society. This course can also be designed to provide students with the knowledge and leadership experiences to help them to become successful in life and in the workplace. Students will further enhance their potential for leadership development, personal growth, and career success. Topics may include workplace skills, effective communication, decision-making, problem-solving, leadership styles and qualities, and successful execution of teamwork or collaborative activities. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18201A001 **Course Title:** **Agricultural Business Management**

This course will provide students with the basic knowledge and skills necessary to manage personal finances and develop into a successful entrepreneur and /or businessperson. Instructional units include: business ownership types, starting an agribusiness, managing and operating an agribusiness, financing an agribusiness, managing personal finances, record keeping and financial management of an agribusiness, local, state, and federal taxes, agricultural law, and developing employability skills. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18449A002 **Course Title:** **Physical Science Applications in Agriculture**

This course is designed to reinforce and extend students understanding of physical science and the scientific process by associating scientific and math principles and concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental /natural resource systems, agricultural production systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18449A003 **Course Title:** **Physical Science Applications in Agriculture II**

This course is designed to reinforce and extend students understanding of physical science and the scientific process by associating scientific and math principles and concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental /natural resource systems, agricultural production systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0000 - Agriculture, General.

State Course ID: 18998A001 **Course Title:** **Agricultural Cooperative Education**

Agricultural Cooperative Education is designed for junior and senior students interested in pursuing careers in Agriculture. Students are released from school for their paid cooperative education work experience. They participate in 200 minutes per week of related classroom instruction focusing on job survival skills, career exploration skills related to the job, and human relations skills. A qualified agricultural instructor is responsible for supervision and is given 30 minutes per student per week to do so. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations. The coordinator also needs to have taken 6 semester hours of organization and administration of cooperative education. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job seeking skills, personal development, human relationship, legal protection and responsibilities, economics of the job, organization and job termination. (NOTE: In schools with insufficient numbers to justify a stand alone Agricultural Cooperative Education course, Interrelated Cooperative Education with the same general requirements may be substituted.)

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 18998A002 **Course Title:** **Supervised Agricultural Experiences**

This course is designed to establish, improve, and/or expand knowledge and skills in various agricultural careers. Students will gain credit by establishing or continuing a Supervised Agricultural Experience (SAE) project at their home, at a business, or at their school often occurring outside the normal school day. SAE projects are typically entrepreneurial, placement or research based. Students are encouraged to add additional projects, experiences, scope, and growth involving managerial and decision making skills. Students will be required to verify their experiences by keeping written or computerized records including: business agreements, budgets, inventories, daily activities, hours worked, income and expenses, total earnings, depreciation, and net worth. Instructor supervision will be conducted to the student's home, place of employment, or location of project. SAE records should be evaluated at least once per month. In addition, classroom time may be incorporated for foundational knowledge related to the SAE. SAE lessons are integrated into each agricultural course which can also provide foundation al knowledge. SAE participation can lead to fulltime employment, scholarships, and awards through the FFA.

State Course ID: 18504A001 **Course Title:** **Environmental Science**

This course examines the relationship of agriculture and the environment. The impact of plant and animal production practices on the environment and the adoption of practices leading to improved air, land, and water quality are investigated. Areas of emphasis include: types of ecosystems, management of waste, chemical use, soil conservation, land uses and regulations, and water and air quality. Encouraging students to be conscious and concerned about the environment and recognizing the need to conserve the environment and its resources will be a theme throughout. Careers of environmental technicians, soil and water conservationists, monitoring field technicians, land surveyor, and related occupations will be examined. Improving computer and workplace skills will be a focus . Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

CTE - CIP Course Details Catalog

Cluster: Agriculture, Food and Natural Resources

CIP: 01.0101 - Agricultural Business and Management, General. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18001A001	**Introduction to the Agricultural Industry**	**1.00**	**2011**	
18003A001	**Basic Agricultural Science**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18201A001	**Agricultural Business Management**	**3.00**	**2011**	
18202A001	**Agricultural Sales and Marketing**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18402A001	**Agricultural Mechanics and Technology**	**3.00**	**2011**	
18203A002	**Agricultural Communications**	**3.00**	**2011**	
18051A002	**Biological Science Applications in Agriculture - Plants**	**3.00**	**2011**	
18101A001	**Biological Science Applications in Agriculture - Animals**	**3.00**	**2011**	
18449A002	**Physical Science Applications in Agriculture**	**3.00**	**2011**	
18449A003	**Physical Science Applications in Agriculture II**	**3.00**	**2011**	**2011**
18998A001	**Agricultural Cooperative Education**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	
18998A002	**Supervised Agricultural Experiences**	**3.00**	**2016**	

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0101 - Agricultural Business and Management, General.

State Course ID: 18001A001 **Course Title:** **Introduction to the Agricultural Industry**

This course provides an opportunity for students to learn how the agricultural industry is organized; its major components; the economic influence of agriculture at state, national and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in animal science, plant science, soil science, horticulture, natural resources, agribusiness management, and agricultural mechanics, will be presented. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18003A001 **Course Title:** **Basic Agricultural Science**

This course builds on basic skills and knowledge gained in the Introduction to the Agricultural Industry course. Major units of instruction include agricultural research, soil science, advanced plant science, biotechnology, advanced animal science. Applied science and math skills and concepts will be stressed throughout the course as they relate to each area. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18201A001 **Course Title:** **Agricultural Business Management**

This course will provide students with the basic knowledge and skills necessary to manage personal finances and develop into a successful entrepreneur and /or businessperson. Instructional units include: business ownership types, starting an agribusiness, managing and operating an agribusiness, financing an agribusiness, managing personal finances, record keeping and financial management of an agribusiness, local, state, and federal taxes, agricultural law, and developing employability skills. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18202A001 **Course Title:** **Agricultural Sales and Marketing**

This course is designed to develop student knowledge and skills in agricultural sales and marketing, commodity marketing, agricultural economics, and international agriculture. Instructional units include: successfully starting an agribusiness, developing a marketing plan, pricing, advertising, and selling products and services, communicating with customers, applying commodity trading techniques, basic economic principles, the international agribusiness economy, and agricultural career opportunities. Student skills will be enhanced in math, reading comprehension, communications, and writing through agribusiness applications. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18402A001 **Course Title:** **Agricultural Mechanics and Technology**

This course will concentrate on expanding student's knowledge and experiences with agricultural mechanics technologies utilized in the agricultural industry. Units of instruction included are: design, construction, fabrication, maintenance, welding, electricity /electronics, internal combustion engines, hydraulics, and employability skills. Careers of agricultural construction engineer, electrician, plumber, welder, equipment designer, parts manager, safety inspector, welder, and other related occupations will be examined. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0101 - Agricultural Business and Management, General.

State Course ID: 18203A002 **Course Title:** **Agricultural Communications**

Students will analyze current agricultural issues and determine how they affect people on all sides of the issue. The students then learn and enhance their written and oral communication skills by presenting their views and opinions to the class. Students learn how to arrange and present debates, speeches, and interviews to be effective leaders in today's society. This course can also be designed to provide students with the knowledge and leadership experiences to help them to become successful in life and in the workplace. Students will further enhance their potential for leadership development, personal growth, and career success. Topics may include workplace skills, effective communication, decision-making, problem-solving, leadership styles and qualities, and successful execution of teamwork or collaborative activities. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18051A002 **Course Title:** **Biological Science Applications in Agriculture - Plants**

This course is designed to reinforce and extend students understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of plant growth and management in agriculture and the specific biological science concepts that govern management decisions. Topics of study are in the areas of initiating plant growth – germination, plant sensory mechanisms, enzyme action, absorption, and managing plant growth – photosynthesis, respiration, translocation, metabolism, and growth regulation. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18101A001 **Course Title:** **Biological Science Applications in Agriculture - Animals**

This course is designed to reinforce and extend students understanding of science by associating scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of animal agriculture and specific biological science concepts that govern management decisions in the animal industry. Topics of study are in the areas of growth and development of animals – embryology, ethology, nutrition, immunity systems, and processing animal products – preservation, fermentation, and pasteurization. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus . Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18449A002 **Course Title:** **Physical Science Applications in Agriculture**

This course is designed to reinforce and extend students understanding of physical science and the scientific process by associating scientific and math principles and concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental /natural resource systems, agricultural production systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0101 - Agricultural Business and Management, General.

State Course ID: 18449A003 **Course Title:** **Physical Science Applications in Agriculture II**

This course is designed to reinforce and extend students understanding of physical science and the scientific process by associating scientific and math principles and concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental /natural resource systems, agricultural production systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18998A001 **Course Title:** **Agricultural Cooperative Education**

Agricultural Cooperative Education is designed for junior and senior students interested in pursuing careers in Agriculture. Students are released from school for their paid cooperative education work experience. They participate in 200 minutes per week of related classroom instruction focusing on job survival skills, career exploration skills related to the job, and human relations skills. A qualified agricultural instructor is responsible for supervision and is given 30 minutes per student per week to do so. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations. The coordinator also needs to have taken 6 semester hours of organization and administration of cooperative education. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job seeking skills, personal development, human relationship, legal protection and responsibilities, economics of the job, organization and job termination. (NOTE: In schools with insufficient numbers to justify a stand alone Agricultural Cooperative Education course, Interrelated Cooperative Education with the same general requirements may be substituted.)

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 18998A002 **Course Title:** **Supervised Agricultural Experiences**

This course is designed to establish, improve, and/or expand knowledge and skills in various agricultural careers. Students will gain credit by establishing or continuing a Supervised Agricultural Experience (SAE) project at their home, at a business, or at their school often occurring outside the normal school day. SAE projects are typically entrepreneurial, placement or research based. Students are encouraged to add additional projects, experiences, scope, and growth involving managerial and decision making skills. Students will be required to verify their experiences by keeping written or computerized records including: business agreements, budgets, inventories, daily activities, hours worked, income and expenses, total earnings, depreciation, and net worth. Instructor supervision will be conducted to the student's home, place of employment, or location of project. SAE records should be evaluated at least once per month. In addition, classroom time may be incorporated for foundational knowledge related to the SAE. SAE lessons are integrated into each agricultural course which can also provide foundation al knowledge. SAE participation can lead to fulltime employment, scholarships, and awards through the FFA.

CTE - CIP Course Details Catalog

Cluster: Agriculture, Food and Natural Resources

CIP: 01.0201 - Agricultural Mechanization, General. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18001A001	Introduction to the Agricultural Industry	1.00	2011	
18003A001	Basic Agricultural Science	1.00	2011	
18401A001	Basic Agricultural Mechanics	1.00	2011	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18449A001	Agricultural Machinery Service	3.00	2011	
18402A001	Agricultural Mechanics and Technology	3.00	2011	
18403A001	Agricultural Construction and Technology	3.00	2011	
18401A002	Agricultural Metal Fabrication	3.00	2012	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18203A002	Agricultural Communications	3.00	2011	
18201A001	Agricultural Business Management	3.00	2011	
18051A002	Biological Science Applications in Agriculture - Plants	3.00	2011	
18101A001	Biological Science Applications in Agriculture - Animals	3.00	2011	
18449A002	Physical Science Applications in Agriculture	3.00	2011	
18449A003	Physical Science Applications in Agriculture II	3.00	2011	2011
18998A001	Agricultural Cooperative Education	3.00	2011	
22153A001	Cooperative Education	3.00	2011	
18998A002	Supervised Agricultural Experiences	3.00	2016	

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0201 - Agricultural Mechanization, General.

State Course ID: 18001A001 **Course Title:** **Introduction to the Agricultural Industry**

This course provides an opportunity for students to learn how the agricultural industry is organized; its major components; the economic influence of agriculture at state, national and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in animal science, plant science, soil science, horticulture, natural resources, agribusiness management, and agricultural mechanics, will be presented. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18003A001 **Course Title:** **Basic Agricultural Science**

This course builds on basic skills and knowledge gained in the Introduction to the Agricultural Industry course. Major units of instruction include agricultural research, soil science, advanced plant science, biotechnology, advanced animal science. Applied science and math skills and concepts will be stressed throughout the course as they relate to each area. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18401A001 **Course Title:** **Basic Agricultural Mechanics**

In this course, theory and hands-on experiences provide opportunities for students to develop basic knowledge and skills in agricultural mechanics. Instructional areas include the basic fundamentals of maintaining and repairing small gasoline engines, basic electricity, welding, construction, cold metal work, and operating agricultural equipment safely. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18449A001 **Course Title:** **Agricultural Machinery Service**

This comprehensive machinery service course concentrates on the following areas: using service manuals, electrical applications for agricultural equipment, fundamentals of multi-cylinder engines, reconditioning and repairing agricultural equipment, assembling and adjusting agricultural equipment, organization and management of agricultural machinery dealerships, human relations, and sales techniques. Careers such as agricultural equipment salesperson, mechanic, parts manager, sales manager, service technician, and other related occupations will be examined. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18402A001 **Course Title:** **Agricultural Mechanics and Technology**

This course will concentrate on expanding student's knowledge and experiences with agricultural mechanics technologies utilized in the agricultural industry. Units of instruction included are: design, construction, fabrication, maintenance, welding, electricity/electronics, internal combustion engines, hydraulics, and employability skills. Careers of agricultural construction engineer, electrician, plumber, welder, equipment designer, parts manager, safety inspector, welder, and other related occupations will be examined. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0201 - Agricultural Mechanization, General.

State Course ID: 18403A001 **Course Title:** **Agricultural Construction and Technology**

This advanced course focuses on the knowledge, hands-on skills, and work place skills applicable to construction in the agricultural industry. Major units of instruction include: personal safety, hand tools, power tools, blue print reading, surveying, construction skills in carpentry, plumbing, electricity, concrete, block laying, drywall and painting. Careers such as agricultural engineers, carpenter, plumber, electrician, concrete and block layers, finishers, safety specialists, and other related occupations will be examined. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18401A002 **Course Title:** **Agricultural Metal Fabrication**

This course will emphasize the development of basic welding and metalworking skills necessary to succeed in agricultural careers in the agricultural metal fabrication industry. Topics of instruction include: metal identification and properties, metal preparation, use of oxy-acetylene torch, plasma cutting and cutting operations, arc welding, MIG welding, TIG welding, and project design and construction. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0201 - Agricultural Mechanization, General.

State Course ID: 18203A002 **Course Title:** **Agricultural Communications**

Students will analyze current agricultural issues and determine how they affect people on all sides of the issue. The students then learn and enhance their written and oral communication skills by presenting their views and opinions to the class. Students learn how to arrange and present debates, speeches, and interviews to be effective leaders in today's society. This course can also be designed to provide students with the knowledge and leadership experiences to help them to become successful in life and in the workplace. Students will further enhance their potential for leadership development, personal growth, and career success. Topics may include workplace skills, effective communication, decision-making, problem-solving, leadership styles and qualities, and successful execution of teamwork or collaborative activities. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18201A001 **Course Title:** **Agricultural Business Management**

This course will provide students with the basic knowledge and skills necessary to manage personal finances and develop into a successful entrepreneur and /or businessperson. Instructional units include: business ownership types, starting an agribusiness, managing and operating an agribusiness, financing an agribusiness, managing personal finances, record keeping and financial management of an agribusiness, local, state, and federal taxes, agricultural law, and developing employability skills. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18051A002 **Course Title:** **Biological Science Applications in Agriculture - Plants**

This course is designed to reinforce and extend students understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of plant growth and management in agriculture and the specific biological science concepts that govern management decisions. Topics of study are in the areas of initiating plant growth – germination, plant sensory mechanisms, enzyme action, absorption, and managing plant growth – photosynthesis, respiration, translocation, metabolism, and growth regulation. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18101A001 **Course Title:** **Biological Science Applications in Agriculture - Animals**

This course is designed to reinforce and extend students understanding of science by associating scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of animal agriculture and specific biological science concepts that govern management decisions in the animal industry. Topics of study are in the areas of growth and development of animals – embryology, ethology, nutrition, immunity systems, and processing animal products – preservation, fermentation, and pasteurization. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus . Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0201 - Agricultural Mechanization, General.

State Course ID: 18449A002 **Course Title:** **Physical Science Applications in Agriculture**

This course is designed to reinforce and extend students understanding of physical science and the scientific process by associating scientific and math principles and concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental /natural resource systems, agricultural production systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18449A003 **Course Title:** **Physical Science Applications in Agriculture II**

This course is designed to reinforce and extend students understanding of physical science and the scientific process by associating scientific and math principles and concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental /natural resource systems, agricultural production systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18998A001 **Course Title:** **Agricultural Cooperative Education**

Agricultural Cooperative Education is designed for junior and senior students interested in pursuing careers in Agriculture. Students are released from school for their paid cooperative education work experience. They participate in 200 minutes per week of related classroom instruction focusing on job survival skills, career exploration skills related to the job, and human relations skills. A qualified agricultural instructor is responsible for supervision and is given 30 minutes per student per week to do so. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations. The coordinator also needs to have taken 6 semester hours of organization and administration of cooperative education. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job seeking skills, personal development, human relationship, legal protection and responsibilities, economics of the job, organization and job termination. (NOTE: In schools with insufficient numbers to justify a stand alone Agricultural Cooperative Education course, Interrelated Cooperative Education with the same general requirements may be substituted.)

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0201 - Agricultural Mechanization, General.

State Course ID: 18998A002 **Course Title:** **Supervised Agricultural Experiences**

This course is designed to establish, improve, and/or expand knowledge and skills in various agricultural careers. Students will gain credit by establishing or continuing a Supervised Agricultural Experience (SAE) project at their home, at a business, or at their school often occurring outside the normal school day. SAE projects are typically entrepreneurial, placement or research based. Students are encouraged to add additional projects, experiences, scope, and growth involving managerial and decision making skills. Students will be required to verify their experiences by keeping written or computerized records including: business agreements, budgets, inventories, daily activities, hours worked, income and expenses, total earnings, depreciation, and net worth. Instructor supervision will be conducted to the student's home, place of employment, or location of project. SAE records should be evaluated at least once per month. In addition, classroom time may be incorporated for foundational knowledge related to the SAE. SAE lessons are integrated into each agricultural course which can also provide foundation al knowledge. SAE participation can lead to fulltime employment, scholarships, and awards through the FFA.

CTE - CIP Course Details Catalog

Cluster: Agriculture, Food and Natural Resources

CIP: 01.0601 - Applied Horticulture/Horticulture Operations, General. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18003A001	**Basic Agricultural Science**	**1.00**	**2011**	
18052A001	**Basic Horticultural Science**	**1.00**	**2011**	
18001A001	**Introduction to the Agricultural Industry**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18053A001	**Greenhouse Production & Floral Design**	**3.00**	**2011**	
18054A001	**Landscaping & Turf Management**	**3.00**	**2011**	
18051A001	**Horticultural Production & Management**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18203A002	**Agricultural Communications**	**3.00**	**2011**	
18201A001	**Agricultural Business Management**	**3.00**	**2011**	
18051A002	**Biological Science Applications in Agriculture - Plants**	**3.00**	**2011**	
18101A001	**Biological Science Applications in Agriculture - Animals**	**3.00**	**2011**	
18449A002	**Physical Science Applications in Agriculture**	**3.00**	**2011**	
18449A003	**Physical Science Applications in Agriculture II**	**3.00**	**2011**	**2011**
18998A001	**Agricultural Cooperative Education**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	
18998A002	**Supervised Agricultural Experiences**	**3.00**	**2016**	

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0601 - Applied Horticulture/Horticulture Operations, General.

State Course ID: 18001A001 **Course Title:** **Introduction to the Agricultural Industry**

This course provides an opportunity for students to learn how the agricultural industry is organized; its major components; the economic influence of agriculture at state, national and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in animal science, plant science, soil science, horticulture, natural resources, agribusiness management, and agricultural mechanics, will be presented. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18003A001 **Course Title:** **Basic Agricultural Science**

This course builds on basic skills and knowledge gained in the Introduction to the Agricultural Industry course. Major units of instruction include agricultural research, soil science, advanced plant science, biotechnology, advanced animal science. Applied science and math skills and concepts will be stressed throughout the course as they relate to each area. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18052A001 **Course Title:** **Basic Horticultural Science**

This course is designed to introduce students to the horticulture industry and provide them with basic plant science knowledge that can be further developed in advanced horticulture courses. Major units of instruction include horticulture research, horticultural careers, plant anatomy, seed germination, plant propagation, growing media, pest management, hydroponics, identifying horticultural plants, growing greenhouse crops, and floral design. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18053A001 **Course Title:** **Greenhouse Production & Floral Design**

This course focuses on the greenhouse management, floral design and related segments of the horticulture industry. Major units of study include floriculture plant identification, greenhouse structures, and the culture of greenhouse crops. Also included are care and handling of cut flowers, principles of art applied to floral design, and the mechanics of floral design. Agribusiness units will be introduced in merchandising, advertising, sales, and operating a retail floral business . Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18054A001 **Course Title:** **Landscaping & Turf Management**

This advanced course focuses on the landscape, nursery, and turf segments of the horticulture industry. Units of student instruction include: identifying landscape plants, designing landscape plans, hardscape construction techniques, and installing landscape plants. Also included are nursery production, turfgrass production, small engine repair, and maintenance of existing landscapes. Agribusiness units will cover calculating prices for work, managing a horticulture business, advertising, and sales. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18051A001 **Course Title:** **Horticultural Production & Management**

This course offers instruction in both the greenhouse production and landscape areas of horticulture. Units of study include plant identification, greenhouse management, growing greenhouse crops, landscape design, installation, and maintenance, horticulture mechanics, nursery management, and turf production . Agribusiness units will cover operating a horticultural business, pricing work, advertising, and sales. Improving computer and workplace skills will be a focus . Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0601 - Applied Horticulture/Horticulture Operations, General.

State Course ID: 18203A002 **Course Title:** **Agricultural Communications**

Students will analyze current agricultural issues and determine how they affect people on all sides of the issue. The students then learn and enhance their written and oral communication skills by presenting their views and opinions to the class. Students learn how to arrange and present debates, speeches, and interviews to be effective leaders in today's society. This course can also be designed to provide students with the knowledge and leadership experiences to help them to become successful in life and in the workplace. Students will further enhance their potential for leadership development, personal growth, and career success. Topics may include workplace skills, effective communication, decision-making, problem-solving, leadership styles and qualities, and successful execution of teamwork or collaborative activities. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18201A001 **Course Title:** **Agricultural Business Management**

This course will provide students with the basic knowledge and skills necessary to manage personal finances and develop into a successful entrepreneur and /or businessperson. Instructional units include: business ownership types, starting an agribusiness, managing and operating an agribusiness, financing an agribusiness, managing personal finances, record keeping and financial management of an agribusiness, local, state, and federal taxes, agricultural law, and developing employability skills. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18051A002 **Course Title:** **Biological Science Applications in Agriculture - Plants**

This course is designed to reinforce and extend students understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of plant growth and management in agriculture and the specific biological science concepts that govern management decisions. Topics of study are in the areas of initiating plant growth – germination, plant sensory mechanisms, enzyme action, absorption, and managing plant growth – photosynthesis, respiration, translocation, metabolism, and growth regulation. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18101A001 **Course Title:** **Biological Science Applications in Agriculture - Animals**

This course is designed to reinforce and extend students understanding of science by associating scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of animal agriculture and specific biological science concepts that govern management decisions in the animal industry. Topics of study are in the areas of growth and development of animals – embryology, ethology, nutrition, immunity systems, and processing animal products – preservation, fermentation, and pasteurization. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus . Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0601 - Applied Horticulture/Horticulture Operations, General.

State Course ID: 18449A002 **Course Title:** **Physical Science Applications in Agriculture**

This course is designed to reinforce and extend students understanding of physical science and the scientific process by associating scientific and math principles and concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental /natural resource systems, agricultural production systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18449A003 **Course Title:** **Physical Science Applications in Agriculture II**

This course is designed to reinforce and extend students understanding of physical science and the scientific process by associating scientific and math principles and concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental /natural resource systems, agricultural production systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18998A001 **Course Title:** **Agricultural Cooperative Education**

Agricultural Cooperative Education is designed for junior and senior students interested in pursuing careers in Agriculture. Students are released from school for their paid cooperative education work experience. They participate in 200 minutes per week of related classroom instruction focusing on job survival skills, career exploration skills related to the job, and human relations skills. A qualified agricultural instructor is responsible for supervision and is given 30 minutes per student per week to do so. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations. The coordinator also needs to have taken 6 semester hours of organization and administration of cooperative education. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job seeking skills, personal development, human relationship, legal protection and responsibilities, economics of the job, organization and job termination. (NOTE: In schools with insufficient numbers to justify a stand alone Agricultural Cooperative Education course, Interrelated Cooperative Education with the same general requirements may be substituted.)

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 01.0601 - Applied Horticulture/Horticulture Operations, General.

State Course ID: 18998A002 **Course Title:** **Supervised Agricultural Experiences**

This course is designed to establish, improve, and/or expand knowledge and skills in various agricultural careers. Students will gain credit by establishing or continuing a Supervised Agricultural Experience (SAE) project at their home, at a business, or at their school often occurring outside the normal school day. SAE projects are typically entrepreneurial, placement or research based. Students are encouraged to add additional projects, experiences, scope, and growth involving managerial and decision making skills. Students will be required to verify their experiences by keeping written or computerized records including: business agreements, budgets, inventories, daily activities, hours worked, income and expenses, total earnings, depreciation, and net worth. Instructor supervision will be conducted to the student's home, place of employment, or location of project. SAE records should be evaluated at least once per month. In addition, classroom time may be incorporated for foundational knowledge related to the SAE. SAE lessons are integrated into each agricultural course which can also provide foundation al knowledge. SAE participation can lead to fulltime employment, scholarships, and awards through the FFA.

CTE - CIP Course Details Catalog

Cluster: Agriculture, Food and Natural Resources

CIP: 03.0101 - Natural Resources/Conservation, General. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18001A001	**Introduction to the Agricultural Industry**	**1.00**	**2011**	
18003A001	**Basic Agricultural Science**	**1.00**	**2011**	
18052A001	**Basic Horticultural Science**	**1.00**	**2013**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18504A002	**Natural Resources Conservation and Management**	**3.00**	**2011**	
18504A001	**Environmental Science**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
18998A002	**Supervised Agricultural Experiences**	**3.00**	**2016**	
18203A002	**Agricultural Communications**	**3.00**	**2011**	
18201A001	**Agricultural Business Management**	**3.00**	**2011**	
18051A002	**Biological Science Applications in Agriculture - Plants**	**3.00**	**2011**	
18101A001	**Biological Science Applications in Agriculture - Animals**	**3.00**	**2011**	
18449A002	**Physical Science Applications in Agriculture**	**3.00**	**2011**	
18449A003	**Physical Science Applications in Agriculture II**	**3.00**	**2011**	**2011**
18998A001	**Agricultural Cooperative Education**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 03.0101 - Natural Resources/Conservation, General.

State Course ID: 18001A001 **Course Title:** **Introduction to the Agricultural Industry**

This course provides an opportunity for students to learn how the agricultural industry is organized; its major components; the economic influence of agriculture at state, national and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in animal science, plant science, soil science, horticulture, natural resources, agribusiness management, and agricultural mechanics, will be presented. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18003A001 **Course Title:** **Basic Agricultural Science**

This course builds on basic skills and knowledge gained in the Introduction to the Agricultural Industry course. Major units of instruction include agricultural research, soil science, advanced plant science, biotechnology, advanced animal science. Applied science and math skills and concepts will be stressed throughout the course as they relate to each area. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18052A001 **Course Title:** **Basic Horticultural Science**

This course is designed to introduce students to the horticulture industry and provide them with basic plant science knowledge that can be further developed in advanced horticulture courses. Major units of instruction include horticulture research, horticultural careers, plant anatomy, seed germination, plant propagation, growing media, pest management, hydroponics, identifying horticultural plants, growing greenhouse crops, and floral design. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18504A002 **Course Title:** **Natural Resources Conservation and Management**

This course develops management and conservation skills in understanding the connection between agriculture and natural resources. Student knowledge and skills are developed in: understanding natural resources and its importance; fish, wildlife, and forestry management and conservation; and exploring outdoor recreational enterprises. Hunting and fishing as a sport, growing and managing tree forests, and outdoor safety education will be featured. Career exploration will be discussed including: park ranger, game warden, campground manager, forester, conservation officer, wildlife manager, and related occupations. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18504A001 **Course Title:** **Environmental Science**

This course examines the relationship of agriculture and the environment. The impact of plant and animal production practices on the environment and the adoption of practices leading to improved air, land, and water quality are investigated. Areas of emphasis include: types of ecosystems, management of waste, chemical use, soil conservation, land uses and regulations, and water and air quality. Encouraging students to be conscious and concerned about the environment and recognizing the need to conserve the environment and its resources will be a theme throughout. Careers of environmental technicians, soil and water conservationists, monitoring field technicians, land surveyor, and related occupations will be examined. Improving computer and workplace skills will be a focus . Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 03.0101 - Natural Resources/Conservation, General.

State Course ID: 18203A002 **Course Title:** **Agricultural Communications**

Students will analyze current agricultural issues and determine how they affect people on all sides of the issue. The students then learn and enhance their written and oral communication skills by presenting their views and opinions to the class. Students learn how to arrange and present debates, speeches, and interviews to be effective leaders in today's society. This course can also be designed to provide students with the knowledge and leadership experiences to help them to become successful in life and in the workplace. Students will further enhance their potential for leadership development, personal growth, and career success. Topics may include workplace skills, effective communication, decision-making, problem-solving, leadership styles and qualities, and successful execution of teamwork or collaborative activities. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18201A001 **Course Title:** **Agricultural Business Management**

This course will provide students with the basic knowledge and skills necessary to manage personal finances and develop into a successful entrepreneur and /or businessperson. Instructional units include: business ownership types, starting an agribusiness, managing and operating an agribusiness, financing an agribusiness, managing personal finances, record keeping and financial management of an agribusiness, local, state, and federal taxes, agricultural law, and developing employability skills. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18051A002 **Course Title:** **Biological Science Applications in Agriculture - Plants**

This course is designed to reinforce and extend students understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of plant growth and management in agriculture and the specific biological science concepts that govern management decisions. Topics of study are in the areas of initiating plant growth – germination, plant sensory mechanisms, enzyme action, absorption, and managing plant growth – photosynthesis, respiration, translocation, metabolism, and growth regulation. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18101A001 **Course Title:** **Biological Science Applications in Agriculture - Animals**

This course is designed to reinforce and extend students understanding of science by associating scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of animal agriculture and specific biological science concepts that govern management decisions in the animal industry. Topics of study are in the areas of growth and development of animals – embryology, ethology, nutrition, immunity systems, and processing animal products – preservation, fermentation, and pasteurization. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus . Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 03.0101 - Natural Resources/Conservation, General.

State Course ID: 18449A002 **Course Title:** **Physical Science Applications in Agriculture**

This course is designed to reinforce and extend students understanding of physical science and the scientific process by associating scientific and math principles and concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental /natural resource systems, agricultural production systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18449A003 **Course Title:** **Physical Science Applications in Agriculture II**

This course is designed to reinforce and extend students understanding of physical science and the scientific process by associating scientific and math principles and concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental /natural resource systems, agricultural production systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

State Course ID: 18998A001 **Course Title:** **Agricultural Cooperative Education**

Agricultural Cooperative Education is designed for junior and senior students interested in pursuing careers in Agriculture. Students are released from school for their paid cooperative education work experience. They participate in 200 minutes per week of related classroom instruction focusing on job survival skills, career exploration skills related to the job, and human relations skills. A qualified agricultural instructor is responsible for supervision and is given 30 minutes per student per week to do so. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations. The coordinator also needs to have taken 6 semester hours of organization and administration of cooperative education. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job seeking skills, personal development, human relationship, legal protection and responsibilities, economics of the job, organization and job termination. (NOTE: In schools with insufficient numbers to justify a stand alone Agricultural Cooperative Education course, Interrelated Cooperative Education with the same general requirements may be substituted.)

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

Cluster: Agriculture, Food and Natural Resources

Course Descriptions

CIP: 03.0101 - Natural Resources/Conservation, General.

State Course ID: 18998A002 **Course Title:** **Supervised Agricultural Experiences**

This course is designed to establish, improve, and/or expand knowledge and skills in various agricultural careers. Students will gain credit by establishing or continuing a Supervised Agricultural Experience (SAE) project at their home, at a business, or at their school often occurring outside the normal school day. SAE projects are typically entrepreneurial, placement or research based. Students are encouraged to add additional projects, experiences, scope, and growth involving managerial and decision making skills. Students will be required to verify their experiences by keeping written or computerized records including: business agreements, budgets, inventories, daily activities, hours worked, income and expenses, total earnings, depreciation, and net worth. Instructor supervision will be conducted to the student's home, place of employment, or location of project. SAE records should be evaluated at least once per month. In addition, classroom time may be incorporated for foundational knowledge related to the SAE. SAE lessons are integrated into each agricultural course which can also provide foundation al knowledge. SAE participation can lead to fulltime employment, scholarships, and awards through the FFA.

Cluster: Human Services

CIP: 12.0401 - Cosmetology/Cosmetologist, General. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 2

Minimum Course Selection: School: 1 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19101A001	**Cosmetology I**	**4.00**	**2011**	
19101A002	**Cosmetology II**	**4.00**	**2011**	

Course Descriptions

CIP: 12.0401 - Cosmetology/Cosmetologist, General.

State Course ID: 19101A001 **Course Title:** **Cosmetology I**

The Cosmetology program must be approved and licensed by the Illinois Department of Financial and Professional Regulations, Division of Professional Regulation and meet all state and federal regulations. Cosmetology I provides introduces students to the requirements to become a licensed cosmetologist. It offers students instruction in both theory and practical application in the following areas: tools and their use, shampoo, understanding chemicals and use, types of hair, sanitation, hygiene, skin diseases and conditions, anatomy and physiology, electricity, ethics, nail technology and esthetics as they relate to the Barber, Cosmetology, Esthetics, and Nail Technology Act. Knowledge, skills, and activities completed in this course will help prepare students for Cosmetology II, while earning hours towards licensure.

State Course ID: 19101A002 **Course Title:** **Cosmetology II**

The Cosmetology program must be approved and licensed by the Illinois Department of Financial and Professional Regulations, Division of Professional Regulation and meet all state and federal regulations. Cosmetology II will build upon the knowledge and skills attained in Cosmetology I and will provide instruction, which may be a combination of classroom instruction and hands on experience in the following areas: practical chemical application /hair treatment, hair styling/hair dressing, and shop management, sanitation and interpersonal relations as they relate to the Barber, Cosmetology, Esthetics, and Nail Technology Act, as well as labor and compensation laws. Instruction may also include instruction in nail technology, esthetics, individualized skill development, and career planning. This course offers a curriculum of advanced theoretical and practical skill development to prepare students for the cosmetology licensure examination and progression to obtain the 1500 hours of study in cosmetology.

CTE - CIP Course Details Catalog

Cluster: Human Services

CIP: 12.0402 - Barbering/Barber. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 2

Minimum Course Selection: School: 1 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19102A001	**Barbering I**	**3.00**	**2011**	
19102A002	**Barbering II**	**3.00**	**2011**	

Course Descriptions

CIP: 12.0402 - Barbering/Barber.

State Course ID: 19102A001 **Course Title:** **Barbering I**

This is the first year of a two year program in Barbering. The barbering program must be approved and licensed by the Illinois Department of Financial and Professional Regulations, Division of Professional Regulation and meet all state and federal regulations. This course offers students curriculum in both theory and practice in the following areas as they relate to the practice of barber science and art: anatomy; physiology; skin diseases; hygiene and sanitation; barber history; barber law; hair cutting and styling; shaving, shampooing, and permanent waving; massaging; and barber implements as they relate to the Barber, Cosmetology, Esthetics, and Nail Technology Act. Knowledge, skills, and activities completed in this course will help prepare students for Barbering II, while earning hours towards licensure.

State Course ID: 19102A002 **Course Title:** **Barbering II**

This is the second year of a two year program in Barbering. The barbering program must be approved and licensed by the Illinois Department of Financial and Professional Regulations, Division of Professional Regulation and meet all state and federal regulations. It offers advanced theoretical and practical skill development to prepare students for the barbering license exam. Training will cover at a minimum: anatomy; physiology; skin diseases; hygiene and sanitation; barber history; barber law; hair cutting and styling; shaving, shampooing, and permanent waving; massaging; bleaching, tinting, and coloring; and barber implements as they relate to the Barber, Cosmetology, Esthetics, and Nail Technology Act, as well as labor and compensation laws. Knowledge, skills, and activities completed in Barbering I and II will prepare students to take the licensure exam and progression to obtain the 1500 hours of study in barbering.

CTE - CIP Course Details Catalog

Cluster: Human Services

CIP: 12.0410 - Nail Technician/Specialist and Manicurist. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 2

Minimum Course Selection: School: 1 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19105A001	**Nail Technology I**	**3.00**	**2011**	

Course Descriptions

CIP: 12.0410 - Nail Technician/Specialist and Manicurist.

State Course ID: 19105A001 **Course Title:** **Nail Technology I**

The Nail Technology program must be approved and licensed by the Illinois Department of Financial and Professional Regulations, Division of Professional Regulation and meet all state and federal regulations. Nail Technology offers students curriculum in both general theory and practical application in the following area of basic training: history of nail care, personal hygiene and public health; professional ethics; sterilization and disinfection; bacteriology; disorders of the nails; OSHA standards as relative to MSDS on chemicals, chemicals and their use; and technical applications of chemicals as they relate to the Barber, Cosmetology, Esthetics, and Nail Technology Act. Knowledge, skills, and activities completed in this course will help prepare to become a licensed nail technician, while earning hours towards the 350 hours of instruction in nail technology.

CTE - CIP Course Details Catalog

Cluster: Human Services

CIP: 19.0000 - Work and Family Studies.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22207A001	**Family and Career Relationships**	**1.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22204A001	**Parenting**	**1.00**	**2011**	
22201A001	**Introduction to Family and Consumer Sciences Careers**	**1.00**	**2011**	
22210A001	**Family Resource Management and Planning**	**1.00**	**2011**	
16054A001	**Nutrition and Culinary Arts I**	**1.00**	**2011**	
19052A001	**Child Development and Parenting**	**1.00**	**2011**	
19053A001	**Human Development and Family Wellness**	**1.00**	**2011**	
19201A001	**Textiles and Design I**	**1.00**	**2011**	

Cluster: Human Services

Course Descriptions

CIP: 19.0000 - Work and Family Studies.

State Course ID: 22207A001 **Course Title:** **Family and Career Relationships**

This course is designed to focus on the knowledge, attitudes, and behaviors needed to participate in positive, caring, and respectful relationships in the family, community, and workplace. This project-based course uses communication, leadership and management methods to develop knowledge and behaviors necessary for individuals to become independent, contributing, and responsible participants in family, community, and career settings. Emphasis is placed on the development of techniques and strategies to assist individuals in responding to situations presented in family relationships and the workplace. The course content includes : managing responsibilities, satisfactions and stresses of work and family life; analyzing personal standards, needs, aptitudes and goals; roles and responsibilities of living independently and as a family member; demonstrating goal-setting and decision-making skills; identifying and utilizing community resources; and developing effective relationships to promote communication with others. The course provides students content to identify resources that will assist them in managing life situations.

State Course ID: 22204A001 **Course Title:** **Parenting**

This course helps students understand the responsibilities, satisfactions and stresses of parenthood. Course content includes the following: managing and organizing parenting by applying decision-making and goal-setting skills; applying the basic principles of the parenting process; practicing health and safety standards as related to parenting; providing experiences which encourage parents and children to maximize resources; encouraging human relations skills in children/adolescents; community resource agencies and services; and evaluating impact on parenting of family and career changes.

State Course ID: 22201A001 **Course Title:** **Introduction to Family and Consumer Sciences Careers**

This course introduces students to the field of family and consumer sciences and the many career opportunities available in this broad field. The course includes theory and laboratory experiences in the following content areas: Nutrition and culinary arts; textiles and design; family, career, and community leadership development; resource management; human development and life-long learning; facility design, care, and management; and interpersonal relationships and life management skills.

State Course ID: 22210A001 **Course Title:** **Family Resource Management and Planning**

This course focuses on the identification and management of personal and family resources to meet the needs, values, and wants of individuals and families throughout the life cycle. The course utilizes a variety of project-based experiences and service learning opportunities to gain knowledge and expertise in understanding and applying management skills, with consideration to diverse social, economic, technological, environmental, and cultural characteristics of individuals and families. Topics include: consumer rights and responsibilities in the marketplace; financial responsibility and decision making; planning and money management; credit and debt; risk management and insurance; saving and investment; homeownership; state and federal taxes; electronic banking; and current issues in the economy.

State Course ID: 16054A001 **Course Title:** **Nutrition and Culinary Arts I**

This course includes classroom and laboratory experiences needed to develop a knowledge and understanding of culinary principles and nutrition for people of all ages. Course content encompass': food service and preparation management using the decision-making process; meeting basic needs by applying nutrition concepts; meeting health, safety, and sanitation requirements; maximizing resources when planning/preparing/preserving/serving food; applying hospitality skills; analyzing nutritional needs in relation to change; and careers in nutrition and culinary arts, including entrepreneurship investigation.

State Course ID: 19052A001 **Course Title:** **Child Development and Parenting**

Child Development and Parenting addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. The focus is on research-based nurturing and parenting practices and skills, including brain development research, that support positive development of children. Students will explore opportunities in human services and education-related careers and develop a career portfolio.

Cluster: Human Services

Course Descriptions

CIP: 19.0000 - Work and Family Studies.

State Course ID: 19053A001 **Course Title:** **Human Development and Family Wellness**

This course focuses on the development and wellness of individuals and families throughout the life cycle. Topics include human development and wellness theories, principles, and practices; life cycle expectations and issues, including biological, physiological, social, and psychological needs and concerns of aging adults; community services, agencies, and resources; roles, responsibilities, and functions of families, family members and caregivers; family issues, including ethics, human worth and dignity, change, stress, neglect and abuse, and care of the care-giver; individual and family wellness planning; and fostering intergenerational relationships. Practical experiences related to these topics are included through a variety of activities such as volunteer experiences, service learning, and intergenerational event planning opportunities. Information on a variety of human and family services careers is incorporated throughout the course.

State Course ID: 19201A001 **Course Title:** **Textiles and Design I**

This course is designed to provide basic knowledge and understanding of the design, development, and production of textile products. Through hands-on and project based learning experiences students will discover fiber characteristics, fabric construction methods, elements of science and design in textiles and apparel, and basic construction skills used in interior furnishings and apparel industries. This course emphasizes awareness and investigation of careers and industry trends in textiles.

CTE - CIP Course Details Catalog

Cluster: Human Services

CIP: 19.0202 - Family and Consumer Sciences/Human Sciences Communication.

Status: Open **Start Year:** 2013 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22201A001	**Introduction to Family and Consumer Sciences Careers**	**1.00**	**2013**	
19053A001	**Human Development and Family Wellness**	**1.00**	**2013**	
22207A001	**Family and Career Relationships**	**1.00**	**2013**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22249A001	**Family and Consumer Sciences Communications**	**3.00**	**2013**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22210A001	**Family Resource Management and Planning**	**1.00**	**2013**	
19201A001	**Textiles and Design I**	**1.00**	**2013**	
16054A001	**Nutrition and Culinary Arts I**	**1.00**	**2013**	
22203A001	**Food Science**	**1.00**	**2013**	
19052A001	**Child Development and Parenting**	**1.00**	**2013**	

Cluster: Human Services

Course Descriptions

CIP: 19.0202 - Family and Consumer Sciences/Human Sciences Communication.

State Course ID: 22201A001 **Course Title:** **Introduction to Family and Consumer Sciences Careers**

This course introduces students to the field of family and consumer sciences and the many career opportunities available in this broad field. The course includes theory and laboratory experiences in the following content areas: Nutrition and culinary arts; textiles and design; family, career, and community leadership development; resource management; human development and life-long learning; facility design, care, and management; and interpersonal relationships and life management skills.

State Course ID: 19053A001 **Course Title:** **Human Development and Family Wellness**

This course focuses on the development and wellness of individuals and families throughout the life cycle. Topics include human development and wellness theories, principles, and practices; life cycle expectations and issues, including biological, physiological, social, and psychological needs and concerns of aging adults; community services, agencies, and resources; roles, responsibilities, and functions of families, family members and caregivers; family issues, including ethics, human worth and dignity, change, stress, neglect and abuse, and care of the care-giver; individual and family wellness planning; and fostering intergenerational relationships. Practical experiences related to these topics are included through a variety of activities such as volunteer experiences, service learning, and intergenerational event planning opportunities. Information on a variety of human and family services careers is incorporated throughout the course.

State Course ID: 22207A001 **Course Title:** **Family and Career Relationships**

This course is designed to focus on the knowledge, attitudes, and behaviors needed to participate in positive, caring, and respectful relationships in the family, community, and workplace. This project-based course uses communication, leadership and management methods to develop knowledge and behaviors necessary for individuals to become independent, contributing, and responsible participants in family, community, and career settings. Emphasis is placed on the development of techniques and strategies to assist individuals in responding to situations presented in family relationships and the workplace. The course content includes : managing responsibilities, satisfactions and stresses of work and family life; analyzing personal standards, needs, aptitudes and goals; roles and responsibilities of living independently and as a family member; demonstrating goal-setting and decision-making skills; identifying and utilizing community resources; and developing effective relationships to promote communication with others. The course provides students content to identify resources that will assist them in managing life situations.

State Course ID: 22249A001 **Course Title:** **Family and Consumer Sciences Communications**

This course provides the opportunity for students to investigate and analyze current family and consumer sciences issues and determine how they affect people on all sides of the issue. Students will participate in projects and activities that will reinforce goal-setting, character development, parliamentary procedure, and other leadership traits to become successful in life and the workplace. The students will develop and enhance their written and verbal communication skills through presentations of their views and opinions. Students will demonstrate their ability to arrange and present information through a variety of experiences, including but not limited to written, debate, testimonial, and interviews. Participation in Family, Career, and Community Leaders of America (FCCLA) student organization programs and activities are an integral course component for leadership development, career exploration, and reinforcement of academic concepts. Community service projects and opportunities to practice communication and leadership skills will be an integral part of this course.

Cluster: Human Services

Course Descriptions

CIP: 19.0202 - Family and Consumer Sciences/Human Sciences Communication.

State Course ID: 22210A001 **Course Title:** **Family Resource Management and Planning**

This course focuses on the identification and management of personal and family resources to meet the needs, values, and wants of individuals and families throughout the life cycle. The course utilizes a variety of project-based experiences and service learning opportunities to gain knowledge and expertise in understanding and applying management skills, with consideration to diverse social, economic, technological, environmental, and cultural characteristics of individuals and families. Topics include: consumer rights and responsibilities in the marketplace; financial responsibility and decision making; planning and money management; credit and debt; risk management and insurance; saving and investment; homeownership; state and federal taxes; electronic banking; and current issues in the economy.

State Course ID: 19201A001 **Course Title:** **Textiles and Design I**

This course is designed to provide basic knowledge and understanding of the design, development, and production of textile products. Through hands-on and project based learning experiences students will discover fiber characteristics, fabric construction methods, elements of science and design in textiles and apparel, and basic construction skills used in interior furnishings and apparel industries. This course emphasizes awareness and investigation of careers and industry trends in textiles.

State Course ID: 16054A001 **Course Title:** **Nutrition and Culinary Arts I**

This course includes classroom and laboratory experiences needed to develop a knowledge and understanding of culinary principles and nutrition for people of all ages. Course content encompass': food service and preparation management using the decision-making process; meeting basic needs by applying nutrition concepts; meeting health, safety, and sanitation requirements; maximizing resources when planning/preparing/preserving/serving food; applying hospitality skills; analyzing nutritional needs in relation to change; and careers in nutrition and culinary arts, including entrepreneurship investigation.

State Course ID: 22203A001 **Course Title:** **Food Science**

The scientific method is used to study foods as a combination of chemical, physical and biological sciences. Laboratory skills in measuring, recording, and analyzing data are used to explore the interrelationship of food science to the other sciences; the scientific evaluation of food, matter, electrolyte solutions, energy, nutrition; food safety; and food chemistry. Experimental methods are used to analyze food mixtures, food microbiology, fermentation, sensory processes, the preservation of foods and complex food systems. Technology is studied as it relates to product development, consumer needs and experimental designs. Emphasis is placed on emerging careers in food science and biotechnology and the application of food science in food service, nutrition, dietetics, and product development.

State Course ID: 19052A001 **Course Title:** **Child Development and Parenting**

Child Development and Parenting addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. The focus is on research-based nurturing and parenting practices and skills, including brain development research, that support positive development of children. Students will explore opportunities in human services and education-related careers and develop a career portfolio.

CTE - CIP Course Details Catalog

Cluster: Human Services

CIP: 19.0702 - Adult Development and Aging.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19053A001	**Human Development and Family Wellness**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19054A001	**Care and Learning Services Occupations**	**3.00**	**2011**	
19055A001	**Care and Learning Services Management**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A002	**FCS Cooperative Education**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	
19052A001	**Child Development and Parenting**	**1.00**	**2011**	
22201A001	**Introduction to Family and Consumer Sciences Careers**	**1.00**	**2011**	

Cluster: Human Services

Course Descriptions

CIP: 19.0702 - Adult Development and Aging.

State Course ID: 19053A001 **Course Title:** **Human Development and Family Wellness**

This course focuses on the development and wellness of individuals and families throughout the life cycle. Topics include human development and wellness theories, principles, and practices; life cycle expectations and issues, including biological, physiological, social, and psychological needs and concerns of aging adults; community services, agencies, and resources; roles, responsibilities, and functions of families, family members and caregivers; family issues, including ethics, human worth and dignity, change, stress, neglect and abuse, and care of the care-giver; individual and family wellness planning; and fostering intergenerational relationships. Practical experiences related to these topics are included through a variety of activities such as volunteer experiences, service learning, and intergenerational event planning opportunities. Information on a variety of human and family services careers is incorporated throughout the course.

State Course ID: 19054A001 **Course Title:** **Care and Learning Services Occupations**

This course provides students with information and practical experiences needed for the development of competencies related to child/adult care, day care, and other education services occupations. Laboratory experiences, either in a school-based or worksite learning facility, are included throughout the class. Students meet standards in developing programs and assisting with children's and/or adult's activities. Classroom study includes the philosophy and management of care centers and the state and local regulations governing care-giving operations. The learning experiences will involve working with children/adults simulating those found in business and industry, as well as preparation for developing and facilitating these activities.

State Course ID: 19055A001 **Course Title:** **Care and Learning Services Management**

This course emphasizes the skills associated with the administration of the infant, child and adult care facilities and education centers. Skills, strategies and issues related to caring for infants and special needs children and adults, where applicable, are included. Emphasis is placed on career opportunities, communication skills, human relations and the service needs of clients in the occupational area. The major learning experiences will involve actual work with children and/or adults in facilities simulating those found in the workplace/industry, and discussion of the situations and problems that arise during the learning experiences. State licensing and certification requirements and regulations related to all-aspects of care and education are stressed throughout the course. Careers in the occupational area will be investigated, including entrepreneurship.

State Course ID: 22153A002 **Course Title:** **FCS Cooperative Education**

Family and Consumer Sciences Cooperative Education is designed for students interested in pursuing careers in occupations in the field family and consumer sciences. Classroom instruction focuses on providing students with workplace skills, post-secondary education opportunities related to the job/career pathway, developing and maintaining positive workplace relationships, planning for the future, legal protection and responsibility, professional organizations, and advancing skills related to the job. Classroom and worksite instruction is based on the duties of the FCS occupation. Students are released from school for their paid cooperative education work experience, participate in 200 minutes per week of related classroom instruction, and supervised on-the-by a qualified instructor ½ hour or more per week per student. A qualified, certified FCS instructor is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations.

Cluster: Human Services

Course Descriptions

CIP: 19.0702 - Adult Development and Aging.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 19052A001 **Course Title:** **Child Development and Parenting**

Child Development and Parenting addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. The focus is on research-based nurturing and parenting practices and skills, including brain development research, that support positive development of children. Students will explore opportunities in human services and education-related careers and develop a career portfolio.

State Course ID: 22201A001 **Course Title:** **Introduction to Family and Consumer Sciences Careers**

This course introduces students to the field of family and consumer sciences and the many career opportunities available in this broad field. The course includes theory and laboratory experiences in the following content areas: Nutrition and culinary arts; textiles and design; family, career, and community leadership development; resource management; human development and life-long learning; facility design, care, and management; and interpersonal relationships and life management skills.

CTE - CIP Course Details Catalog

Cluster: Human Services

CIP: 19.0708 - Child Care and Support Services Management. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19052A001	**Child Development and Parenting**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19055A001	**Care and Learning Services Management**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22201A001	**Introduction to Family and Consumer Sciences Careers**	**1.00**	**2011**	
22153A002	**FCS Cooperative Education**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	
19054A001	**Care and Learning Services Occupations**	**3.00**	**2011**	
19053A001	**Human Development and Family Wellness**	**1.00**	**2011**	

Cluster: Human Services

Course Descriptions

CIP: 19.0708 - Child Care and Support Services Management.

State Course ID: 19052A001 **Course Title:** **Child Development and Parenting**

Child Development and Parenting addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. The focus is on research-based nurturing and parenting practices and skills, including brain development research, that support positive development of children. Students will explore opportunities in human services and education-related careers and develop a career portfolio.

State Course ID: 19055A001 **Course Title:** **Care and Learning Services Management**

This course emphasizes the skills associated with the administration of the infant, child and adult care facilities and education centers. Skills, strategies and issues related to caring for infants and special needs children and adults, where applicable, are included. Emphasis is placed on career opportunities, communication skills, human relations and the service needs of clients in the occupational area. The major learning experiences will involve actual work with children and /or adults in facilities simulating those found in the workplace/industry, and discussion of the situations and problems that arise during the learning experiences. State licensing and certification requirements and regulations related to all-aspects of care and education are stressed throughout the course. Careers in the occupational area will be investigated, including entrepreneurship.

State Course ID: 22201A001 **Course Title:** **Introduction to Family and Consumer Sciences Careers**

This course introduces students to the field of family and consumer sciences and the many career opportunities available in this broad field. The course includes theory and laboratory experiences in the following content areas: Nutrition and culinary arts; textiles and design; family, career, and community leadership development; resource management; human development and life-long learning; facility design, care, and management; and interpersonal relationships and life management skills.

State Course ID: 22153A002 **Course Title:** **FCS Cooperative Education**

Family and Consumer Sciences Cooperative Education is designed for students interested in pursuing careers in occupations in the field family and consumer sciences. Classroom instruction focuses on providing students with workplace skills, post-secondary education opportunities related to the job/career pathway, developing and maintaining positive workplace relationships, planning for the future, legal protection and responsibility, professional organizations, and advancing skills related to the job. Classroom and worksite instruction is based on the duties of the FCS occupation. Students are released from school for their paid cooperative education work experience, participate in 200 minutes per week of related classroom instruction, and supervised on-the-by a qualified instructor ½ hour or more per week per student. A qualified, certified FCS instructor is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

Cluster: Human Services

Course Descriptions

CIP: 19.0708 - Child Care and Support Services Management.

State Course ID: 19054A001 **Course Title:** **Care and Learning Services Occupations**

This course provides students with information and practical experiences needed for the development of competencies related to child/adult care, day care, and other education services occupations. Laboratory experiences, either in a school-based or worksite learning facility, are included throughout the class. Students meet standards in developing programs and assisting with children's and/or adult's activities. Classroom study includes the philosophy and management of care centers and the state and local regulations governing care-giving operations. The learning experiences will involve working with children/adults simulating those found in business and industry, as well as preparation for developing and facilitating these activities.

State Course ID: 19053A001 **Course Title:** **Human Development and Family Wellness**

This course focuses on the development and wellness of individuals and families throughout the life cycle. Topics include human development and wellness theories, principles, and practices; life cycle expectations and issues, including biological, physiological, social, and psychological needs and concerns of aging adults; community services, agencies, and resources; roles, responsibilities, and functions of families, family members and caregivers; family issues, including ethics, human worth and dignity, change, stress, neglect and abuse, and care of the care-giver; individual and family wellness planning; and fostering intergenerational relationships. Practical experiences related to these topics are included through a variety of activities such as volunteer experiences, service learning, and intergenerational event planning opportunities. Information on a variety of human and family services careers is incorporated throughout the course.

CTE - CIP Course Details Catalog

Cluster: Human Services

CIP: 19.0709 - Child Care Provider/Assistant. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19052A001	**Child Development and Parenting**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19054A001	**Care and Learning Services Occupations**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22201A001	**Introduction to Family and Consumer Sciences Careers**	**1.00**	**2011**	
22153A002	**FCS Cooperative Education**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	
19053A001	**Human Development and Family Wellness**	**1.00**	**2011**	
19055A001	**Care and Learning Services Management**	**3.00**	**2011**	

Cluster: Human Services

Course Descriptions

CIP: 19.0709 - Child Care Provider/Assistant.

State Course ID: 19052A001 **Course Title:** **Child Development and Parenting**

Child Development and Parenting addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. The focus is on research-based nurturing and parenting practices and skills, including brain development research, that support positive development of children. Students will explore opportunities in human services and education-related careers and develop a career portfolio.

State Course ID: 19054A001 **Course Title:** **Care and Learning Services Occupations**

This course provides students with information and practical experiences needed for the development of competencies related to child/adult care, day care, and other education services occupations. Laboratory experiences, either in a school-based or worksite learning facility, are included throughout the class. Students meet standards in developing programs and assisting with children's and/or adult's activities. Classroom study includes the philosophy and management of care centers and the state and local regulations governing care-giving operations. The learning experiences will involve working with children/adults simulating those found in business and industry, as well as preparation for developing and facilitating these activities.

State Course ID: 22201A001 **Course Title:** **Introduction to Family and Consumer Sciences Careers**

This course introduces students to the field of family and consumer sciences and the many career opportunities available in this broad field. The course includes theory and laboratory experiences in the following content areas: Nutrition and culinary arts; textiles and design; family, career, and community leadership development; resource management; human development and life-long learning; facility design, care, and management; and interpersonal relationships and life management skills.

State Course ID: 22153A002 **Course Title:** **FCS Cooperative Education**

Family and Consumer Sciences Cooperative Education is designed for students interested in pursuing careers in occupations in the field family and consumer sciences. Classroom instruction focuses on providing students with workplace skills, post-secondary education opportunities related to the job/career pathway, developing and maintaining positive workplace relationships, planning for the future, legal protection and responsibility, professional organizations, and advancing skills related to the job. Classroom and worksite instruction is based on the duties of the FCS occupation. Students are released from school for their paid cooperative education work experience, participate in 200 minutes per week of related classroom instruction, and supervised on-the-by a qualified instructor ½ hour or more per week per student. A qualified, certified FCS instructor is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

Cluster: Human Services

Course Descriptions

CIP: 19.0709 - Child Care Provider/Assistant.

State Course ID: 19053A001 **Course Title:** **Human Development and Family Wellness**

This course focuses on the development and wellness of individuals and families throughout the life cycle. Topics include human development and wellness theories, principles, and practices; life cycle expectations and issues, including biological, physiological, social, and psychological needs and concerns of aging adults; community services, agencies, and resources; roles, responsibilities, and functions of families, family members and caregivers; family issues, including ethics, human worth and dignity, change, stress, neglect and abuse, and care of the care-giver; individual and family wellness planning; and fostering intergenerational relationships. Practical experiences related to these topics are included through a variety of activities such as volunteer experiences, service learning, and intergenerational event planning opportunities. Information on a variety of human and family services careers is incorporated throughout the course.

State Course ID: 19055A001 **Course Title:** **Care and Learning Services Management**

This course emphasizes the skills associated with the administration of the infant, child and adult care facilities and education centers. Skills, strategies and issues related to caring for infants and special needs children and adults, where applicable, are included. Emphasis is placed on career opportunities, communication skills, human relations and the service needs of clients in the occupational area. The major learning experiences will involve actual work with children and /or adults in facilities simulating those found in the workplace/industry, and discussion of the situations and problems that arise during the learning experiences. State licensing and certification requirements and regulations related to all-aspects of care and education are stressed throughout the course. Careers in the occupational area will be investigated, including entrepreneurship.

CTE - CIP Course Details Catalog

Cluster: Information Technology

CIP: 11.0202 - Computer Programming, Specific Applications.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12001A001	**Business and Technology Concepts**	**1.00**	**2011**	
12005A001	**Keyboarding and Formatting**	**0.50**	**2011**	
10004A001	**Computer Concepts and Software Applications**	**0.50**	**2011**	
10008A001	**Digital Literacy and Responsibility**	**0.50**	**2017**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
10152A001	**Computer Operations and Programming I**	**3.00**	**2011**	
10152A002	**Computer Operations and Programming II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Information Technology

Course Descriptions

CIP: 11.0202 - Computer Programming, Specific Applications.

State Course ID: 12001A001 **Course Title:** **Business and Technology Concepts**

This orientation-level course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production). Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level courses that make up the Business, Marketing and Management occupations programs.

State Course ID: 12005A001 **Course Title:** **Keyboarding and Formatting**

Keyboarding and Formatting is a course designed to develop basic skills in touch keyboarding techniques for entering alphabetic, numeric, and symbol information found on computers and terminals. Students will learn to edit and format text and paragraphs, change fonts, work with headers and footers, cut and paste text, create and use tab keys, create labels, and work with multiple windows. Students will format documents such as letters, envelopes, memorandums, reports, and tables for personal, educational, and business uses. During the second half of the course, major emphasis is placed on formatting documents, improving proofreading skills, and increasing speed and accuracy.

State Course ID: 10004A001 **Course Title:** **Computer Concepts and Software Applications**

Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

State Course ID: 10008A001 **Course Title:** **Digital Literacy and Responsibility**

This foundation-level course prepares students to use technology in a proficient and responsible manner in school, in the workforce, and in everyday life. The course contains skills for working in an Internet or networked environment and the knowledge of what it means to be a good digital citizen and the ability to use technology responsibly. Topics include the benefits and risks of sharing information online, and the possible consequences of inappropriate sharing (oversharing). Students explore the legal and ethical dimensions of respecting creative work. Technology use is a vital employability skill for entry-level and upper-level management positions. Students may be provided with the opportunity to seek industry-recognized digital literacy certifications.

State Course ID: 10152A001 **Course Title:** **Computer Operations and Programming I**

Computer Operations and Programming I is the first of two skill-level courses designed to develop computer programming and program design skills through the use of various programming languages such as Visual Basic, C#, Java, and other object-oriented languages. Students will be exposed to the fundamentals of system analysis and design (e.g. flowcharting, diagramming, system design and planning), and the systems development life cycle. Instruction will include basic programming tools that are common to many programming languages. These may include items such as input/output statements, constants, assignment statements, string and numeric variable types, conditional processing, and branching and looping control structures. Students will learn programming techniques such as counting, averaging, rounding, and generation of random numbers to develop a good programming technique. Students will apply what they learn to create programs and applications that solve real world business related problems. Students will create programs to store, locate and retrieve data.

Cluster: Information Technology

Course Descriptions

CIP: 11.0202 - Computer Programming, Specific Applications.

State Course ID: 10152A002 **Course Title:** **Computer Operations and Programming II**

Computer Operations and Programming II is a skill-level course for students who have completed Computer Operations and Programming I. Students will use procedural and object-oriented programming languages such as Visual Basic, C# and Java. Students will learn programming concepts such as inheritance and polymorphism, advanced data handling (pointers, arrays, strings, and files), and common algorithms (recursion, searching and sorting). Students will be able to write, compile, run, test, debug and modify programs and applications that solve real world problems. Problem examples may include tracking inventory, scheduling rooms and facilities, accessing information and performing calculations.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Information Technology

CIP: 11.0801 - Web Page, Digital/Multimedia and Information Resources Design.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
10004A001	**Computer Concepts and Software Applications**	**0.50**	**2011**	
12001A001	**Business and Technology Concepts**	**1.00**	**2011**	
12005A001	**Keyboarding and Formatting**	**0.50**	**2011**	
10008A001	**Digital Literacy and Responsibility**	**0.50**	**2017**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
10201A001	**Web Page and Interactive Media Development I**	**3.00**	**2011**	
10201A002	**Web Page and Interactive Media Development II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Information Technology

Course Descriptions

CIP: 11.0801 - Web Page, Digital/Multimedia and Information Resources Design.

State Course ID: 10004A001 **Course Title:** **Computer Concepts and Software Applications**

Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

State Course ID: 12001A001 **Course Title:** **Business and Technology Concepts**

This orientation-level course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production). Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level courses that make up the Business, Marketing and Management occupations programs.

State Course ID: 12005A001 **Course Title:** **Keyboarding and Formatting**

Keyboarding and Formatting is a course designed to develop basic skills in touch keyboarding techniques for entering alphabetic, numeric, and symbol information found on computers and terminals. Students will learn to edit and format text and paragraphs, change fonts, work with headers and footers, cut and paste text, create and use tab keys, create labels, and work with multiple windows. Students will format documents such as letters, envelopes, memorandums, reports, and tables for personal, educational, and business uses. During the second half of the course, major emphasis is placed on formatting documents, improving proofreading skills, and increasing speed and accuracy.

State Course ID: 10008A001 **Course Title:** **Digital Literacy and Responsibility**

This foundation-level course prepares students to use technology in a proficient and responsible manner in school, in the workforce, and in everyday life. The course contains skills for working in an Internet or networked environment and the knowledge of what it means to be a good digital citizen and the ability to use technology responsibly. Topics include the benefits and risks of sharing information online, and the possible consequences of inappropriate sharing (oversharing). Students explore the legal and ethical dimensions of respecting creative work. Technology use is a vital employability skill for entry-level and upper-level management positions. Students may be provided with the opportunity to seek industry-recognized digital literacy certifications.

State Course ID: 10201A001 **Course Title:** **Web Page and Interactive Media Development I**

Web Page and Interactive Media Development I is a skill-level course designed to prepare students to plan, design, create and maintain web pages and sites. Students will learn the fundamentals of web page design using HTML, HTML editors, and graphic editors as well as programming tools such as JavaScript. Students will work in a project-based environment to create a working website. Students will learn to create pages, add hyperlinks, make tables and frames, create forms, integrate images, and set styles. Students will use image-editing programs to manipulate scanned images, computer graphics, and original artwork. Instruction will include creating graphical headers, interactive menus and buttons, and visually appealing backgrounds. Students will use hardware and software to capture, edit, create, and compress audio and video clips.

Cluster: Information Technology

Course Descriptions

CIP: 11.0801 - Web Page, Digital/Multimedia and Information Resources Design.

State Course ID: 10201A002 **Course Title:** **Web Page and Interactive Media Development II**

Web Page and Interactive Media Development II is a skill-level course for students who have completed Web Page and Interactive Media Development I. Instruction will include using multimedia authoring applications and programming tools such as JavaScript to create a web site that combines text, hyperlinks, images, video, and sound. Instruction will include using hardware and software to capture, edit, create, and compress audio and video clips as well as create animated text, graphics, and images. Other topics will include using tables to align images with text, creating newspaper-style columns, and inserting side menus and call-outs. Students will learn how to use templates, cascading style sheets and interactive elements to enhance web pages. Students will learn to create dynamic forms that include multiple-choice questions, comment boxes, and buttons. Students will learn how to connect to a database and retrieve and write data. Students are encouraged to develop a portfolio project that demonstrates their expertise in areas such as multimedia authoring, web development, audio and video editing, and advanced JavaScript applications to create interactive web pages.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Information Technology

CIP: 11.0901 - Computer Systems Networking and Telecommunications. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
10004A001	**Computer Concepts and Software Applications**	**0.50**	**2011**	
12001A001	**Business and Technology Concepts**	**1.00**	**2011**	
12005A001	**Keyboarding and Formatting**	**0.50**	**2011**	
10008A001	**Digital Literacy and Responsibility**	**0.50**	**2017**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
10102A001	**Computer Networking I**	**3.00**	**2011**	
10102A002	**Computer Networking II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Information Technology

Course Descriptions

CIP: 11.0901 - Computer Systems Networking and Telecommunications.

State Course ID: 10004A001 **Course Title:** **Computer Concepts and Software Applications**

Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

State Course ID: 12001A001 **Course Title:** **Business and Technology Concepts**

This orientation-level course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production). Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level courses that make up the Business, Marketing and Management occupations programs.

State Course ID: 12005A001 **Course Title:** **Keyboarding and Formatting**

Keyboarding and Formatting is a course designed to develop basic skills in touch keyboarding techniques for entering alphabetic, numeric, and symbol information found on computers and terminals. Students will learn to edit and format text and paragraphs, change fonts, work with headers and footers, cut and paste text, create and use tab keys, create labels, and work with multiple windows. Students will format documents such as letters, envelopes, memorandums, reports, and tables for personal, educational, and business uses. During the second half of the course, major emphasis is placed on formatting documents, improving proofreading skills, and increasing speed and accuracy.

State Course ID: 10008A001 **Course Title:** **Digital Literacy and Responsibility**

This foundation-level course prepares students to use technology in a proficient and responsible manner in school, in the workforce, and in everyday life. The course contains skills for working in an Internet or networked environment and the knowledge of what it means to be a good digital citizen and the ability to use technology responsibly. Topics include the benefits and risks of sharing information online, and the possible consequences of inappropriate sharing (oversharing). Students explore the legal and ethical dimensions of respecting creative work. Technology use is a vital employability skill for entry-level and upper-level management positions. Students may be provided with the opportunity to seek industry-recognized digital literacy certifications.

State Course ID: 10102A001 **Course Title:** **Computer Networking I**

Computer Networking I is a skill-level course designed to provide students with the skills needed to setup, configure, test, troubleshoot, maintain, and administer a data network using various network operating systems such as Novell, Windows, and Linux. Instruction will include network planning decisions, such as choosing an appropriate network configuration, determining the performance level requirements considering the differences among operating systems, and recommending network interface cards and cabling. Students will also learn how to setup and manage file systems and resources, and network topologies, protocols, and system utilities to efficiently run software applications on a network. Students will learn to use basic operating system commands, install and configure networks, set up user accounts and rights, and establish user security and permissions.

Cluster: Information Technology

Course Descriptions

CIP: 11.0901 - Computer Systems Networking and Telecommunications.

State Course ID: 10102A002 **Course Title:** **Computer Networking II**

Computer Networking II is a skill-level course for students who have completed Computer Networking I. Students will continue to learn skills to set up, configure, test, troubleshoot, maintain, and administer a data network using various network operating systems such as Novell, Windows, and Linux. Students will learn to use troubleshooting services, system monitoring utilities, and data backup and recovery systems. Instruction will include setting up and configuring various network services such as TCP/IP, DHCP, DNS, VPN, terminal services, e-mail, content filtering, and web services. Students will learn techniques to secure and protect network servers and data. Students will be introduced to some basic concepts regarding web server configuration. Students will also learn to use standard software tools to determine system vulnerabilities and correct these vulnerabilities by reconfiguring the operating system. Students will diagnose network problems using public domain network sniffers such as Ethereal. Instruction will include setting up and configuring a firewall, intrusion detection system, and encryption software for identifying and preventing potential network attacks.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

Cluster: Law, Public Safety, Corrections and Security

CIP: 22.0001 - Pre-Law Studies.

Status: Open **Start Year:** 2013 **End Year:**

Minimum Carnegie Units: 2.00

Group 2

Minimum Course Selection: School: 2 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
04165A001	**Legal System**	**3.00**	**2013**	
04162A001	**Law Studies**	**3.00**	**2016**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2013**	
12054A001	**Business Law**	**3.00**	**2016**	

Cluster: Law, Public Safety, Corrections and Security

Course Descriptions

CIP: 22.0001 - Pre-Law Studies.

State Course ID: 04165A001 **Course Title:** **Legal System**

Legal System courses examine the workings of the U.S. criminal and civil justice systems, including providing an understanding of civil and criminal law and the legal process, the structure and procedures of courts, and the role of various legal or judicial agencies. Although these courses emphasize the legal process, they may also cover the history and foundation of U.S. law (the Constitution, statutes, and precedents). Course content may also include contemporary problems in the criminal justice system.

State Course ID: 04162A001 **Course Title:** **Law Studies**

Law Studies courses examine the history and philosophy of law as part of U.S. society and include the study of the major substantive areas of both criminal and civil law, such as constitutional rights, torts, contracts, property, criminal law, family law, and equity. Although these courses emphasize the study of law, they may also cover the workings of the legal system.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 12054A001 **Course Title:** **Business Law**

Introduces law and the origins and necessity of the legal system; provides insight into the evolution and development of laws that govern business in our society; develops an understanding of how organization and operation of the legal system impact business; develops an understanding of rights and duties within the business environment; and includes contractual responsibility, protection of individual rights in legal relationships relative to warranties, product liability, secured and unsecured debts, negotiable instruments, agencies, employer-employee relations, property ownership and transfer, landlord and tenant, wills and estates, community property, social security, and taxation.

CTE - CIP Course Details Catalog

Cluster: Law, Public Safety, Corrections and Security

CIP: 43.0107 - Criminal Justice/Police Science. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 2

Minimum Course Selection: School: 1 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
15051A003	**Law Enforcement I**	**3.00**	**2011**	
15051A004	**Law Enforcement II**	**3.00**	**2011**	
15051A005	**Security I**	**3.00**	**2011**	
15051A006	**Security II**	**3.00**	**2011**	
15052A001	**Corrections**	**3.00**	**2015**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Law, Public Safety, Corrections and Security

Course Descriptions

CIP: 43.0107 - Criminal Justice/Police Science.

State Course ID: 15051A003 **Course Title:** **Law Enforcement I**

This course is designed to prepare students to enter the fields of law enforcement and the criminal justice system. Instruction includes the history of law enforcement and the legal system, report writing and recordkeeping, criminal investigation techniques, and routine police procedures. Students learn how to use communications and dispatch equipment, perform proper search and seizure techniques, conduct basic criminal investigations, and execute correct pursuit and arrest procedures . Instruction also includes patrolling techniques, private security operations, traffic investigations, and community relations.

State Course ID: 15051A004 **Course Title:** **Law Enforcement II**

This course provides experiences for students in basic investigative techniques for crimes against people and property. Learning activities emphasize the development of more advanced knowledge and skill than those provided in Law Enforcement I. Units of instruction include how to conduct a preliminary investigation and protect a crime scene, collect and preserve physical evidence including dusting latent prints, casting, fingerprint classification, and the use of portable crime laboratory equipment. Students learn how to conduct interviews, complete police reports, use police equipment, and testify in court. Instruction also includes traffic control, personal security, and law enforcement administration.

State Course ID: 15051A005 **Course Title:** **Security I**

This course is designed to prepare students to enter the fields of law enforcement and the criminal justice system. Instruction includes the history of law enforcement and the legal system, report writing and recordkeeping, criminal investigation techniques, and routine police procedures. Students learn how to use communications and dispatch equipment, perform proper search and seizure techniques, conduct basic criminal investigations, and execute correct pursuit and arrest procedures . Instruction also includes patrolling techniques, private security operations, traffic investigations, and community relations.

State Course ID: 15051A006 **Course Title:** **Security II**

This course provides learning activities to assist students in understanding the differences and similarities between the criminal justice system and security and protective services, incident response techniques, crime prevention, security operations, and crime in the workplace. Learning activities emphasize the development of more advanced knowledge and skill than those provided in Security I.

State Course ID: 15052A001 **Course Title:** **Corrections**

This course will provide instruction regarding the principles and techniques used by institutions that incarcerate, rehabilitate, and monitor people accused or convicted of crimes. Course topics vary and may include (but are not limited to) protective services; correction, judicial, and probation service; public administration; and social work.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Law, Public Safety, Corrections and Security

CIP: 43.0203 - Fire Science/Fire-fighting. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 2

Minimum Course Selection: School: 1 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
15152A001	**Fire-Fighting I**	**4.00**	**2011**	
15152A002	**Fire-Fighting II**	**4.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Law, Public Safety, Corrections and Security

Course Descriptions

CIP: 43.0203 - Fire Science/Fire-fighting.

State Course ID: 15152A001 **Course Title:** **Fire-Fighting I**

This course is designed to provide students with the skills needed to prevent and extinguish fires, maintain and repair fire service related equipment, provide basic emergency medical treatment, and prepare public service information concerning fires and hazardous materials. Instruction includes the physical characteristics of fire as well as general safety practices, basic fire behavior, and extinguishing principles. Students learn rescue and extrication procedures, types and use of ground ladders, proper ventilation techniques, and appropriate use of various water supply systems, and how to use ropes and tie knots. Students also learn basic emergency medical techniques and practices which include medical legal considerations, terminology, airway management, patient assessment and transportation, and emergency treatment.

State Course ID: 15152A002 **Course Title:** **Fire-Fighting II**

This course builds on the concepts and skills introduced in Fire-Fighter I. Instruction is provided in the use fire hoses, controlling property loss along with fire control techniques, detection systems, and prevention practices. Instruction includes communication procedures, procedures for operating emergency vehicles, maintaining fire-related equipment and vehicles, and securing and protecting evidence. Students may learn procedures for treating poisonings and allergic reactions, environmental emergencies, and hazardous waste removal, as well as how to treat soft tissue, musculoskeletal, and head and spine injuries.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Manufacturing

CIP: 19.0902 - Apparel and Textile Manufacture. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19201A001	**Textiles and Design I**	**1.00**	**2011**	
19203A001	**Textiles and Design II**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19204A001	**Fashion, Apparel, and Textile Services Occupations**	**3.00**	**2011**	
19204A002	**Textile and Design Occupations**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12153A001	**Fashion Merchandising**	**3.00**	**2011**	
22201A001	**Introduction to Family and Consumer Sciences Careers**	**1.00**	**2011**	
22153A002	**FCS Cooperative Education**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Manufacturing

Course Descriptions

CIP: 19.0902 - Apparel and Textile Manufacture.

State Course ID: 19201A001 **Course Title:** **Textiles and Design I**

This course is designed to provide basic knowledge and understanding of the design, development, and production of textile products. Through hands-on and project based learning experiences students will discover fiber characteristics, fabric construction methods, elements of science and design in textiles and apparel, and basic construction skills used in interior furnishings and apparel industries. This course emphasizes awareness and investigation of careers and industry trends in textiles.

State Course ID: 19203A001 **Course Title:** **Textiles and Design II**

This project-based course focuses on the implementation and recognition of design principles in selecting, constructing, altering, and remodeling textile products. Project management skills, including efficient use of time, materials, technique, and tools are incorporated throughout the course. Topics include: engineered fabric constructions; fiber and textile trends; color theory; principles of design; fabric finishes; industry construction techniques; use of industry tools, equipment, and terminology; knowledge of resources and vendors; research and evaluation of textile products for special needs populations; impacts of technology; construction, alteration and re-design skills; and simple flat pattern design and recognition.

State Course ID: 19204A001 **Course Title:** **Fashion, Apparel, and Textile Services Occupations**

This course prepares students for employment and higher education programs of study related to the broad spectrum of careers encompassed in fashion, apparel, and textile industries. This course provides students with opportunities to: analyze the influences of social, cultural, and environmental diversity in the fashion, apparel, and textile industry; investigate applicable regulatory and policy issues; assess product quality; develop a design portfolio; refine and develop industry skills necessary to employment in fashion, apparel, and/or textiles; model proper safety procedures; communicate with potential customers/clients using industry terminology; perform operational functions; and research current industry employment opportunities, including the investigation of entrepreneurship.

State Course ID: 19204A002 **Course Title:** **Textile and Design Occupations**

The Textile and Design Occupations course focuses on the study and application of functional and aesthetic design, human factors research, production planning, manufacturing processes, quality assessment, and distribution systems of textile products. Additional topics include: consumer and industry textile trends; industry specific terminology; advanced design applications; project development, management, and supervision; safety codes and procedures; portfolio development and presentation; client relationships; and individualized mastery of textile/design skills.

State Course ID: 12153A001 **Course Title:** **Fashion Merchandising**

Fashion Merchandising focuses on the application of research techniques to understand the cultural, environmental, and psychological aspects of textile products as related to the customer needs. This course develops skills to research and apply knowledge of a product for the textile and design industry through hands-on, problem based learning experiences and projects. Topics include: product knowledge and promotion; industry trends and style; industry specific terminology; marketing campaigns; current technology; and visual merchandising displays. Emphasis is placed on the development of a variety of communication techniques necessary in the promotion of products and the formation of client relationships.

State Course ID: 22201A001 **Course Title:** **Introduction to Family and Consumer Sciences Careers**

This course introduces students to the field of family and consumer sciences and the many career opportunities available in this broad field. The course includes theory and laboratory experiences in the following content areas: Nutrition and culinary arts; textiles and design; family, career, and community leadership development; resource management; human development and life-long learning; facility design, care, and management; and interpersonal relationships and life management skills.

Cluster: Manufacturing

Course Descriptions

CIP: 19.0902 - Apparel and Textile Manufacture.

State Course ID: 22153A002 **Course Title:** **FCS Cooperative Education**

Family and Consumer Sciences Cooperative Education is designed for students interested in pursuing careers in occupations in the field family and consumer sciences. Classroom instruction focuses on providing students with workplace skills, post-secondary education opportunities related to the job/career pathway, developing and maintaining positive workplace relationships, planning for the future, legal protection and responsibility, professional organizations, and advancing skills related to the job. Classroom and worksite instruction is based on the duties of the FCS occupation. Students are released from school for their paid cooperative education work experience, participate in 200 minutes per week of related classroom instruction, and supervised on-the-by a qualified instructor ½ hour or more per week per student. A qualified, certified FCS instructor is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Manufacturing

CIP: 47.0104 - Computer Installation and Repair Technology/Technician. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	**Production Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
20001A001	**Transportation Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
10252A001	**Computer Maintenance I**	**3.00**	**2011**	
10252A002	**Computer Maintenance II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Manufacturing

Course Descriptions

CIP: 47.0104 - Computer Installation and Repair Technology/Technician.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

Cluster: Manufacturing

Course Descriptions

CIP: 47.0104 - Computer Installation and Repair Technology/Technician.

State Course ID: 10252A001 **Course Title:** **Computer Maintenance I**

This course is designed to provide students with the skills needed to install, setup, configure, test, troubleshoot, and maintain, personal computers and peripherals . Instruction includes assembling, maintaining, and upgrading personal computers. Students learn how to install, upgrade, and troubleshoot various hardware components such as motherboards, hard drives, CD- ROMS, memory, power supplies, video cards, sound cards, and network cards. Students install and configure various desktop operating systems such as Windows, Apple, and Linux. The course includes adding and removing software programs, installing and updating system drivers, creating startup and recovery disk, and updating the BIOS and CMOS. Students learn to conduct preventive maintenance and perform system backups, data transfer, and recovery routines as well as use diagnostic utilities to troubleshoot hardware and software problems. Students also learn how to disassemble, clean, troubleshoot, and reassemble peripherals such as printers.

State Course ID: 10252A002 **Course Title:** **Computer Maintenance II**

This course builds on the skills introduced in Computer Maintenance I. Students learn how to connect and install multiple computers and peripherals together to create a computer network. Students build, configure, and maintain network servers along with installing and configuring various network operating systems such as Novell, Windows, and Linux. Students learn to use troubleshooting services, system monitoring utilities, and data backup and recovery systems. Other topics include learning how to connect various network components such as servers, computers, and printers together using data cabling, hubs, and switches. Students learn to run, terminate, and troubleshoot data cabling. In addition, students learn how to install and upgrade software across the network, as well as map drives and share resources such as printers, software, and files. The course includes setting up and configuring various network services such as TCP /IP, DHCP, DNS, VPN, terminal services, e-mail, and web services. Students learn how to secure and protect network servers and data as well as setting up and configuring a firewall, intrusion detection system, and encryption software for identifying and preventing potential network attacks.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Manufacturing

CIP: 47.0105 - Industrial Electronics Technology/Technician. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
13052A001	**Production Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
20001A001	**Transportation Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
17104A001	**Industrial Electronics I**	**3.00**	**2011**	
17104A002	**Industrial Electronics II**	**3.00**	**2011**	
13102A001	**Mechatronics**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	
21009A001	**Robotics**	**3.00**	**2015**	

Cluster: Manufacturing

Course Descriptions

CIP: 47.0105 - Industrial Electronics Technology/Technician.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society . Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 17104A001 **Course Title:** **Industrial Electronics I**

This course introduces students to the skills needed to service, repair, and replace a wide range of equipment associated with automated or instrument -controlled manufacturing processes. Planned learning activities in this course allow students to become more knowledgeable in the fundamental principles and theories of electrical/electronic and hydraulic/pneumatic equipment as applied to instrumentation devices and digitally encoded radio equipment. Instruction also includes safety principles and practices, semi-conductors and transistor theory, electrical parameters and circuits, electronic component function and identification, and the use and care of related hand tools, power tools, and test equipment.

Cluster: Manufacturing

Course Descriptions

CIP: 47.0105 - Industrial Electronics Technology/Technician.

State Course ID: 17104A002 **Course Title:** **Industrial Electronics II**

This course provides planned learning activities designed to allow students to gain knowledge and skills in testing, maintaining, and repairing electronic equipment and systems used in the manufacturing industry. Learning activities in this course emphasizes the development of more advanced knowledge and skills than those provided in Industrial Electronics I. Skills introduced in this course include instruction in the interpretation of technical sketches, schematics, and circuit diagrams . Additional units of instruction include the identification and causes of equipment malfunctions, the repair and replacement of parts and equipment, the care and use of standard tools, equipment, and specialized instrumentation testing devices.

State Course ID: 13102A001 **Course Title:** **Mechatronics**

Electro-Mechanical Systems courses provide students with instruction and experience in components and equipment that use electricity and the power of physical forces. Students gain an understanding of the principles of electricity and mechanics and their application to gears, including hydraulic /pneumatic equipment, cams, levers, circuits, and other devices used in the manufacturing process or within manufactured goods.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 21009A001 **Course Title:** **Robotics**

Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.

CTE - CIP Course Details Catalog

Cluster: Manufacturing

CIP: 47.0303 - Industrial Mechanics and Maintenance Technology. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	**Production Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
20001A001	**Transportation Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13302A001	**Industrial Maintenance I**	**3.00**	**2011**	
13302A002	**Industrial Maintenance II**	**3.00**	**2011**	
13102A001	**Mechatronics**	**3.00**	**2015**	**2016**

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	
21009A001	**Robotics**	**3.00**	**2015**	
13102A001	**Mechatronics**	**3.00**	**2017**	

Cluster: Manufacturing

Course Descriptions

CIP: 47.0303 - Industrial Mechanics and Maintenance Technology.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society . Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 13302A001 **Course Title:** **Industrial Maintenance I**

This course is intended to provide students with planned learning experiences and activities that include safety, basic hand and power tools, mathematics, precision measurement, blueprint reading, introduction to electricity, basic carpentry, scaffolding and rigging, and basic welding and cutting. In addition, students are introduced to robotics and other automated manufacturing procedures.

Cluster: Manufacturing

Course Descriptions

CIP: 47.0303 - Industrial Mechanics and Maintenance Technology.

State Course ID: 13302A002 **Course Title:** **Industrial Maintenance II**

This course builds on the skills and concepts introduced in Industrial Maintenance I. This course provides planned learning experiences and activities in safety, advanced mathematics, precision measurement, and blueprint reading. The program also includes instruction in preventative maintenance, automated control systems, automated manufacturing, hydraulic/pneumatic equipment, metal lathe operations, drill press and metal sawing operations, rotating equipment, pipe fitting, and insulation.

State Course ID: 13102A001 **Course Title:** **Mechatronics**

Electro-Mechanical Systems courses provide students with instruction and experience in components and equipment that use electricity and the power of physical forces. Students gain an understanding of the principles of electricity and mechanics and their application to gears, including hydraulic /pneumatic equipment, cams, levers, circuits, and other devices used in the manufacturing process or within manufactured goods.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 21009A001 **Course Title:** **Robotics**

Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.

State Course ID: 13102A001 **Course Title:** **Mechatronics**

Electro-Mechanical Systems courses provide students with instruction and experience in components and equipment that use electricity and the power of physical forces. Students gain an understanding of the principles of electricity and mechanics and their application to gears, including hydraulic /pneumatic equipment, cams, levers, circuits, and other devices used in the manufacturing process or within manufactured goods.

CTE - CIP Course Details Catalog

Cluster: Manufacturing

CIP: 47.0409 - Parts and Warehousing Operations and Maintenance Technology/Technician. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20001A001	**Transportation Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
13052A001	**Production Technology**	**1.00**	**2018**	
20101A001	**Energy Utilization Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20152A001	**Warehouse Operations I**	**3.00**	**2011**	
20152A002	**Warehouse Operations II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Manufacturing

Course Descriptions

CIP: 47.0409 - Parts and Warehousing Operations and Maintenance Technology/Technician.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society . Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 20152A001 **Course Title:** **Warehouse Operations I**

This course provides planned learning activities designed to allow students to gain knowledge and skills applicable to the Parts, Warehousing, and Inventory Management Operations occupation. Students are instructed in areas of safety, inventory management, warehouse operations, and inventory control.

Cluster: Manufacturing

Course Descriptions

CIP: 47.0409 - Parts and Warehousing Operations and Maintenance Technology/Technician.

State Course ID: 20152A002 **Course Title:** **Warehouse Operations II**

This course provides planned learning activities designed to allow students to gain knowledge and skills in PC based inventory control, parts identification, and customer service. Learning activities in this course emphasize the development of more advanced knowledge and skills than those provided in Warehouse Operations I. Skills introduced in this course include data base operations, supply logistics, supplier relations, and shop operations.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Manufacturing

CIP: 48.0501 - Machine Tool Technology/Machinist. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	**Production Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
13203A007	**Beginning Machining**	**1.00**	**2012**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
21006A001	**Introduction to Engineering Design**	**3.00**	**2015**	
20001A001	**Transportation Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13203A005	**Machine Shop Technology I**	**3.00**	**2011**	
13203A006	**Machine Shop Technology II**	**3.00**	**2011**	
13203A001	**Machine Tool Technology/Machinist I**	**3.00**	**2011**	
13203A002	**Machine Tool Technology/Machinist II**	**3.00**	**2011**	
21010A001	**Computer Integrated Manufacturing**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	
21009A001	**Robotics**	**3.00**	**2015**	
21053A001	**Emerging Technologies**	**3.00**	**2015**	
21102A002	**Beginning Drafting**	**1.00**	**2018**	
13207A003	**Beginning Welding**	**1.00**	**2018**	

Cluster: Manufacturing

Course Descriptions

CIP: 48.0501 - Machine Tool Technology/Machinist.

State Course ID: 13052A001 **Course Title:** **Production Technology**
Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**
Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**
Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**
Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 13203A007 **Course Title:** **Beginning Machining**
Beginning Machining course enable students to create metal parts using various machine tools and equipment. Course content may include interpreting specifications for machines using blueprints, sketches, or descriptions of parts; preparing and using lathes, milling machines, shapers, and grinders with skill, safety, and precision.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**
The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 21006A001 **Course Title:** **Introduction to Engineering Design**
Engineering Design courses offer students experience in solving problems by applying a design development process. Often using solid modeling computer design software, students develop, analyze, and test product solutions models as well as communicate the features of those models.

Cluster: Manufacturing

Course Descriptions

CIP: 48.0501 - Machine Tool Technology/Machinist.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 13203A005 **Course Title:** **Machine Shop Technology I**

This course introduces students to the basic mechanical and technical skills common to most fields in the fabrication of metal parts in support of other manufacturing activities. Topics include shop safety, hand and power tool use, the operation and maintenance of precision metal working equipment, precision measurement, quality control, exploring the manufacturing process, instrumentation and blueprint reading.

State Course ID: 13203A006 **Course Title:** **Machine Shop Technology II**

This course builds on the skills and concepts introduced in Machine Shop Technology I. Additional skill-building activities include automated manufacturing, the use of end mills, surface grinders, drill presses, and basic welding procedures.

State Course ID: 13203A001 **Course Title:** **Machine Tool Technology/Machinist I**

This course introduces students to the basic skills and machines needed in precision metal work. Students gain machining skills while working with lathes, milling machines, surface grinders, drill presses, and other equipment. In addition, students learn the basics of blueprint reading, precision measuring, layout, and machining process planning.

State Course ID: 13203A002 **Course Title:** **Machine Tool Technology/Machinist II**

This course provides more in-depth skill development in various types of precision tool operation, especially using mills, lathes, and surface grinders to perform machining tasks. Power cutoff saws and power band saws are also covered. Students also explore the use of computer and numerical controlled machining.

State Course ID: 21010A001 **Course Title:** **Computer Integrated Manufacturing**

Computer Integrated Manufacturing courses involve the study of robotics and automation. Building on computer solid modeling skills, students may use computer numerical control (CNC) equipment to produce actual models of their three-dimensional designs. Course topics may also include fundamental concepts of robotics, automated manufacturing, and design analysis.

Cluster: Manufacturing

Course Descriptions

CIP: 48.0501 - Machine Tool Technology/Machinist.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 21009A001 **Course Title:** **Robotics**

Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.

State Course ID: 21053A001 **Course Title:** **Emerging Technologies**

Emerging Technologies courses emphasize students' exposure to and understanding of new and emerging technologies. The range of technological issues varies widely but typically include lasers, fiber optics, electronics, robotics, computer technologies (software engineering), Game Art and Design, CAD/CAM, communication modalities, and transportation technologies.

State Course ID: 21102A002 **Course Title:** **Beginning Drafting**

Beginning Drafting is an introductory level drafting course. During this course students will learn the basic fundamentals of drafting and/or computer aided drafting (CAD). The instruction will include the care and use of drafting equipment, freehand sketching, orthographic projection, lettering techniques, dimensioning standards, pictorial drawings, drawing reproduction, and an introduction to CAD.

State Course ID: 13207A003 **Course Title:** **Beginning Welding**

Beginning Welding course enables students to gain knowledge of the properties, uses, and applications of various metals, skills in various processes used to join and cut metals (such as oxyacetylene, shielded metal, metal inert gas, and tungsten arc processes), and experience in identifying, selecting, and rating appropriate techniques. Welding courses often include instruction in interpreting blueprints or other types of specifications.

CTE - CIP Course Details Catalog

Cluster: Manufacturing

CIP: 48.0506 - Sheet Metal Technology/Sheetworking. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	**Production Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
20001A001	**Transportation Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13205A001	**Sheet Metal Technology I**	**3.00**	**2011**	
13205A002	**Sheet Metal Technology II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Manufacturing

Course Descriptions

CIP: 48.0506 - Sheet Metal Technology/Sheetworking.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society . Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 13205A001 **Course Title:** **Sheet Metal Technology I**

This course is designed to introduce students to the Sheet Metal Worker occupation. Students are instructed in areas of safety including hand tool, power tool, ladder and scaffolding. Students are introduced to the planning, layout, and fabrication of sheet metal parts. Students gain knowledge of blueprint reading and sketching to determine sequence and methods of fabrication and assembly of products. In addition, units of instruction include the proper use and maintenance of hand and power tools, metal identification, measuring and layout, metal separating, forming machinery, and basic welding.

Cluster: Manufacturing

Course Descriptions

CIP: 48.0506 - Sheet Metal Technology/Sheetworking.

State Course ID: 13205A002 **Course Title:** **Sheet Metal Technology II**

This course is a continuation of and builds on the skills and concepts introduced in Sheet Metal Technology I. In this course students are introduced to precision measurement, power assisted sheet metal forming equipment, constructing ductwork, hand and power tools specifically designed for sheet metal fabrication, sheet metal production equipment, and advanced welding and brazing.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Manufacturing

CIP: 48.0508 - Welding Technology/Welder. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	**Production Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
13207A003	**Beginning Welding**	**1.00**	**2012**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
20001A001	**Transportation Technology**	**1.00**	**2016**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13207A001	**Welding Technology I**	**3.00**	**2011**	
13207A002	**Welding Technology II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Manufacturing

Course Descriptions

CIP: 48.0508 - Welding Technology/Welder.

State Course ID: 13052A001 **Course Title:** **Production Technology**
Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**
Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 11002A001 **Course Title:** **Communication Technology**
Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**
Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 13207A003 **Course Title:** **Beginning Welding**
Beginning Welding course enables students to gain knowledge of the properties, uses, and applications of various metals, skills in various processes used to join and cut metals (such as oxyacetylene, shielded metal, metal inert gas, and tungsten arc processes), and experience in identifying, selecting, and rating appropriate techniques. Welding courses often include instruction in interpreting blueprints or other types of specifications.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**
The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**
Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

Cluster: Manufacturing

Course Descriptions

CIP: 48.0508 - Welding Technology/Welder.

State Course ID: 13207A001 **Course Title:** **Welding Technology I**

This course assists students in gaining the knowledge and developing the basic skills needed to be successful in welding technology. Units of instruction include arc, TIG and MIG welding, metallurgy, cutting metal using arc, plasma, and oxy-gas. In addition, students learn the basics of blueprint reading, precision measuring, layout, and production process planning.

State Course ID: 13207A002 **Course Title:** **Welding Technology II**

This course builds on the skills and concepts introduced in Welding Technology I and provides more in-depth skill development in various types of welding including horizontal, vertical, overhead, and circular techniques. Students also explore the use of robotic and automated production welding.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Manufacturing

CIP: 48.0511 - Metal Fabicator.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	**Production Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
13203A007	**Beginning Machining**	**1.00**	**2012**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
20001A001	**Transportation Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13055A001	**Precision Metal Production I**	**3.00**	**2011**	
13055A002	**Precision Metal Production II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	
21102A002	**Beginning Drafting**	**1.00**	**2018**	
13207A003	**Beginning Welding**	**1.00**	**2018**	

Cluster: Manufacturing

Course Descriptions

CIP: 48.0511 - Metal Fabicator.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 13203A007 **Course Title:** **Beginning Machining**

Beginning Machining course enable students to create metal parts using various machine tools and equipment. Course content may include interpreting specifications for machines using blueprints, sketches, or descriptions of parts; preparing and using lathes, milling machines, shapers, and grinders with skill, safety, and precision.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

Cluster: Manufacturing

Course Descriptions

CIP: 48.0511 - Metal Fabicator.

State Course ID: 13055A001 **Course Title:** **Precision Metal Production I**

This course offers a planned sequence of learning experiences which provide students with the opportunities to develop competencies needed for employment in a variety of manufacturing-related occupations. This course introduces students to the skills common to many occupations, such as applying safety practices, selecting materials, performing bench work operations, performing precision measurement, performing layouts, performing housekeeping and recordkeeping activities, and operating a variety of tools used for separating, forming, and combining materials.

State Course ID: 13055A002 **Course Title:** **Precision Metal Production II**

This course is a continuation of Precision Metal Production I and builds on the skills introduced in that course. This course begins to offer students the opportunity to specialize in specific areas of manufacturing such as machine tool set-up and operation, welding, quality control, automated machine set-up and operation, and sheet metal fabrication. Course content includes the following areas: metallurgy and heat treatment of metal, advanced machine set-up and operation, numerical control/computer, numerical control machining, performing supervisory functions and installation, and maintenance and repair of machinery.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 21102A002 **Course Title:** **Beginning Drafting**

Beginning Drafting is an introductory level drafting course. During this course students will learn the basic fundamentals of drafting and/or computer aided drafting (CAD). The instruction will include the care and use of drafting equipment, freehand sketching, orthographic projection, lettering techniques, dimensioning standards, pictorial drawings, drawing reproduction, and an introduction to CAD.

State Course ID: 13207A003 **Course Title:** **Beginning Welding**

Beginning Welding course enables students to gain knowledge of the properties, uses, and applications of various metals, skills in various processes used to join and cut metals (such as oxyacetylene, shielded metal, metal inert gas, and tungsten arc processes), and experience in identifying, selecting, and rating appropriate techniques. Welding courses often include instruction in interpreting blueprints or other types of specifications.

CTE - CIP Course Details Catalog

Cluster: Manufacturing

CIP: 48.0703 - Cabinetmaking and Millwork. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	**Production Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
17007A003	**Beginning Cabinetmaking**	**1.00**	**2012**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
20001A001	**Transportation Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
17007A001	**Cabinetmaking & Millwork I**	**3.00**	**2011**	
17007A002	**Cabinetmaking & Millwork II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Manufacturing

Course Descriptions

CIP: 48.0703 - Cabinetmaking and Millwork.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 17007A003 **Course Title:** **Beginning Cabinetmaking**

Beginning Cabinetmaking course provides students with experience in constructing cases, cabinets, counters, and other interior woodwork. Students learn how to use various woodworking machines and power tools for cutting and shaping wood. This course can cover the different methods of joining pieces of wood, how to use mechanical fasteners, and how to attach hardware.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

Cluster: Manufacturing

Course Descriptions

CIP: 48.0703 - Cabinetmaking and Millwork.

State Course ID: 17007A001 **Course Title:** **Cabinetmaking & Millwork I**

This course introduces students to the basic design and fabrication of residential cabinetry and custom furniture. The course also exposes students to the millwork and millwright industry. Instruction includes safety practices in using hand tools and power equipment.

State Course ID: 17007A002 **Course Title:** **Cabinetmaking & Millwork II**

This course provides learning experiences related to the erection, installation, and maintenance of commercial and residential cabinetry, and the repair and maintenance of stationary woodworking machinery. Planned learning activities emphasize the development of more advanced knowledge and skills than those provided in Cabinetmaking and Millwork I. This course provides the student with the knowledge and skills necessary to perform basic cabinetry construction and how it relates to the manufacturing process. In addition, more advanced woodworking machine maintenance skills are introduced.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Marketing

CIP: 19.0905 - Apparel and Textile Marketing Management.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19201A001	**Textiles and Design I**	**1.00**	**2011**	
19203A001	**Textiles and Design II**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12153A001	**Fashion Merchandising**	**3.00**	**2011**	
19204A001	**Fashion, Apparel, and Textile Services Occupations**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22201A001	**Introduction to Family and Consumer Sciences Careers**	**1.00**	**2011**	
22153A002	**FCS Cooperative Education**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	
19204A002	**Textile and Design Occupations**	**3.00**	**2011**	

Cluster: Marketing

Course Descriptions

CIP: 19.0905 - Apparel and Textile Marketing Management.

State Course ID: 19201A001 **Course Title:** **Textiles and Design I**

This course is designed to provide basic knowledge and understanding of the design, development, and production of textile products. Through hands-on and project based learning experiences students will discover fiber characteristics, fabric construction methods, elements of science and design in textiles and apparel, and basic construction skills used in interior furnishings and apparel industries. This course emphasizes awareness and investigation of careers and industry trends in textiles.

State Course ID: 19203A001 **Course Title:** **Textiles and Design II**

This project-based course focuses on the implementation and recognition of design principles in selecting, constructing, altering, and remodeling textile products. Project management skills, including efficient use of time, materials, technique, and tools are incorporated throughout the course. Topics include: engineered fabric constructions; fiber and textile trends; color theory; principles of design; fabric finishes; industry construction techniques; use of industry tools, equipment, and terminology; knowledge of resources and vendors; research and evaluation of textile products for special needs populations; impacts of technology; construction, alteration and re-design skills; and simple flat pattern design and recognition.

State Course ID: 12153A001 **Course Title:** **Fashion Merchandising**

Fashion Merchandising focuses on the application of research techniques to understand the cultural, environmental, and psychological aspects of textile products as related to the customer needs. This course develops skills to research and apply knowledge of a product for the textile and design industry through hands-on, problem based learning experiences and projects. Topics include: product knowledge and promotion; industry trends and style; industry specific terminology; marketing campaigns; current technology; and visual merchandising displays. Emphasis is placed on the development of a variety of communication techniques necessary in the promotion of products and the formation of client relationships.

State Course ID: 19204A001 **Course Title:** **Fashion, Apparel, and Textile Services Occupations**

This course prepares students for employment and higher education programs of study related to the broad spectrum of careers encompassed in fashion, apparel, and textile industries. This course provides students with opportunities to: analyze the influences of social, cultural, and environmental diversity in the fashion, apparel, and textile industry; investigate applicable regulatory and policy issues; assess product quality; develop a design portfolio; refine and develop industry skills necessary to employment in fashion, apparel, and/or textiles; model proper safety procedures; communicate with potential customers/clients using industry terminology; perform operational functions; and research current industry employment opportunities, including the investigation of entrepreneurship.

State Course ID: 22201A001 **Course Title:** **Introduction to Family and Consumer Sciences Careers**

This course introduces students to the field of family and consumer sciences and the many career opportunities available in this broad field. The course includes theory and laboratory experiences in the following content areas: Nutrition and culinary arts; textiles and design; family, career, and community leadership development; resource management; human development and life-long learning; facility design, care, and management; and interpersonal relationships and life management skills.

Cluster: Marketing

Course Descriptions

CIP: 19.0905 - Apparel and Textile Marketing Management.

State Course ID: 22153A002 **Course Title:** **FCS Cooperative Education**

Family and Consumer Sciences Cooperative Education is designed for students interested in pursuing careers in occupations in the field family and consumer sciences. Classroom instruction focuses on providing students with workplace skills, post-secondary education opportunities related to the job/career pathway, developing and maintaining positive workplace relationships, planning for the future, legal protection and responsibility, professional organizations, and advancing skills related to the job. Classroom and worksite instruction is based on the duties of the FCS occupation. Students are released from school for their paid cooperative education work experience, participate in 200 minutes per week of related classroom instruction, and supervised on-the-by a qualified instructor ½ hour or more per week per student. A qualified, certified FCS instructor is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 19204A002 **Course Title:** **Textile and Design Occupations**

The Textile and Design Occupations course focuses on the study and application of functional and aesthetic design, human factors research, production planning, manufacturing processes, quality assessment, and distribution systems of textile products. Additional topics include: consumer and industry textile trends; industry specific terminology; advanced design applications; project development, management, and supervision; safety codes and procedures; portfolio development and presentation; client relationships; and individualized mastery of textile/design skills.

CTE - CIP Course Details Catalog

Cluster: Marketing

CIP: 52.1801 - Sales, Distribution, and Marketing Operations, General.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
10004A001	**Computer Concepts and Software Applications**	**0.50**	**2011**	
12001A001	**Business and Technology Concepts**	**1.00**	**2011**	
12005A001	**Keyboarding and Formatting**	**0.50**	**2011**	
10008A001	**Digital Literacy and Responsibility**	**0.50**	**2017**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12164A001	**Product-Oriented Marketing**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12152A001	**Advanced Marketing**	**3.00**	**2011**	
12104A001	**Accounting I**	**3.00**	**2011**	
10005A001	**Information Processing I**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	
12054A001	**Business Law**	**3.00**	**2011**	
12052A001	**Business Management**	**3.00**	**2015**	

Cluster: Marketing

Course Descriptions

CIP: 52.1801 - Sales, Distribution, and Marketing Operations, General.

State Course ID: 10004A001 **Course Title:** **Computer Concepts and Software Applications**

Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

State Course ID: 12001A001 **Course Title:** **Business and Technology Concepts**

This orientation-level course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production). Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level courses that make up the Business, Marketing and Management occupations programs.

State Course ID: 12005A001 **Course Title:** **Keyboarding and Formatting**

Keyboarding and Formatting is a course designed to develop basic skills in touch keyboarding techniques for entering alphabetic, numeric, and symbol information found on computers and terminals. Students will learn to edit and format text and paragraphs, change fonts, work with headers and footers, cut and paste text, create and use tab keys, create labels, and work with multiple windows. Students will format documents such as letters, envelopes, memorandums, reports, and tables for personal, educational, and business uses. During the second half of the course, major emphasis is placed on formatting documents, improving proofreading skills, and increasing speed and accuracy.

State Course ID: 10008A001 **Course Title:** **Digital Literacy and Responsibility**

This foundation-level course prepares students to use technology in a proficient and responsible manner in school, in the workforce, and in everyday life. The course contains skills for working in an Internet or networked environment and the knowledge of what it means to be a good digital citizen and the ability to use technology responsibly. Topics include the benefits and risks of sharing information online, and the possible consequences of inappropriate sharing (oversharing). Students explore the legal and ethical dimensions of respecting creative work. Technology use is a vital employability skill for entry-level and upper-level management positions. Students may be provided with the opportunity to seek industry-recognized digital literacy certifications.

State Course ID: 12164A001 **Course Title:** **Product-Oriented Marketing**

Principles of Marketing courses offer students insight into the processes affecting the flow of goods and services from the producer to the consumer. Course content ranges considerably as general marketing principles such as purchasing, distribution, and sales are covered; however, a major emphasis is often placed on kinds of markets; market identification; product planning, packaging, and pricing; and business management.

State Course ID: 12152A001 **Course Title:** **Advanced Marketing**

Marketing—Comprehensive courses focus on the wide range of factors that influence the flow of goods and services from the producer to the consumer. Topics may include (but are not limited to) market research, the purchasing process, distribution systems, warehouse and inventory control, salesmanship, sales promotions, shoplifting and theft control, business management, and entrepreneurship. Human relations, computers, and economics are often covered as well.

Cluster: Marketing

Course Descriptions

CIP: 52.1801 - Sales, Distribution, and Marketing Operations, General.

State Course ID: 12104A001 **Course Title:** **Accounting I**

Accounting I is a course assists students pursuing a career in business, marketing, and management. This course includes planned learning experiences that develop initial and basic skills used in systematically computing, classifying, recording, verifying and maintaining numerical data involved in financial and product control records including the paying and receiving of money. Instruction includes information on keeping financial records, summarizing them for convenient interpretation, and analyzing them to provide assistance to management for decision making. Accounting computer applications should be integrated throughout the course where applicable. In addition to stressing basic fundamentals and terminology of accounting, instruction should provide initial understanding of the preparation of budgets and financial reports, operation of related business machines and equipment, and career opportunities in the accounting field. Processing employee benefits may also be included.

State Course ID: 10005A001 **Course Title:** **Information Processing I**

Information Processing I is a skill-level course that includes the concepts and terminology related to the people, equipment, and procedures of information processing as well as skill development in the use of information processing equipment. Students will operate computer equipment to prepare memos, letters, reports, and forms. Students will create rough drafts, correct copy, process incoming and outgoing telephone calls and mail, and transmit and receive messages electronically . Students will create, input, and update databases and spreadsheets. Students will create data directories; copy, rename, move, and delete files, and perform backup procedures. In addition, students will prepare files to merge, as well as create mailing labels and envelopes from merge files. Students will learn to locate and retrieve information from hard copy and electronic sources, and prepare masters for a presentations using presentation software. Students will apply proper grammar, punctuation, spelling and proofreading practices. Accuracy will be emphasized. Workplace skills as well as communication skills (thinking, listening, composing, revising, editing, and speaking) will be taught and integrated throughout this course.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 12054A001 **Course Title:** **Business Law**

Introduces law and the origins and necessity of the legal system; provides insight into the evolution and development of laws that govern business in our society; develops an understanding of how organization and operation of the legal system impact business; develops an understanding of rights and duties within the business environment; and includes contractual responsibility, protection of individual rights in legal relationships relative to warranties, product liability, secured and unsecured debts, negotiable instruments, agencies, employer-employee relations, property ownership and transfer, landlord and tenant, wills and estates, community property, social security, and taxation.

Cluster: Marketing

Course Descriptions

CIP: 52.1801 - Sales, Distribution, and Marketing Operations, General.

State Course ID: 12052A001 **Course Title:** **Business Management**

Business Management courses acquaint students with management opportunities and effective human relations. These courses provide students with the skills to perform planning, staffing, financing, and controlling functions within a business. In addition, they usually provide a macro-level study of the business world, including business structure and finance, and the interconnections among industry, government, and the global economy. The course may also emphasize problem-based, real-world applications of business concepts and use accounting concepts to formulate, analyze, and evaluate business decisions.

CTE - CIP Course Details Catalog

Cluster: Science, Technology, Engineering and Mathematics

CIP: 15.0000 - Engineering Technology, General.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	Production Technology	1.00	2011	
11002A001	Communication Technology	1.00	2011	
20001A001	Transportation Technology	1.00	2011	
20101A001	Energy Utilization Technology	1.00	2011	
21052A002	Introduction to Technology and Engineering (Industrial)	1.00	2011	
21052A001	Foundations of Technology	1.00	2012	
21006A001	Introduction to Engineering Design	3.00	2012	
21102A002	Beginning Drafting	1.00	2017	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
21001A001	Principles of Technology I	3.00	2011	
21001A002	Principles of Technology II	3.00	2011	
21006A001	Introduction to Engineering Design	3.00	2011	2011
21004A001	Principles of Engineering	3.00	2011	
21008A001	Digital Electronics	3.00	2011	
21052A001	Foundations of Technology	1.00	2011	2011
21054A001	Technological Design and Innovation	3.00	2011	
21009A001	Robotics	3.00	2012	
21053A001	Emerging Technologies	3.00	2013	

CTE - CIP Course Details Catalog

Cluster: Science, Technology, Engineering and Mathematics

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
21010A001	**Computer Integrated Manufacturing**	**3.00**	**2011**	
21013A001	**Aerospace Engineering**	**3.00**	**2011**	
21014A001	**Biotechnical Engineering**	**3.00**	**2011**	**2017**
21012A001	**Civil Engineering and Architecture**	**3.00**	**2011**	
21007A002	**Engineering Design & Development**	**3.00**	**2011**	
21054A002	**Advanced Design Applications (EbD)**	**3.00**	**2011**	**2017**
21054A003	**Advanced Technological Applications (EbD)**	**3.00**	**2011**	**2017**
21006A002	**Engineering Design**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	
21054A004	**Technology, Society and Sustainability**	**3.00**	**2017**	

Cluster: Science, Technology, Engineering and Mathematics

Course Descriptions

CIP: 15.0000 - Engineering Technology, General.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society . Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 21006A001 **Course Title:** **Introduction to Engineering Design**

Engineering Design courses offer students experience in solving problems by applying a design development process. Often using solid modeling computer design software, students develop, analyze, and test product solutions models as well as communicate the features of those models.

Cluster: Science, Technology, Engineering and Mathematics

Course Descriptions

CIP: 15.0000 - Engineering Technology, General.

State Course ID: 21102A002 **Course Title:** **Beginning Drafting**

Beginning Drafting is an introductory level drafting course. During this course students will learn the basic fundamentals of drafting and /or computer aided drafting (CAD). The instruction will include the care and use of drafting equipment, freehand sketching, orthographic projection, lettering techniques, dimensioning standards, pictorial drawings, drawing reproduction, and an introduction to CAD.

Cluster: Science, Technology, Engineering and Mathematics

Course Descriptions

CIP: 15.0000 - Engineering Technology, General.

State Course ID: 21001A001 **Course Title:** **Principles of Technology I**

This course provides learning experiences related to the principles that underlie today's high technology: force, work, rate, resistance, energy, power, and force transformers. The course deals with these principles as they apply in each of the four systems that make up both the simplest and the most complex technological devices and equipment: mechanical systems, fluid systems, electrical systems, and thermal systems. Learning experiences are designed to allow students to acquire knowledge and skills which are transferable to postsecondary technical programs.

State Course ID: 21001A002 **Course Title:** **Principles of Technology II**

This course includes learning experiences related to the principles that underlie today's high technology: momentum, waves and vibrations, energy converters, transducers, radiation, optical systems, and time constraints. The course deals with these principles as they apply in each of the systems that make up both the simplest and the most complex technological devices and equipment: mechanical systems, fluid systems, electrical systems, and thermal systems. Learning experiences are designed to allow students to acquire knowledge and skills which are transferable to postsecondary technical programs.

State Course ID: 21006A001 **Course Title:** **Introduction to Engineering Design**

Engineering Design courses offer students experience in solving problems by applying a design development process. Often using solid modeling computer design software, students develop, analyze, and test product solutions models as well as communicate the features of those models.

State Course ID: 21004A001 **Course Title:** **Principles of Engineering**

Principles of Engineering courses provide students with an understanding of the engineering/technology field. Students typically explore how engineers use various technology systems and manufacturing processes to solve problems; they may also gain an appreciation of the social and political consequences of technological change.

State Course ID: 21008A001 **Course Title:** **Digital Electronics**

Digital Electronics courses teach students how to use applied logic in the development of electronic circuits and devices. Students may use computer simulation software to design and test digital circuitry prior to the actual construction of circuits and devices.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 21054A001 **Course Title:** **Technological Design and Innovation**

In this course, technological design and innovation are presented through practical applications. Students apply technology, science, and mathematics concepts and skills to solve technological/engineering problems and innovative designs. Students research, develop, create simulations, test, and analyze engineering designs using criteria such as design effectiveness, public safety and human factors.

State Course ID: 21009A001 **Course Title:** **Robotics**

Robotics courses develop and expand students’ skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.

Cluster: Science, Technology, Engineering and Mathematics

Course Descriptions

CIP: 15.0000 - Engineering Technology, General.

State Course ID: 21053A001 **Course Title:** **Emerging Technologies**

Emerging Technologies courses emphasize students' exposure to and understanding of new and emerging technologies. The range of technological issues varies widely but typically include lasers, fiber optics, electronics, robotics, computer technologies (software engineering), Game Art and Design, CAD/CAM, communication modalities, and transportation technologies.

Cluster: Science, Technology, Engineering and Mathematics

Course Descriptions

CIP: 15.0000 - Engineering Technology, General.

State Course ID: 21010A001 **Course Title:** **Computer Integrated Manufacturing**

Computer Integrated Manufacturing courses involve the study of robotics and automation. Building on computer solid modeling skills, students may use computer numerical control (CNC) equipment to produce actual models of their three-dimensional designs. Course topics may also include fundamental concepts of robotics, automated manufacturing, and design analysis.

State Course ID: 21013A001 **Course Title:** **Aerospace Engineering**

Aerospace Engineering courses introduce students to the world of aeronautics, flight, and engineering. Topics covered in the course may include the history of flight, aerodynamics and aerodynamics testing, flight systems, astronautics, space life systems, aerospace materials, and systems engineering.

State Course ID: 21014A001 **Course Title:** **Biotechnical Engineering**

Biotechnical Engineering courses enable students to develop and expand their knowledge and skills in biology, physics, technology, and mathematics. Course content may vary widely, drawing upon diverse fields such as biomedical engineering, biomolecular genetics, bioprocess engineering, agricultural biology, or environmental engineering. Students may engage in problems related to biomechanics, cardiovascular engineering, genetic engineering, agricultural biotechnology, tissue engineering, biomedical devices, human interfaces, bioprocesses, forensics, and bioethics.

State Course ID: 21012A001 **Course Title:** **Civil Engineering and Architecture**

Civil Engineering and Architecture courses provide students with an overview of the fields of Civil Engineering and Architecture while emphasizing the interrelationship of both fields. Students typically use software to address real world problems and to communicate the solutions that they develop. Course topics typically include the roles of civil engineers and architects, project-planning, site-planning, building design, project documentation, and presentation.

State Course ID: 21007A002 **Course Title:** **Engineering Design & Development**

Engineering Design and Development courses provide students with the opportunity to apply engineering research principles as they design and construct a solution to an engineering problem. Students typically develop and test solutions using computer simulations or models but eventually create a working prototype as part of the design solution.

State Course ID: 21054A002 **Course Title:** **Advanced Design Applications (EbD)**

This course consists of four units including Manufacturing, Energy and Power, Construction and Transportation. The Manufacturing unit examines the advances that maintain manufacturing efficiency, how human consumption affects manufacturing, how manufacturing affects the standard of living of various peoples, and how processing and changing raw materials can produce more desirable products. The Construction unit examines a number of factors influencing the design and construction of permanent and semi-permanent structures, the practices related to construction maintenance, alteration, and renovation and the functions of the primary systems installed in those structures. The Energy & Power unit explores the relationship between energy and power technologies and all other technologies, and how modern energy and power systems impact cultures, societies, and the environment. It also offers an examination of how energy and power systems can become more efficient and how they may be utilized in problem solving. The Transportation unit examines the complex networks of interconnected subsystems that comprise each transportation system, and the roles of these components in the overall functional process of the system. It also analyzes the improvements and the impacts of transportation technologies on the environment, society, and culture.

Cluster: Science, Technology, Engineering and Mathematics

Course Descriptions

CIP: 15.0000 - Engineering Technology, General.

State Course ID: 21054A003 **Course Title:** **Advanced Technological Applications (EbD)**

In this course, students study four components of the Designed World including Information Technology, Agriculture and Bio-related Technologies, Medical, and Entertainment/Recreation. The Information Technologies unit examines how technology facilitates the gathering, manipulation, storage, and transmission of data, and how this data can be used to create useful products. It also provides students with opportunities for developing communications systems that can solve technological problems. The Agriculture and Biotechnologies unit explores how agricultural technologies provide increased crop yields and allow adaptation to changing and harsh environments, enabling the growth of plants and animals for various uses. It also offers an analysis of the various uses of biotechnology and the ethical considerations of those uses. The Medical Technologies Unit provides an analysis of how medical technologies are used to increase the quality and length of human life, and how increased use of technology carries potential consequences which require public debate. Students also examine tools and devices used to repair and replace organs, prevent disease, and rehabilitate the human body. The Entertainment and Recreation unit provides a study of technological entertainment and recreation systems with an examination of the differences between these technologies, how their use enhances human leisure-time performance, and the social, cultural, and environmental implications of their usage.

State Course ID: 21006A002 **Course Title:** **Engineering Design**

In this course, engineering scope, content, and professional practice are presented through practical applications. Students in engineering teams apply technology, science, and mathematics concepts and skills to solve engineering design problems and create innovative designs. Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics. This course is the capstone experience for students who are interested in Technology, Innovation, Design, and Engineering.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 21054A004 **Course Title:** **Technology, Society and Sustainability**

Technology, Society and Sustainability course will provide an overview of the importance of, impact on, and relationships between technological endeavors and society at large. This courses typically emphasize environmental factors, economics impacts and the influences of society on technological /environmental endeavors.

CTE - CIP Course Details Catalog

Cluster: Transportation, Distribution, and Logistics

CIP: 47.0603 - Autobody/Collision and Repair Technology/Technician. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20001A001	**Transportation Technology**	**1.00**	**2011**	
13052A001	**Production Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20116A001	**Auto-Body I**	**3.00**	**2011**	
20116A002	**Auto-Body II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Transportation, Distribution, and Logistics

Course Descriptions

CIP: 47.0603 - Autobody/Collision and Repair Technology/Technician.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 20116A001 **Course Title:** **Auto-Body I**

This course provides learning experiences designed to allow students to gain knowledge and skills in repairing automotive bodies and fenders. Planned learning activities in this course are balanced to allow students to become knowledgeable in the fundamental aspects of auto body repair methods and techniques, and to develop practical skills in the basic operations required to prepare the automobile for final paint application. Instruction emphasizes safety principles and practices, hazardous materials, auto body nomenclature, function of individual components, the use of parts manuals, the identification of replacement parts, the use of auto body fillers, the use of plastic/glass fillers and special body repair tools, refinishing problems, and paint preparation procedures. Practical activities relate to experiences in writing and calculating damage estimates, removing and installing body panels, trim, and glass; straightening by using hammers, bucks, and jacks; and smoothing by filing, grinding, and using fillers. Students also learn to prime the area to be painted and prepare the surface for final paint application. These experiences and skills are related to metal, fiberglass, or urethane components.

Cluster: Transportation, Distribution, and Logistics

Course Descriptions

CIP: 47.0603 - Autobody/Collision and Repair Technology/Technician.

State Course ID: 20116A002 **Course Title:** **Auto-Body II**

This course provides learning experiences designed to further enhance the students' skills in performing more advanced tasks related to automotive body and fender repair. Learning activities in this course emphasize the successful application of the final paint coat and the preparation that precedes it. Emphasis is also placed upon the identification and correction of imperfections and finish buffing of the final coat. Student learning activities include instruction in safety principles and practices, hazardous materials, types and qualities of paints, colors, and refinishing problems; glass standards and installation, special alignment techniques, customer relations, damage estimating, and insurance adjustments. Student practical activities relate to experiences in estimating collision damage costs, preparing customer bills, removing and replacing glass surfaces, selecting paints, repainting minor and major damages, repainting total car body, drying or baking painted surfaces, post-paint cleanup, and post-paint polishing.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Transportation, Distribution, and Logistics

CIP: 47.0604 - Automobile/Automotive Mechanics Technology/Technician. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20001A001	**Transportation Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
13052A001	**Production Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
20106A001	**Beginning Automotive Services**	**1.00**	**2012**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20104A001	**Automotive Technician I**	**3.00**	**2011**	
20104A002	**Automotive Technician II**	**3.00**	**2011**	
20107A001	**Diesel Mechanics**	**3.00**	**2013**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	
20110A001	**Small Engine Repair I**	**3.00**	**2017**	
20110A002	**Small Engine Repair II**	**3.00**	**2017**	

Cluster: Transportation, Distribution, and Logistics

Course Descriptions

CIP: 47.0604 - Automobile/Automotive Mechanics Technology/Technician.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**
Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**
Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 13052A001 **Course Title:** **Production Technology**
Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**
Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**
Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 20106A001 **Course Title:** **Beginning Automotive Services**
Beginning Automotive Service course emphasizes preventative auto maintenance and automobile troubleshooting. Course content typically includes tune-up, oil change, and lubrication skills; tire replacement, alignment, and balancing; and basic knowledge of brake, cooling, electrical, emission, fuel, ignition, steering, suspension, and transmission systems.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**
The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

Cluster: Transportation, Distribution, and Logistics

Course Descriptions

CIP: 47.0604 - Automobile/Automotive Mechanics Technology/Technician.

State Course ID: 20104A001 **Course Title:** **Automotive Technician I**

This course introduces students to the basic skills needed to inspect, maintain, and repair automobiles and light trucks that run on gasoline, electricity, or alternative fuels. Instructional units include engine performance, automotive electrical system, integrated computer systems, lubrication, exhaust and emission control, steering and suspension, fuel systems, cooling system, braking, and power train.

State Course ID: 20104A002 **Course Title:** **Automotive Technician II**

This course is a continuation of and builds on the skills and concepts introduced in Automotive Technician I. This course includes instructional units in alternative fuel systems, computerized diagnostics, new vehicle servicing, automotive heating and air conditioning, transmissions, testing and diagnostics, drive train and overall automobile performance.

State Course ID: 20107A001 **Course Title:** **Diesel Mechanics**

Diesel Mechanics—Comprehensive courses prepare students to maintain and repair diesel engines and related systems. Specific course topics may include principles underlying diesel engines, analyzing electrical circuits and systems, troubleshooting and repairing cooling systems, testing and repairing air conditioning charging systems, reading and interpreting service manuals, and identifying the principles and components of fuel injection systems. Courses may also cover safety, employability skills, and entrepreneurship.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 20110A001 **Course Title:** **Small Engine Repair I**

Small engine repair is an instructional program that prepares individuals to troubleshoot, service, and repair a variety of small internal-combustion engines, involving both two and four cycle engines used on portable power equipment. Planned activities will allow students to become knowledgeable of fundamental principles and technical skills related to troubleshooting, repairing, identifying parts and making precision measurements. Safety will be a key component of this class. Students will also be exposed to career opportunities related to small engines.

State Course ID: 20110A002 **Course Title:** **Small Engine Repair II**

This course will be designed to provide the student with the opportunity to complete specialized study in the service and repair of small engines and related systems . Some of these areas may include chain saw repair, snow blower repair, snowmobile repair, generator repair, motorcycle repair, etc. Planned activities will allow students to become knowledgeable of fundamental principles and technical skills related to troubleshooting, repairing, identifying parts and making precision measurements. Other areas that will be covered deal with electrical, systems, ignition systems, drive train and chassis systems. Safety will be a key component of this class. Students will also be exposed to career opportunities related to small engines.

CTE - CIP Course Details Catalog

Cluster: Transportation, Distribution, and Logistics

CIP: 47.0606 - Small Engine Mechanics and Repair Technology/Technician. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20001A001	**Transportation Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
13052A001	**Production Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20110A001	**Small Engine Repair I**	**3.00**	**2011**	
20110A002	**Small Engine Repair II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Transportation, Distribution, and Logistics

Course Descriptions

CIP: 47.0606 - Small Engine Mechanics and Repair Technology/Technician.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**
Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**
Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 13052A001 **Course Title:** **Production Technology**
Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**
Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**
Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**
The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20110A001 **Course Title:** **Small Engine Repair I**
Small engine repair is an instructional program that prepares individuals to troubleshoot, service, and repair a variety of small internal-combustion engines, involving both two and four cycle engines used on portable power equipment. Planned activities will allow students to become knowledgeable of fundamental principles and technical skills related to troubleshooting, repairing, identifying parts and making precision measurements. Safety will be a key component of this class. Students will also be exposed to career opportunities related to small engines.

Cluster: Transportation, Distribution, and Logistics

Course Descriptions

CIP: 47.0606 - Small Engine Mechanics and Repair Technology/Technician.

State Course ID: 20110A002 **Course Title:** **Small Engine Repair II**

This course will be designed to provide the student with the opportunity to complete specialized study in the service and repair of small engines and related systems . Some of these areas may include chain saw repair, snow blower repair, snowmobile repair, generator repair, motorcycle repair, etc. Planned activities will allow students to become knowledgeable of fundamental principles and technical skills related to troubleshooting, repairing, identifying parts and making precision measurements. Other areas that will be covered deal with electrical, systems, ignition systems, drive train and chassis systems. Safety will be a key component of this class. Students will also be exposed to career opportunities related to small engines.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Transportation, Distribution, and Logistics

CIP: 47.0608 - Aircraft Powerplant Technology/Technician. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20001A001	**Transportation Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
13052A001	**Production Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20113A001	**Aircraft Technician I**	**3.00**	**2011**	
20113A002	**Aircraft Technician II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Transportation, Distribution, and Logistics

Course Descriptions

CIP: 47.0608 - Aircraft Powerplant Technology/Technician.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**
Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**
Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 11002A001 **Course Title:** **Communication Technology**
Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 13052A001 **Course Title:** **Production Technology**
Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**
Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 20113A001 **Course Title:** **Aircraft Technician I**
This course provides experiences related to the maintenance, repair, and servicing of a variety of aircraft powerplants. Planned learning activities allow students to become knowledgeable in fundamental principles of aircraft powerplant construction. In addition, students develop technical skills related to avionics, aviation, and airplane power plants. Instruction includes the types, structures, and mechanics of airplanes, electronics, gauge purpose and care, engine mechanics, major component identification, construction techniques, hydraulics, evolution of aerodynamics, and comparison of similar elements in different types of air craft.

State Course ID: 20113A002 **Course Title:** **Aircraft Technician II**
This course provides experiences related to the maintenance, repair, and servicing of a variety of aircraft powerplants and their associated mechanical systems. Planned learning activities emphasize the development of more advanced knowledge and skill than those provided in Aircraft Technician I. Student technical skill experiences include instruction and activities in aviation construction, shop and maintenance related areas of aircraft, safety principles and practices, as well as continued development of skills associated with aircraft powerplants.

Cluster: Transportation, Distribution, and Logistics

Course Descriptions

CIP: 47.0608 - Aircraft Powerplant Technology/Technician.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Transportation, Distribution, and Logistics

CIP: 49.0102 - Airline/Commercial/Professional Pilot and Flight Crew. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 1.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20001A001	**Transportation Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
13052A001	**Production Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20053A001	**Aviation/Pilot I**	**3.00**	**2011**	
20053A002	**Aviation/Pilot II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Transportation, Distribution, and Logistics

Course Descriptions

CIP: 49.0102 - Airline/Commercial/Professional Pilot and Flight Crew.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 20053A001 **Course Title:** **Aviation/Pilot I**

This course introduces students to the airplane piloting and the navigation field. Instructional units include principles of flight, the flight environment, aircraft systems and performance, meteorology for pilots, interpreting weather data, and basic navigation.

State Course ID: 20053A002 **Course Title:** **Aviation/Pilot II**

This course is a continuation of and builds on the skills and concepts introduced in Aviation/Pilot I. This course includes instructional units in radio navigation systems, aviation physiology, flight planning and decision making, aviation history, the nature of space, rockets, and space flight, and careers in aviation and aerospace.

Cluster: Transportation, Distribution, and Logistics

Course Descriptions

CIP: 49.0102 - Airline/Commercial/Professional Pilot and Flight Crew.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Architecture and Construction

CIP: 15.1301 - Drafting and Design Technology/Technician, General. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
11002A001	Communication Technology	1.00	2011	
21052A002	Introduction to Technology and Engineering (Industrial)	1.00	2011	
13052A001	Production Technology	1.00	2011	
21102A002	Beginning Drafting	1.00	2012	
21006A001	Introduction to Engineering Design	3.00	2013	
21052A001	Foundations of Technology	1.00	2014	
20001A001	Transportation Technology	1.00	2018	
20101A001	Energy Utilization Technology	1.00	2018	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
21103A001	Architectural Drafting I	3.00	2011	
21103A002	Architectural Drafting II	3.00	2011	
21106A001	Mechanical Drafting I	3.00	2011	
21106A002	Mechanical Drafting II	3.00	2011	
21102A001	Drafting	3.00	2011	
21012A001	Civil Engineering and Architecture	3.00	2013	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	Cooperative Education	3.00	2011	
21053A001	Emerging Technologies	3.00	2015	
21006A002	Engineering Design	3.00	2015	
21054A001	Technological Design and Innovation	3.00	2015	
21007A002	Engineering Design & Development	3.00	2015	

Cluster: Architecture and Construction

Course Descriptions

CIP: 15.1301 - Drafting and Design Technology/Technician, General.

State Course ID: 11002A001 **Course Title:** **Communication Technology**
Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**
Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 13052A001 **Course Title:** **Production Technology**
Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 21102A002 **Course Title:** **Beginning Drafting**
Beginning Drafting is an introductory level drafting course. During this course students will learn the basic fundamentals of drafting and/or computer aided drafting (CAD). The instruction will include the care and use of drafting equipment, freehand sketching, orthographic projection, lettering techniques, dimensioning standards, pictorial drawings, drawing reproduction, and an introduction to CAD.

State Course ID: 21006A001 **Course Title:** **Introduction to Engineering Design**
Engineering Design courses offer students experience in solving problems by applying a design development process. Often using solid modeling computer design software, students develop, analyze, and test product solutions models as well as communicate the features of those models.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**
The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**
Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

Cluster: Architecture and Construction

Course Descriptions

CIP: 15.1301 - Drafting and Design Technology/Technician, General.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

Cluster: Architecture and Construction

Course Descriptions

CIP: 15.1301 - Drafting and Design Technology/Technician, General.

State Course ID: 21103A001 **Course Title:** **Architectural Drafting I**

This course is designed to provide students interested in a career in Architecture with information and practical experience needed for the development of job -related competencies. Students are made aware of the career opportunities available in the Architectural Drafting and Architectural Drafting CAD - CADD field. Instruction is provided in the areas of planning and organizing activities, researching information, performing general office procedures, preparing of preliminary drawings, basic layout, detail drawings, reproduction techniques, producing working drawings, and computer aided drafting. Students are also provided with instruction in producing architectural drawings in the areas of presentation, floor plans, illustration of landscape features, sketching preliminary floor plans, drawing foundation plans and sections, exterior elevations, stair sections, chimney sections, roof sections, finish schedules, preparing plumbing, HVAC and electrical plans, and structural drawings.

State Course ID: 21103A002 **Course Title:** **Architectural Drafting II**

Instruction is provided in the areas of locating information using computer data files, determination of materials and availability, project conferences, checking plan dimensions, drawing schematic sketches, preparing scale sketches, producing drawings from written /verbal instructions, application of coordinate dimensioning standards, creating drawings using a plotter/printer, producing renderings and/or charts and graphs, and common plan features. Instruction is also provided in the areas of drawing framing plans, wall sections, fireplace sections, door sections, door and window schedules, dimensioning structural steel drawings, constructing column detail drawings, preparation of structural foundation, slab and floor plans, drawing electrical, block, schematic, and electrical connection drawings. Skills relating to CAD include preparation of a basic CAD drawing, building and editing a data base, developing a 3-dimensional drawing and selecting appropriate line work, line weight, and color.

State Course ID: 21106A001 **Course Title:** **Mechanical Drafting I**

This course introduces students to layout to scale using specified tolerances, preparing detail drawing for individual parts from drawings, layout and creating assembly drawings, and preparing mechanical orthographic subassembly drawings. This course also includes a sequence of CAD experiences in 2-dimensional and 3-dimensional drawing generation to include vocabulary development, system operation, entity creation, dimensioning and text insertion, plotting, three dimensional coordinate system, 3-D parts detailing and assembly drawings, wire frame models, and system management relative to hard disk and tape storage systems.

State Course ID: 21106A002 **Course Title:** **Mechanical Drafting II**

Instruction is provided in the areas of identifying appropriate interfacing personnel (internal/external), producing renderings and project time schedules, producing structural working drawings as structural steel plans, dimension structural steel drawings, and draw beam connections, and producing electrical and electronic working drawings as electrical and electronic schematic diagrams. Additional skills introduced in this program include determining the requirements of a specific drafting job, preparing preliminary drawings such as freehand, isometric, orthographic, and oblique sketches; preparing detail drawings such as creating assembly drawings, orthographic projections, sectional views, auxiliary views, isometric views and letter drawings; producing mechanical working drawings such as detailing components of mechanical orthographic assembly and subassembly drawings; using CAD command processes as preparing a basic CAD drawing, start up, log on, retrieve, save, log off and shut down CAD system; creating disk files, copying disk files, and generating a grid on drawing.

State Course ID: 21102A001 **Course Title:** **Drafting**

Drafting—General courses, usually offered as a sequence of courses, introduce students to the technical craft of drawing illustrations to represent and /or analyze design specifications and then refine the skills necessary for this craft. Drafting—General courses use exercises from a variety of applications to provide students with the knowledge and experience to develop the ability to perform freehand sketching, lettering, geometric construction, and multiview projections and to produce various types of drawings (working, detail, assembly, schematic, perspective, and so on). Computer-aided drafting (CAD) systems (if available) are typically introduced and used to fulfill course objectives.

Cluster: Architecture and Construction

Course Descriptions

CIP: 15.1301 - Drafting and Design Technology/Technician, General.

State Course ID: 21012A001 **Course Title:** **Civil Engineering and Architecture**

Civil Engineering and Architecture courses provide students with an overview of the fields of Civil Engineering and Architecture while emphasizing the interrelationship of both fields. Students typically use software to address real world problems and to communicate the solutions that they develop. Course topics typically include the roles of civil engineers and architects, project-planning, site-planning, building design, project documentation, and presentation.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 21053A001 **Course Title:** **Emerging Technologies**

Emerging Technologies courses emphasize students' exposure to and understanding of new and emerging technologies. The range of technological issues varies widely but typically include lasers, fiber optics, electronics, robotics, computer technologies (software engineering), Game Art and Design, CAD/CAM, communication modalities, and transportation technologies.

State Course ID: 21006A002 **Course Title:** **Engineering Design**

In this course, engineering scope, content, and professional practice are presented through practical applications. Students in engineering teams apply technology, science, and mathematics concepts and skills to solve engineering design problems and create innovative designs. Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics. This course is the capstone experience for students who are interested in Technology, Innovation, Design, and Engineering.

State Course ID: 21054A001 **Course Title:** **Technological Design and Innovation**

In this course, technological design and innovation are presented through practical applications. Students apply technology, science, and mathematics concepts and skills to solve technological/engineering problems and innovative designs. Students research, develop, create simulations, test, and analyze engineering designs using criteria such as design effectiveness, public safety and human factors.

State Course ID: 21007A002 **Course Title:** **Engineering Design & Development**

Engineering Design and Development courses provide students with the opportunity to apply engineering research principles as they design and construct a solution to an engineering problem. Students typically develop and test solutions using computer simulations or models but eventually create a working prototype as part of the design solution.

CTE - CIP Course Details Catalog

Cluster: Architecture and Construction

CIP: 46.0000 - Construction Trades, General.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	Production Technology	1.00	2011	
11002A001	Communication Technology	1.00	2011	
20001A001	Transportation Technology	1.00	2011	
21052A002	Introduction to Technology and Engineering (Industrial)	1.00	2011	
17001A001	Beginning Construction	1.00	2012	
17102A005	Beginning Electricity	1.00	2014	
21052A001	Foundations of Technology	1.00	2014	
21102A002	Beginning Drafting	1.00	2017	
20101A001	Energy Utilization Technology	1.00	2018	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
17002A001	Construction Trades I	3.00	2011	
17002A002	Construction Trades II	3.00	2011	
17003A001	Carpentry I	3.00	2011	
17003A002	Carpentry II	3.00	2011	
17005A001	Drywall Installation I	3.00	2011	
17005A002	Drywall Installation II	3.00	2011	
17008A001	Masonry I	3.00	2011	
17008A002	Masonry II	3.00	2011	
17011A001	Wall Finishing I	3.00	2011	
17011A002	Wall Finishing II	3.00	2011	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	Cooperative Education	3.00	2011	

Cluster: Architecture and Construction

Course Descriptions

CIP: 46.0000 - Construction Trades, General.

State Course ID: 13052A001 **Course Title:** **Production Technology**
Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**
Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**
Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**
Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 17001A001 **Course Title:** **Beginning Construction**
Beginning Construction course expose students to the opportunities available in construction-related trades, such as carpentry, masonry, air conditioning/refrigeration, plumbing, and so on. Students learn about the processes involved in construction projects and may engage in a variety of small projects.

State Course ID: 17102A005 **Course Title:** **Beginning Electricity**
Beginning Electricity—course provides a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electrical field. This courses typically include AC and DC circuitry, safety, and the National Electrical Code and may cover such skills as those involved in building circuits; wiring residential, installing lighting, power circuits, and cables.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**
The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 21102A002 **Course Title:** **Beginning Drafting**
Beginning Drafting is an introductory level drafting course. During this course students will learn the basic fundamentals of drafting and/or computer aided drafting (CAD). The instruction will include the care and use of drafting equipment, freehand sketching, orthographic projection, lettering techniques, dimensioning standards, pictorial drawings, drawing reproduction, and an introduction to CAD.

Cluster: Architecture and Construction

Course Descriptions

CIP: 46.0000 - Construction Trades, General.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

Cluster: Architecture and Construction

Course Descriptions

CIP: 46.0000 - Construction Trades, General.

State Course ID: 17002A001 **Course Title:** **Construction Trades I**

This course provides experiences related to the erection, installation, and maintenance of residential buildings and related fixtures. Planned learning activities allow students to understand fundamental principles and methods, and develop technical skills related to masonry, carpentry, and finish work. Instruction includes safety principles and practices, recognition of standard lumber sizes, foundation layout methods, building concepts and procedures, local, state, and national codes, cost estimating, and blueprint reading.

State Course ID: 17002A002 **Course Title:** **Construction Trades II**

This course provides learning experiences related to the erection, installation, maintenance, and repair of building structures and related utilities . Student technical skill experiences include instruction and activities in safety principles and practices, performing maintenance control functions, joining pipes, building water distribution lines and drains, installing and maintaining plumbing fixtures and systems, installing switch and outlet boxes, light fixtures, service entrances, roughing in and trimming out electrical devices and appliances, preparing foundations and footings, constructing residential chimneys and fireplaces, laying, jointing and pointing brick, and advanced building and construction methods and codes. All learning experiences are designed to allow the student to acquire job-entry skills and knowledge.

State Course ID: 17003A001 **Course Title:** **Carpentry I**

This course is designed to introduce students to the Carpentry/Carpenter occupation. Students are instructed in areas of safety, including hand tool, power tool, ladder, scaffolding and the use of safety harnesses. Students are introduced to the theoretical knowledge needed to lay out rafter, stairs, and basic framing techniques. Students demonstrate knowledge of blueprint reading, including foundations, concrete, floor plans, specification schedules, and electrical, plumbing and mechanical symbols. Students demonstrate entry-level skills in all facets of residential construction. Technology-related mathematics, reading, writing, vocabulary, blueprint reading, and science are integrated throughout the curriculum.

State Course ID: 17003A002 **Course Title:** **Carpentry II**

This course provides learning experiences related to the erection, installation, maintenance and repair of building structures and related utilities . Students are instructed in areas of safety, including hand tool, power tool, ladder, scaffolding and the use of safety harnesses. Students demonstrate knowledge of exterior trim and finishes, energy conservation in residential construction, and design of stairs and rafter building. Students gain knowledge of planning and zoning regulations and building codes. Students are introduced to estimating both materials and construction costs, and demonstrate basic knowledge in applying drywall materials, stair-building skills, designing and erecting wall partitions, applying roofing materials, and installing common siding and interior finish. Technology-related mathematics, reading, writing, vocabulary, blueprint reading, and science are integrated throughout the curriculum.

State Course ID: 17005A001 **Course Title:** **Drywall Installation I**

This course provides experiences related to the fastening of drywall panels to the inside framework of residential, commercial, and other buildings, and preparing these panels for painting by taping and finishing joints and imperfections. Planned learning activities allow students to become knowledgeable in fundamental principles and methods. Students develop technical skills related to drywall handling, drywall fastening, drywall taping, and drywall sanding. Instruction includes safety principles and practices, recognition of standard lumber sizes, estimating materials, building concepts and procedures, local state, and national building codes, and blueprint reading.

Cluster: Architecture and Construction

Course Descriptions

CIP: 46.0000 - Construction Trades, General.

State Course ID: 17005A002 **Course Title:** **Drywall Installation II**

This course provides experiences related to the fastening of drywall, Drivit panels and stucco to the interior and exterior framework of residential, commercial, and other buildings, and preparing these panels for painting by taping and finishing joints and imperfections. Planned learning activities allow students to attain knowledge in fundamental principles and methods. Students develop advanced technical skills related to drywall handling, drywall fastening, drywall taping, and drywall sanding. Students are also introduced to the use of Drivit panels and the application of stucco finishes. Instruction includes safety principles and practices, recognition of standard lumber and drywall sizes, estimating materials, building concepts and procedures, local, state, and national building codes, and blueprint reading. All learning experiences are designed to allow students to acquire entry-level job skills and knowledge.

State Course ID: 17008A001 **Course Title:** **Masonry I**

This course introduces students to the development and manufacture of brick and concrete block. Instruction concentrates on learning how to handle the trowel and lay brick to the line accurately. Skills involving the use of additional tools are also introduced at this level, so that students have a working knowledge of a mason's basic tools. In addition, students are introduced to the skills needed for installing ceramic, stone, vinyl and composite flooring as well as ceramic, glass, and stone wall tile.

State Course ID: 17008A002 **Course Title:** **Masonry II**

This course is designed to build upon the intermediate skills learned in Masonry I. More time on skill development is provided to acquaint students with a wide range of experiences within the trade. Along with the skills already introduced, students continue to improve their speed and efficiency in laying brick and block to the line . Because of the needs of the building industry, greater emphasis is placed on tuck-pointing, cement finishing, and installing glass block windows.

State Course ID: 17011A001 **Course Title:** **Wall Finishing I**

This course provides students with experiences related to the painting and wall covering industry. Introductory experiences consist of finishing both exterior and interior surfaces, mixing, blending, and the proper techniques in applying paints, lacquers, enamels, and varnishes. Students learn to use hand tools in removing old surfaces and preparing new surfaces. Safety and care in handling materials are emphasized in this course. Skills introduced include safety, preparation of surfaces for painting, wall-coverings, concrete finishing, plaster finishing, finishing surfaces, filling holes and cracks, applying primer, and sealing wood surfaces.

State Course ID: 17011A002 **Course Title:** **Wall Finishing II**

This course includes planned learning activities that emphasize the development of more advanced knowledge and skills than those provided in Wall Finishings I . Students are instructed in areas of safety that includes hand tool, power tool, ladder, scaffolding and the use of safety harnesses. Students are introduced to skills in areas such as estimating labor materials, selecting and using spraying equipment, finishing surfaces with wall-coverings, maintaining and repairing of structures, inventory of supplies and equipment, determining basic maintenance procedures for tools and equipment, mixing primer, staining wood, and varnishing wood.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Architecture and Construction

CIP: 46.0301 - Electrical and Power Transmission Installation/Installer, General. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
13052A001	**Production Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
17102A005	**Beginning Electricity**	**1.00**	**2012**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
20001A001	**Transportation Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
17102A001	**Electrical Systems I**	**3.00**	**2011**	
17102A002	**Electrical Systems II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Architecture and Construction

Course Descriptions

CIP: 46.0301 - Electrical and Power Transmission Installation/Installer, General.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 17102A005 **Course Title:** **Beginning Electricity**

Beginning Electricity—course provides a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electrical field . This courses typically include AC and DC circuitry, safety, and the National Electrical Code and may cover such skills as those involved in building circuits; wiring residential, installing lighting, power circuits, and cables.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society . Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

Cluster: Architecture and Construction

Course Descriptions

CIP: 46.0301 - Electrical and Power Transmission Installation/Installer, General.

State Course ID: 17102A001 **Course Title:** **Electrical Systems I**

This course provides experiences that prepare students to apply technical knowledge and skills to install indoor and outdoor residential, commercial, and industrial electrical systems and associated power transmission lines. The program includes instruction in electricity, safety procedures, wiring, insulation and grounding, schematic blueprint interpretation, equipment operation and maintenance, and applicable codes and standards. Specific program content includes but is not limited to electrical wiring, industrial hydraulics, introduction to pneumatic technology, understanding of local and national electrical codes, basic power transmission, and an introduction to motor controls.

State Course ID: 17102A002 **Course Title:** **Electrical Systems II**

This course builds on the concepts and skills introduced in Electrical Systems I. It provides experiences that prepare students to apply technical knowledge and skills to install indoor and outdoor residential, commercial, and industrial electrical systems, and associated power transmission lines. The program includes instruction in electricity, safety procedures, wiring, insulation and grounding, schematic blueprint interpretation, equipment operation and maintenance, and applicable codes and standards. Content in this course includes program controls, industrial program controls, and quality assurance.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Architecture and Construction

CIP: 46.0302 - Electrician. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
13052A001	**Production Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
17102A005	**Beginning Electricity**	**1.00**	**2012**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
20001A001	**Transportation Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
17102A003	**Electrical Trades I**	**3.00**	**2011**	
17102A004	**Electrical Trades II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Architecture and Construction

Course Descriptions

CIP: 46.0302 - Electrician.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 17102A005 **Course Title:** **Beginning Electricity**

Beginning Electricity—course provides a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electrical field . This courses typically include AC and DC circuitry, safety, and the National Electrical Code and may cover such skills as those involved in building circuits; wiring residential, installing lighting, power circuits, and cables.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society . Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

Cluster: Architecture and Construction

Course Descriptions

CIP: 46.0302 - Electrician.

State Course ID: 17102A003 **Course Title:** **Electrical Trades I**

This course is designed to provide students with instruction and training in areas that prepare them to enter the electrical trades. Areas of instruction include electrical theory, circuit design and operation, the national electrical code, blue print reading, construction blue print interpretation, and test equipment usage . Students plan and organize wiring tasks, and gain practical experience by wiring mock-ups and trainers. Students become familiar with tools, materials, and methods used in residential wiring. Students troubleshoot circuits for faulty operation and make repairs. Specific studies include AC and DC theory, series and parallel circuits, motor and generator theory, motor controls, lighting and appliance wiring, low voltage wiring, and testing and repair.

State Course ID: 17102A004 **Course Title:** **Electrical Trades II**

This course is a continuation of Electrical Trades I, advancing the basics learned in the first course. The study centers around advancing basic theory, multi-phase electricity, transmission and delivery systems, electronic and advanced motor controls, alarm and sensory systems, light commercial and industrial wiring, and advanced circuit design. Students continue to gain practical skill by working on trainers, mock-ups, and on-the-job projects.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Architecture and Construction

CIP: 46.0401 - Building/Property Maintenance. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 1.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	**Production Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
21052A001	**Foundations of Technology**	**1.00**	**2017**	
20001A001	**Transportation Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
17009A001	**Building Maintenance I**	**3.00**	**2011**	
17009A002	**Building Maintenance II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Architecture and Construction

Course Descriptions

CIP: 46.0401 - Building/Property Maintenance.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 17009A001 **Course Title:** **Building Maintenance I**

This course includes learning experiences and skills in servicing building systems, repair and maintenance of machinery, maintaining plumbing systems, minor electrical repairs, essential heating ventilation and air conditioning system maintenance, painting, and basic carpentry. These experiences provide students the opportunity to become knowledgeable in a variety of practices and skills associated with all trades necessary to maintain a building’s daily operations that are repair-related. The Building Maintenance I course provides instruction and hands-on activities including the use of test equipment and tools, hand tools, basic electricity, carpentry and masonry skills.

Cluster: Architecture and Construction

Course Descriptions

CIP: 46.0401 - Building/Property Maintenance.

State Course ID: 17009A002 **Course Title:** **Building Maintenance II**

This course provides learning experiences and skills related to servicing building systems, repairing and maintenance of machinery, maintaining plumbing systems, minor electrical repairs, essential heating ventilation and air conditioning system maintenance, painting and basic carpentry. These experiences provide students the opportunity to become knowledgeable in a variety of practices and skills associated with all trades necessary to maintain a building's daily operations that are repair-related. Planned learning activities should emphasize the development of more advanced knowledge and skills than those provided in Building Maintenance I. Students are instructed in areas of safety including hand tool, power tool, ladder, scaffolding, and the use of safety harnesses. Additional instruction is provided in drywall installation and repair, maintenance painting, tile setting and repair, and basic masonry repair. Students demonstrate knowledge of technology-related mathematics, reading, writing, vocabulary, blueprint reading, and science as these are integrated throughout the curriculum.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Architecture and Construction

CIP: 46.0503 - Plumbing Technology/Plumber. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 1.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	**Production Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
21052A001	**Foundations of Technology**	**1.00**	**2017**	
20001A001	**Transportation Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
17058A001	**Plumbing I**	**3.00**	**2011**	
17058A002	**Plumbing II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Architecture and Construction

Course Descriptions

CIP: 46.0503 - Plumbing Technology/Plumber.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 17058A001 **Course Title:** **Plumbing I**

This course is an introductory level course designed to acquaint students with the basics of plumbing. Tasks introduced in this course include classroom safety, estimating the costs of jobs, joining copper tubing and strip pipes, installing hangars and supports, roughing in water supply lines for bathtubs, water closets, and water heaters, maintaining plumbing systems, using manuals to determine maintenance schedules, brazing pipes, joining pipes of dissimilar material with a variety of couplings, building water distribution line, and installing vents and drains.

Cluster: Architecture and Construction

Course Descriptions

CIP: 46.0503 - Plumbing Technology/Plumber.

State Course ID: 17058A002 **Course Title:** **Plumbing II**

Planned learning activities emphasize the development of more advanced knowledge and skills than those provided in Plumbing I. This course provides more time for skill development and to acquaint the student with the requirements of an entry-level position as a plumber. Skills introduced include using manuals to determine maintenance schedules, brazing pipes, joining pipes of dissimilar material with a variety of couplings, installing hangars and supports, building water distribution lines and installing vents and drains.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Architecture and Construction

CIP: 47.0201 - Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician. (Non Traditional - Fem

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 1.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	**Production Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
20001A001	**Transportation Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
17056A001	**HVAC I**	**3.00**	**2011**	
17056A002	**HVAC II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Architecture and Construction

Course Descriptions

CIP: 47.0201 - Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 17056A001 **Course Title:** **HVAC I**

This course is an introduction to the principles and practices employed in the installation, maintenance, and repair of basic air conditioning and heating systems units. Instruction is provided in safety precautions related to electricity, heating units, rotating machinery, refrigerants, and the use of power tools. Instruction includes basic electrical concepts, circuits, transformers, motors and motor controls, and circuit protection devices. Emphasis is also placed on basic refrigeration principles, gas laws, pressure, fluidics, heat and heat transfer, refrigerants, compressors, and lubrication systems. Activities include experiences in using hand tools, gauges, and test instruments used in cutting, reaming, flaring, swaging, bending, soldering, and brazing copper tubing; evacuating and charging refrigeration systems, and inspecting and testing electrical and air conditioning circuits and component parts.

State Course ID: 17056A002 **Course Title:** **HVAC II**

This course builds on the foundational skills introduced in HVAC I. Students learn the mechanics and electrical fundamentals needed to work as a HVACR technician. Installation, maintenance, and repair of residential forced air hearing systems, alternative energy sources, hydronic heating systems, heat pumps, and air conditioners are taught.

Cluster: Architecture and Construction

Course Descriptions

CIP: 47.0201 - Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Architecture and Construction

CIP: 47.0302 - Heavy Equipment Technology/Technician. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 1.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
13052A001	**Production Technology**	**1.00**	**2011**	
20001A001	**Transportation Technology**	**1.00**	**2011**	
20101A001	**Energy Utilization Technology**	**1.00**	**2011**	
11002A001	**Communication Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
21052A001	**Foundations of Technology**	**1.00**	**2017**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
20112A001	**Heavy Equipment Technician I**	**3.00**	**2011**	
20112A002	**Heavy Equipment Technician II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Architecture and Construction

Course Descriptions

CIP: 47.0302 - Heavy Equipment Technology/Technician.

State Course ID: 13052A001 **Course Title:** **Production Technology**

Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**

Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society . Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**

Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 11002A001 **Course Title:** **Communication Technology**

Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**

The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20112A001 **Course Title:** **Heavy Equipment Technician I**

This course introduces students to the basic skills needed to repair and maintain heavy equipment found in the manufacturing industry. Topics covered in this course include safety, blueprint reading basic hand and power tools, introductory hydraulics and pneumatics, orientation to computer diagnostics, basic electricity and electronics, and an introduction to welding technology.

Cluster: Architecture and Construction

Course Descriptions

CIP: 47.0302 - Heavy Equipment Technology/Technician.

State Course ID: 20112A002 **Course Title:** **Heavy Equipment Technician II**

This course is a continuation of Heavy Equipment Technician I and builds on the skills and concepts introduced there. New skills introduced in this course include metal separating, drill press, metal lathe, surface grinder, and milling machine operation. Also included are units of instruction on advanced electronics and electricity along with additional skill building activities in welding, braising, hydraulics, pneumatics, computer diagnostics, and precision measurement.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Arts, Audio/Video Technology and Communications

CIP: 10.0202 - Radio and Television Broadcasting Technology/Technician. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
11002A001	**Communication Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
11051A003	**Beginning Audio/Visual Production**	**1.00**	**2012**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
13052A001	**Production Technology**	**1.00**	**2018**	
20001A001	**Transportation Technology**	**1.00**	**2018**	
20101A001	**Energy Utilization Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
11051A001	**Audio/Video Production I**	**3.00**	**2011**	
11051A002	**Audio/Video Production II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Arts, Audio/Video Technology and Communications

Course Descriptions

CIP: 10.0202 - Radio and Television Broadcasting Technology/Technician.

State Course ID: 11002A001 **Course Title:** **Communication Technology**
Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**
Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 11051A003 **Course Title:** **Beginning Audio/Visual Production**
Beginning Audio/Visual Production course provide students with the basic knowledge and skills necessary for television, video, film, and /or radio production. Camera operation, use of graphics and other visuals, lighting, audio techniques, editing, production principles, and career opportunities are typical topics covered within this course.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**
The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 13052A001 **Course Title:** **Production Technology**
Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**
Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society . Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**
Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

Cluster: Arts, Audio/Video Technology and Communications

Course Descriptions

CIP: 10.0202 - Radio and Television Broadcasting Technology/Technician.

State Course ID: 11051A001 **Course Title:** **Audio/Video Production I**

This course is designed to provide students with the skills needed for a career in the technical aspects of radio and television broadcasting. Instruction includes camera operations, basic audio and video editing, sound and lighting techniques, and sound mixing. Students learn the operation, maintenance, and repair of video and DVD recording equipment, video/digital cameras, microphones, computers, lighting/grip equipment, and other production equipment used in the video and audio production of television programs. Students also learn to use, maintain, and repair various types of audio recorders, amplifiers, transmitters, receivers, microphones, and sound mixers to record and broadcast radio programs.

State Course ID: 11051A002 **Course Title:** **Audio/Video Production II**

This course is for students who have completed Audio/Video Production I. In addition to expanding on the activities explored in the first course, students work in a team-based environment to create a variety of video and audio related broadcasts. Instruction includes single and multi camera operations, linear and nonlinear video editing, production and post-production processes, animation graphics, sound mixing, multi-track production, audio editing, and special effects. Students learn how to use digital editing equipment and software to electronically cut and paste video and sound segments together, as well as how to regulate and monitor signal strength, volume, sound quality, brightness, and clarity of outgoing signals. This course also provides students with an understanding of the FCC and other governmental agencies regulations related to radio and television broadcasting.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Arts, Audio/Video Technology and Communications

CIP: 10.0303 - Prepress/Desktop Publishing and Digital Imaging Design. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
11002A001	**Communication Technology**	**1.00**	**2011**	
13052A001	**Production Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
11154A003	**Beginning Graphic Communication**	**1.00**	**2012**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
20001A001	**Transportation Technology**	**1.00**	**2018**	
20101A001	**Energy Utilization Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
11154A001	**Graphic Communications I**	**3.00**	**2011**	
11154A002	**Graphic Communications II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Arts, Audio/Video Technology and Communications

Course Descriptions

CIP: 10.0303 - Prepress/Desktop Publishing and Digital Imaging Design.

State Course ID: 11002A001 **Course Title:** **Communication Technology**
Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 13052A001 **Course Title:** **Production Technology**
Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**
Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 11154A003 **Course Title:** **Beginning Graphic Communication**
Beginning Graphic Communication course will teach students to use artistic techniques to effectively communicate ideas via illustration and other forms of digital or printed media. Topics covered may include concept design, layout, paste-up and techniques such as engraving, etching, silkscreen, lithography, offset, drawing, collage and computer graphics.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**
The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**
Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**
Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

Cluster: Arts, Audio/Video Technology and Communications

Course Descriptions

CIP: 10.0303 - Prepress/Desktop Publishing and Digital Imaging Design.

State Course ID: 11154A001 **Course Title:** **Graphic Communications I**

Graphic Communications I provides learning experiences common to all graphic communications occupations. Instruction should include use of color, balance and proportion in design; three-dimensional visualization; sketching; design procedures; layout; selection of type styles; selection of appropriate drawing tools and media; and the use of the computer as a communication tool. Planned learning activities will allow students to become knowledgeable of fundamental principles and methods and to develop technical skills related to the graphic arts industry.

State Course ID: 11154A002 **Course Title:** **Graphic Communications II**

Graphic Communications II provides learning experiences related to the tools, materials, processes and practices utilized in the printing industry. Instruction is provided in industrial safety; stencil preparation and duplicating equipment operation; print screen preparation and printing; machine typesetting; ink and color preparation; assembly, binding, and trimming operations; layout, digital paste up and copy preparation. In addition the course provides the student with learning experiences in the use of cameras and photographic equipment, development and processing of photographic negatives and prints, negative stripping and related platemaking procedures, photocomposition, photoengraving, lithography, and offset presswork. Use of the computer in graphic arts occupations should be emphasized.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Arts, Audio/Video Technology and Communications

CIP: 50.0102 - Digital Arts.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
11002A001	**Communication Technology**	**1.00**	**2011**	
13052A001	**Production Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
10202A002	**Beginning Digital Graphics**	**1.00**	**2012**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
20001A001	**Transportation Technology**	**1.00**	**2018**	
20101A001	**Energy Utilization Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
10202A001	**Digital Graphics**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Arts, Audio/Video Technology and Communications

Course Descriptions

CIP: 50.0102 - Digital Arts.

State Course ID: 11002A001 **Course Title:** **Communication Technology**
Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 13052A001 **Course Title:** **Production Technology**
Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**
Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 10202A002 **Course Title:** **Beginning Digital Graphics**
Beginning Digital Graphics course provides students with the opportunity to explore the capability of the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Typical course topics include modeling, simulation, animation, and image retouching.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**
The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**
Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society . Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**
Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

State Course ID: 10202A001 **Course Title:** **Digital Graphics**
Digital Graphics course provides students with the opportunity to use the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Course topics include modeling, simulation, animation, and image retouching.

Cluster: Arts, Audio/Video Technology and Communications

Course Descriptions

CIP: 50.0102 - Digital Arts.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Arts, Audio/Video Technology and Communications

CIP: 50.0402 - Commercial and Advertising Art.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
11002A001	**Communication Technology**	**1.00**	**2011**	
13052A001	**Production Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
10202A002	**Beginning Digital Graphics**	**1.00**	**2012**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
20001A001	**Transportation Technology**	**1.00**	**2018**	
20101A001	**Energy Utilization Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
11155A001	**Commercial & Advertising Art I**	**3.00**	**2011**	
11155A002	**Commercial & Advertising Art II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Arts, Audio/Video Technology and Communications

Course Descriptions

CIP: 50.0402 - Commercial and Advertising Art.

State Course ID: 11002A001 **Course Title:** **Communication Technology**
Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 13052A001 **Course Title:** **Production Technology**
Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**
Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 10202A002 **Course Title:** **Beginning Digital Graphics**
Beginning Digital Graphics course provides students with the opportunity to explore the capability of the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Typical course topics include modeling, simulation, animation, and image retouching.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**
The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**
Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society . Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**
Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

Cluster: Arts, Audio/Video Technology and Communications

Course Descriptions

CIP: 50.0402 - Commercial and Advertising Art.

State Course ID: 11155A001 **Course Title:** **Commercial & Advertising Art I**

This course is designed to provide students with the skills needed for a career in the fields of advertising, commercial art, graphic design, web site development, and graphic illustrator. Students learn to apply artistic design and layout principles along with text, graphics, drawing, rendering, sound, video, and 2D/3D animation integration to develop various print, video, and digital products. Students use hardware and software programs to create, manipulate, color, paint, and layer scanned images, computer graphics, and original artwork. Students use hardware and software to capture, edit, create, and compress audio and video clips. Students use animation and 2D/3D hardware and software to create animated text, graphics, and images. Students apply artistic techniques to design and create advertisements, displays, publications, technical illustrations, marketing brochures, logos, trademarks, packaging, video graphics, and computer-generated media.

State Course ID: 11155A002 **Course Title:** **Commercial & Advertising Art II**

This course continues to build on the concepts and skills introduced in Commercial and Advertising Art I. In addition to expanding on the activities explored in Commercial and Advertising Art I, students work in a project-based environment to create a variety of interactive online and CD/DVD-based products such as web sites, catalogs, publications, marketing materials, presentations, and educational/training programs. Students create dynamic web pages and sites using HTML, HTML editors, and graphic editors. Students create graphic sketches, designs, and copy layouts for online content. Instruction includes how to determine size and arrangement of illustrative material and copy, select style and size of type, and arrange layout based upon available space. Students learn how to capture and edit images, sound, and video, and combine them with text and animation. Instruction includes client interviewing skills, product proposal development, and product presentation techniques. Students also learn how to create a product portfolio.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Arts, Audio/Video Technology and Communications

CIP: 50.0406 - Commercial Photography.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
11002A001	**Communication Technology**	**1.00**	**2011**	
21052A002	**Introduction to Technology and Engineering (Industrial)**	**1.00**	**2011**	
11052A003	**Beginning Photography**	**1.00**	**2012**	
21052A001	**Foundations of Technology**	**1.00**	**2014**	
13052A001	**Production Technology**	**1.00**	**2018**	
20001A001	**Transportation Technology**	**1.00**	**2018**	
20101A001	**Energy Utilization Technology**	**1.00**	**2018**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
11052A001	**Commercial Photography I**	**3.00**	**2011**	
11052A002	**Commercial Photography II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Arts, Audio/Video Technology and Communications

Course Descriptions

CIP: 50.0406 - Commercial Photography.

State Course ID: 11002A001 **Course Title:** **Communication Technology**
Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society . Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.

State Course ID: 21052A002 **Course Title:** **Introduction to Technology and Engineering (Industrial)**
Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.

State Course ID: 11052A003 **Course Title:** **Beginning Photography**
Beginning Photography course provides instruction in the use of conventional and digital cameras and laboratory film processing techniques. Topics covered in the course include composition and color dynamics; contact printing; enlarging; developing film and use of camera meters.

State Course ID: 21052A001 **Course Title:** **Foundations of Technology**
The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

State Course ID: 13052A001 **Course Title:** **Production Technology**
Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.

State Course ID: 20001A001 **Course Title:** **Transportation Technology**
Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society . Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.

State Course ID: 20101A001 **Course Title:** **Energy Utilization Technology**
Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.

Cluster: Arts, Audio/Video Technology and Communications

Course Descriptions

CIP: 50.0406 - Commercial Photography.

State Course ID: 11052A001 **Course Title:** **Commercial Photography I**

This course provides students with experiences related to the photography field including conventional and digital cameras. Planned experiences give students a clear and concise introduction in the following areas: safety and proper housekeeping of the photo studio, photography of visual and communicative discipline, constructing a usable cardboard camera and develop printing, learning basic terms, understanding how film /paper work, proper exposure, working in the darkroom and knowing all necessary darkroom activities, safe use of photo chemicals, using dyes, and mounting and matting a completed photographic image. In addition, students are introduced to photographic terms, using light meters to measure natural and artificial lighting, using various lighting sources, manipulating basic backgrounds with different light sources, conducting shop operations, performing camera work, processing film and performing darkroom work on black and white and color film, printing photographic images, purchasing equipment and supplies, and the selection and use of cameras, film, lenses, accessories, tripods and filters.

State Course ID: 11052A002 **Course Title:** **Commercial Photography II**

This course provides learning experiences related to the tools, materials, processes and practices utilized in the photography industry including conventional and digital cameras. Instruction includes arranging photography sessions, selecting and using cameras, film, lenses, and accessories, calculating and setting shutter speed, preparing darkroom equipment, mixing chemicals, processing film both black and white and color, printing photographic images such as enlargements, sandwich negatives, and copying slides. In addition, Commercial Photography II provides students with a better understanding of photographic images and their application in design. Students shoot photographs specifically for design layouts and in the process develop a better visual language, enhancing photo selection and editing skills. Students learn to visualize not only the look of the design, but also the structure and form of the photographs they shoot.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Business, Management and Administration

CIP: 52.0302 - Accounting Technology/Technician and Bookkeeping. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12001A001	**Business and Technology Concepts**	**1.00**	**2011**	
12005A001	**Keyboarding and Formatting**	**0.50**	**2011**	
10004A001	**Computer Concepts and Software Applications**	**0.50**	**2011**	
12007A001	**Recordkeeping**	**0.50**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12104A001	**Accounting I**	**3.00**	**2011**	
12104A002	**Accounting II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
10005A001	**Information Processing I**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Business, Management and Administration

Course Descriptions

CIP: 52.0302 - Accounting Technology/Technician and Bookkeeping.

State Course ID: 12001A001 **Course Title:** **Business and Technology Concepts**

This orientation-level course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production). Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level courses that make up the Business, Marketing and Management occupations programs.

State Course ID: 12005A001 **Course Title:** **Keyboarding and Formatting**

Keyboarding and Formatting is a course designed to develop basic skills in touch keyboarding techniques for entering alphabetic, numeric, and symbol information found on computers and terminals. Students will learn to edit and format text and paragraphs, change fonts, work with headers and footers, cut and paste text, create and use tab keys, create labels, and work with multiple windows. Students will format documents such as letters, envelopes, memorandums, reports, and tables for personal, educational, and business uses. During the second half of the course, major emphasis is placed on formatting documents, improving proofreading skills, and increasing speed and accuracy.

State Course ID: 10004A001 **Course Title:** **Computer Concepts and Software Applications**

Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

State Course ID: 12007A001 **Course Title:** **Recordkeeping**

Develops understanding of and skill in maintaining accurate records; includes skills used in everyday business activities both for personal and professional use; provides an opportunity to develop skills related to personal financial management as well as budgeting, financial planning, cashier's records, handling of money, and tasks common to simple office practices.

State Course ID: 12104A001 **Course Title:** **Accounting I**

Accounting I is a course assists students pursuing a career in business, marketing, and management. This course includes planned learning experiences that develop initial and basic skills used in systematically computing, classifying, recording, verifying and maintaining numerical data involved in financial and product control records including the paying and receiving of money. Instruction includes information on keeping financial records, summarizing them for convenient interpretation, and analyzing them to provide assistance to management for decision making. Accounting computer applications should be integrated throughout the course where applicable. In addition to stressing basic fundamentals and terminology of accounting, instruction should provide initial understanding of the preparation of budgets and financial reports, operation of related business machines and equipment, and career opportunities in the accounting field. Processing employee benefits may also be included.

Cluster: Business, Management and Administration

Course Descriptions

CIP: 52.0302 - Accounting Technology/Technician and Bookkeeping.

State Course ID: 12104A002 **Course Title:** **Accounting II**

Accounting II is a course that builds upon the foundation established in Accounting I. This course is planned to help students to develop deeper knowledge of the principles of accounting with more emphasis being placed on financial statements and accounting records. It is a study of previously learned principles as they apply to the more complicated types of business organizations: partnerships, corporations, branches, etc. The students may become familiar with such specialized fields of accounting as cost accounting, tax accounting, payroll accounting, and others. Some students may choose to do specialized accounting computer applications, and others may elect payroll clerk, data processing computer applications. Simulated business conditions may be provided through the use of practice sets. Skills are developed in the entry, retrieval, and statistical analysis of business data using computers for accounting business applications.

State Course ID: 10005A001 **Course Title:** **Information Processing I**

Information Processing I is a skill-level course that includes the concepts and terminology related to the people, equipment, and procedures of information processing as well as skill development in the use of information processing equipment. Students will operate computer equipment to prepare memos, letters, reports, and forms. Students will create rough drafts, correct copy, process incoming and outgoing telephone calls and mail, and transmit and receive messages electronically . Students will create, input, and update databases and spreadsheets. Students will create data directories; copy, rename, move, and delete files, and perform backup procedures. In addition, students will prepare files to merge, as well as create mailing labels and envelopes from merge files. Students will learn to locate and retrieve information from hard copy and electronic sources, and prepare masters for a presentations using presentation software. Students will apply proper grammar, punctuation, spelling and proofreading practices. Accuracy will be emphasized. Workplace skills as well as communication skills (thinking, listening, composing, revising, editing, and speaking) will be taught and integrated throughout this course.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Business, Management and Administration

CIP: 52.0401 - Administrative Assistant and Secretarial Science, General. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12001A001	**Business and Technology Concepts**	**1.00**	**2011**	
12005A001	**Keyboarding and Formatting**	**0.50**	**2011**	
10004A001	**Computer Concepts and Software Applications**	**0.50**	**2011**	
10008A001	**Digital Literacy and Responsibility**	**0.50**	**2017**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
10005A001	**Information Processing I**	**3.00**	**2011**	
10005A002	**Information Processing II**	**3.00**	**2011**	
12002A001	**Business Technology and Procedures**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12054A001	**Business Law**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	
12104A001	**Accounting I**	**3.00**	**2011**	

Cluster: Business, Management and Administration

Course Descriptions

CIP: 52.0401 - Administrative Assistant and Secretarial Science, General.

State Course ID: 12001A001 **Course Title:** **Business and Technology Concepts**

This orientation-level course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production). Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level courses that make up the Business, Marketing and Management occupations programs.

State Course ID: 12005A001 **Course Title:** **Keyboarding and Formatting**

Keyboarding and Formatting is a course designed to develop basic skills in touch keyboarding techniques for entering alphabetic, numeric, and symbol information found on computers and terminals. Students will learn to edit and format text and paragraphs, change fonts, work with headers and footers, cut and paste text, create and use tab keys, create labels, and work with multiple windows. Students will format documents such as letters, envelopes, memorandums, reports, and tables for personal, educational, and business uses. During the second half of the course, major emphasis is placed on formatting documents, improving proofreading skills, and increasing speed and accuracy.

State Course ID: 10004A001 **Course Title:** **Computer Concepts and Software Applications**

Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

State Course ID: 10008A001 **Course Title:** **Digital Literacy and Responsibility**

This foundation-level course prepares students to use technology in a proficient and responsible manner in school, in the workforce, and in everyday life. The course contains skills for working in an Internet or networked environment and the knowledge of what it means to be a good digital citizen and the ability to use technology responsibly. Topics include the benefits and risks of sharing information online, and the possible consequences of inappropriate sharing (oversharing). Students explore the legal and ethical dimensions of respecting creative work. Technology use is a vital employability skill for entry-level and upper-level management positions. Students may be provided with the opportunity to seek industry-recognized digital literacy certifications.

Cluster: Business, Management and Administration

Course Descriptions

CIP: 52.0401 - Administrative Assistant and Secretarial Science, General.

State Course ID: 10005A001 **Course Title:** **Information Processing I**

Information Processing I is a skill-level course that includes the concepts and terminology related to the people, equipment, and procedures of information processing as well as skill development in the use of information processing equipment. Students will operate computer equipment to prepare memos, letters, reports, and forms. Students will create rough drafts, correct copy, process incoming and outgoing telephone calls and mail, and transmit and receive messages electronically. Students will create, input, and update databases and spreadsheets. Students will create data directories; copy, rename, move, and delete files, and perform backup procedures. In addition, students will prepare files to merge, as well as create mailing labels and envelopes from merge files. Students will learn to locate and retrieve information from hard copy and electronic sources, and prepare masters for a presentations using presentation software. Students will apply proper grammar, punctuation, spelling and proofreading practices. Accuracy will be emphasized. Workplace skills as well as communication skills (thinking, listening, composing, revising, editing, and speaking) will be taught and integrated throughout this course.

State Course ID: 10005A002 **Course Title:** **Information Processing II**

Information Processing II is a skill-level course for students who have completed Information Processing I. Students will create and update documents using word processing and desktop publishing programs and put together slideshows, speaker notes and handouts using presentation software. Students will revise data in a stored database and use queries to create customized reports. Students will edit and utilize calculation functions in spreadsheets, integrate graphics, spreadsheets, tables, text and data into documents and reports, and create graphs and charts from spreadsheets. Students will learn to conduct research on the internet and/or intranet, prepare and answer routine correspondence, organize and maintain a filing system, maintain an appointment calendar, make travel arrangements, prepare itineraries and expense reports, and prepare and process timesheets. In addition, students will maintain inventory, order equipment and supplies, and perform routine equipment maintenance. Students will apply proper grammar, punctuation, spelling and proofreading practices to documents and reports. Accuracy will be emphasized. Workplace skills as well as communication skills will be taught and integrated throughout this course. A simulated information processing center or workbased learning experience may be used to provide students with the experience of working in the environment of an information processing center.

State Course ID: 12002A001 **Course Title:** **Business Technology and Procedures**

Business Technology and Procedures is a course that prepares students for entry level employment in a technology-based office setting. Integrated software applications will be included in this course. Instruction will focus on office etiquette, office management, telephone and communications procedures, time management, records management, and proper business behavior and attire. Students will perform clerical duties, create, edit and correct documents, records and files, perform information processing activities (e.g. spreadsheets, database entry, desktop publishing) and prepare documents using presentation software. Students will discuss appropriate procedures for receiving visitors, patients or clients, and organize, schedule and plan meetings. In addition, students will file materials manually and electronically, make travel arrangements, perform financial activities, process mail, transmit messages electronically, and maintain office supplies and equipment. Students will organize and plan office activities, compose and distribute meeting notes and reports, answer routine correspondence, input information from voice recordings; conduct research using the intranet and/or internet, and supervise and train other employees. Students will apply proper grammar, punctuation, spelling and proofreading skills. Accuracy will be emphasized. Students will apply new skills as well as skills learned in other courses to complete a series of realistic office assignments or participate in an office workbased learning experience. Workplace skills as well as communication skills (thinking, listening, composing, revising, editing, and speaking) will be taught and integrated throughout this course.

Cluster: Business, Management and Administration

Course Descriptions

CIP: 52.0401 - Administrative Assistant and Secretarial Science, General.

State Course ID: 12054A001 **Course Title:** **Business Law**

Introduces law and the origins and necessity of the legal system; provides insight into the evolution and development of laws that govern business in our society; develops an understanding of how organization and operation of the legal system impact business; develops an understanding of rights and duties within the business environment; and includes contractual responsibility, protection of individual rights in legal relationships relative to warranties, product liability, secured and unsecured debts, negotiable instruments, agencies, employer-employee relations, property ownership and transfer, landlord and tenant, wills and estates, community property, social security, and taxation.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 12104A001 **Course Title:** **Accounting I**

Accounting I is a course assists students pursuing a career in business, marketing, and management. This course includes planned learning experiences that develop initial and basic skills used in systematically computing, classifying, recording, verifying and maintaining numerical data involved in financial and product control records including the paying and receiving of money. Instruction includes information on keeping financial records, summarizing them for convenient interpretation, and analyzing them to provide assistance to management for decision making. Accounting computer applications should be integrated throughout the course where applicable. In addition to stressing basic fundamentals and terminology of accounting, instruction should provide initial understanding of the preparation of budgets and financial reports, operation of related business machines and equipment, and career opportunities in the accounting field. Processing employee benefits may also be included.

CTE - CIP Course Details Catalog

Cluster: Business, Management and Administration

CIP: 52.0701 - Entrepreneurship/Entrepreneurial Studies.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12001A001	**Business and Technology Concepts**	**1.00**	**2011**	
12005A001	**Keyboarding and Formatting**	**0.50**	**2011**	
10004A001	**Computer Concepts and Software Applications**	**0.50**	**2011**	
10008A001	**Digital Literacy and Responsibility**	**0.50**	**2017**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12053A001	**Entrepreneurship**	**3.00**	**2011**	
12052A001	**Business Management**	**3.00**	**2015**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12055A001	**Service-Oriented Marketing**	**3.00**	**2011**	
12054A001	**Business Law**	**3.00**	**2011**	
12152A001	**Advanced Marketing**	**3.00**	**2011**	
12164A001	**Product-Oriented Marketing**	**3.00**	**2011**	
10005A001	**Information Processing I**	**3.00**	**2011**	
12104A001	**Accounting I**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Business, Management and Administration

Course Descriptions

CIP: 52.0701 - Entrepreneurship/Entrepreneurial Studies.

State Course ID: 12001A001 **Course Title:** **Business and Technology Concepts**

This orientation-level course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production). Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level courses that make up the Business, Marketing and Management occupations programs.

State Course ID: 12005A001 **Course Title:** **Keyboarding and Formatting**

Keyboarding and Formatting is a course designed to develop basic skills in touch keyboarding techniques for entering alphabetic, numeric, and symbol information found on computers and terminals. Students will learn to edit and format text and paragraphs, change fonts, work with headers and footers, cut and paste text, create and use tab keys, create labels, and work with multiple windows. Students will format documents such as letters, envelopes, memorandums, reports, and tables for personal, educational, and business uses. During the second half of the course, major emphasis is placed on formatting documents, improving proofreading skills, and increasing speed and accuracy.

State Course ID: 10004A001 **Course Title:** **Computer Concepts and Software Applications**

Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

State Course ID: 10008A001 **Course Title:** **Digital Literacy and Responsibility**

This foundation-level course prepares students to use technology in a proficient and responsible manner in school, in the workforce, and in everyday life. The course contains skills for working in an Internet or networked environment and the knowledge of what it means to be a good digital citizen and the ability to use technology responsibly. Topics include the benefits and risks of sharing information online, and the possible consequences of inappropriate sharing (oversharing). Students explore the legal and ethical dimensions of respecting creative work. Technology use is a vital employability skill for entry-level and upper-level management positions. Students may be provided with the opportunity to seek industry-recognized digital literacy certifications.

State Course ID: 12053A001 **Course Title:** **Entrepreneurship**

Entrepreneurship courses acquaint students with the knowledge and skills necessary to own and operate their own businesses. Topics from several fields typically form the course content: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting, and communication. Several topics surveyed in Business Management courses may also be included.

Cluster: Business, Management and Administration

Course Descriptions

CIP: 52.0701 - Entrepreneurship/Entrepreneurial Studies.

State Course ID: 12052A001 **Course Title:** **Business Management**

Business Management courses acquaint students with management opportunities and effective human relations. These courses provide students with the skills to perform planning, staffing, financing, and controlling functions within a business. In addition, they usually provide a macro-level study of the business world, including business structure and finance, and the interconnections among industry, government, and the global economy. The course may also emphasize problem-based, real-world applications of business concepts and use accounting concepts to formulate, analyze, and evaluate business decisions.

Cluster: Business, Management and Administration

Course Descriptions

CIP: 52.0701 - Entrepreneurship/Entrepreneurial Studies.

State Course ID: 12055A001 **Course Title:** **Service-Oriented Marketing**

This course explores the basic principles of marketing such as the creation of concepts, strategies, and the development of marketing plans. Students learn about the components of the marketing mix, target marketing, sponsorship, event marketing, promotions, proposals, and execution of planning. This course emphasizes strong decision-making, critical thinking, and collaborative skills to complete group marketing projects throughout the semester. Students will be challenged to create new marketing ideas as they analyze current marketing trends. Students will also explore the legal aspects of these industries. Real life projects allow students to demonstrate their understanding of these areas. This course will examine the impact of marketing in our everyday lives, as well as teach many critical business concepts to ready students for a career in the area of marketing.

State Course ID: 12054A001 **Course Title:** **Business Law**

Introduces law and the origins and necessity of the legal system; provides insight into the evolution and development of laws that govern business in our society; develops an understanding of how organization and operation of the legal system impact business; develops an understanding of rights and duties within the business environment; and includes contractual responsibility, protection of individual rights in legal relationships relative to warranties, product liability, secured and unsecured debts, negotiable instruments, agencies, employer-employee relations, property ownership and transfer, landlord and tenant, wills and estates, community property, social security, and taxation.

State Course ID: 12152A001 **Course Title:** **Advanced Marketing**

Marketing—Comprehensive courses focus on the wide range of factors that influence the flow of goods and services from the producer to the consumer. Topics may include (but are not limited to) market research, the purchasing process, distribution systems, warehouse and inventory control, salesmanship, sales promotions, shoplifting and theft control, business management, and entrepreneurship. Human relations, computers, and economics are often covered as well.

State Course ID: 12164A001 **Course Title:** **Product-Oriented Marketing**

Principles of Marketing courses offer students insight into the processes affecting the flow of goods and services from the producer to the consumer. Course content ranges considerably as general marketing principles such as purchasing, distribution, and sales are covered; however, a major emphasis is often placed on kinds of markets; market identification; product planning, packaging, and pricing; and business management.

State Course ID: 10005A001 **Course Title:** **Information Processing I**

Information Processing I is a skill-level course that includes the concepts and terminology related to the people, equipment, and procedures of information processing as well as skill development in the use of information processing equipment. Students will operate computer equipment to prepare memos, letters, reports, and forms. Students will create rough drafts, correct copy, process incoming and outgoing telephone calls and mail, and transmit and receive messages electronically . Students will create, input, and update databases and spreadsheets. Students will create data directories; copy, rename, move, and delete files, and perform backup procedures. In addition, students will prepare files to merge, as well as create mailing labels and envelopes from merge files. Students will learn to locate and retrieve information from hard copy and electronic sources, and prepare masters for a presentations using presentation software. Students will apply proper grammar, punctuation, spelling and proofreading practices. Accuracy will be emphasized. Workplace skills as well as communication skills (thinking, listening, composing, revising, editing, and speaking) will be taught and integrated throughout this course.

Cluster: Business, Management and Administration

Course Descriptions

CIP: 52.0701 - Entrepreneurship/Entrepreneurial Studies.

State Course ID: 12104A001 **Course Title:** **Accounting I**

Accounting I is a course assists students pursuing a career in business, marketing, and management. This course includes planned learning experiences that develop initial and basic skills used in systematically computing, classifying, recording, verifying and maintaining numerical data involved in financial and product control records including the paying and receiving of money. Instruction includes information on keeping financial records, summarizing them for convenient interpretation, and analyzing them to provide assistance to management for decision making. Accounting computer applications should be integrated throughout the course where applicable. In addition to stressing basic fundamentals and terminology of accounting, instruction should provide initial understanding of the preparation of budgets and financial reports, operation of related business machines and equipment, and career opportunities in the accounting field. Processing employee benefits may also be included.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Business, Management and Administration

CIP: 59.0109 - Work Experience and Career Exploration Program

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 2

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22004A001	**Work Experience and Career Exploration Program**	**3.00**	**2011**	

Course Descriptions

CIP: 59.0109 - Work Experience and Career Exploration Program

State Course ID: 22004A001 **Course Title:** **Work Experience and Career Exploration Program**

Dropout Prevention Program courses vary widely, but typically are targeted at students who have been identified as being at risk of dropping out of or failing in school . Course content may include study skills and individual tutorials; job preparation, readiness, application, or interview skills; communication skills; personal assessment and awareness activities; speaker presentations; and small group seminars.

CTE - CIP Course Details Catalog

Cluster: Education and Training

CIP: 13.0101 - Education, General.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 2

Minimum Course Selection: School: 1 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19151A001	**Foundations to Teaching**	**3.00**	**2011**	
19152A001	**Educational Methodology**	**3.00**	**2011**	

Course Descriptions

CIP: 13.0101 - Education, General.

State Course ID: 19151A001 **Course Title:** **Foundations to Teaching**

This course introduces students to the principles underlying teaching and learning, responsibilities and duties of teachers, and strategies and techniques to deliver knowledge and information. A combination of classroom and field experiences will enable the student gain skilled knowledge and understanding of the education profession. Course content includes projects to develop an understanding of the learner and the learning process, instructional planning, the learning environment, assessment and instructional strategies, career opportunities in the field of education, and Illinois regulations and licensing requirements.

State Course ID: 19152A001 **Course Title:** **Educational Methodology**

This course provides opportunity for students to develop skills to teach and guide others. Coursework includes opportunity for students to create and develop teaching objectives, design lesson plans, and experience teaching in a controlled environment. Students examine and practice teaching strategies, learning styles, time management and planning strategies, presentation and questioning skills, classroom management, and evaluation techniques. Students will explore opportunities in education careers and develop/expand their career portfolio.

CTE - CIP Course Details Catalog

Cluster: Education and Training

CIP: 13.1210 - Early Childhood Education and Teaching. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19052A001	**Child Development and Parenting**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19153A001	**Early Childhood Education**	**3.00**	**2011**	

Course Descriptions

CIP: 13.1210 - Early Childhood Education and Teaching.

State Course ID: 19052A001 **Course Title:** **Child Development and Parenting**

Child Development and Parenting addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. The focus is on research-based nurturing and parenting practices and skills, including brain development research, that support positive development of children. Students will explore opportunities in human services and education-related careers and develop a career portfolio.

State Course ID: 19153A001 **Course Title:** **Early Childhood Education**

This course prepares students to guide the development of young children in an educational setting through classroom and job shadowing experiences. Course content includes child development, care, and education issues. Project-based learning experiences include planning and implementing developmentally appropriate activities, basic health and safety practices, and legal requirements of teaching young children. Students will research the requirements of early childhood education careers and develop/expand their career portfolio.

CTE - CIP Course Details Catalog

Cluster: Finance

CIP: 52.1908 - Business and Personal/Financial Services Marketing Operations.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
10004A001	**Computer Concepts and Software Applications**	**0.50**	**2011**	
12001A001	**Business and Technology Concepts**	**1.00**	**2011**	
12005A001	**Keyboarding and Formatting**	**0.50**	**2011**	
10008A001	**Digital Literacy and Responsibility**	**0.50**	**2017**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12055A001	**Service-Oriented Marketing**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12104A001	**Accounting I**	**3.00**	**2011**	
10005A001	**Information Processing I**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	
12152A001	**Advanced Marketing**	**3.00**	**2011**	
12054A001	**Business Law**	**3.00**	**2011**	
12052A001	**Business Management**	**3.00**	**2015**	

Cluster: Finance

Course Descriptions

CIP: 52.1908 - Business and Personal/Financial Services Marketing Operations.

State Course ID: 10004A001 **Course Title:** **Computer Concepts and Software Applications**

Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

State Course ID: 12001A001 **Course Title:** **Business and Technology Concepts**

This orientation-level course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production). Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level courses that make up the Business, Marketing and Management occupations programs.

State Course ID: 12005A001 **Course Title:** **Keyboarding and Formatting**

Keyboarding and Formatting is a course designed to develop basic skills in touch keyboarding techniques for entering alphabetic, numeric, and symbol information found on computers and terminals. Students will learn to edit and format text and paragraphs, change fonts, work with headers and footers, cut and paste text, create and use tab keys, create labels, and work with multiple windows. Students will format documents such as letters, envelopes, memorandums, reports, and tables for personal, educational, and business uses. During the second half of the course, major emphasis is placed on formatting documents, improving proofreading skills, and increasing speed and accuracy.

State Course ID: 10008A001 **Course Title:** **Digital Literacy and Responsibility**

This foundation-level course prepares students to use technology in a proficient and responsible manner in school, in the workforce, and in everyday life. The course contains skills for working in an Internet or networked environment and the knowledge of what it means to be a good digital citizen and the ability to use technology responsibly. Topics include the benefits and risks of sharing information online, and the possible consequences of inappropriate sharing (oversharing). Students explore the legal and ethical dimensions of respecting creative work. Technology use is a vital employability skill for entry-level and upper-level management positions. Students may be provided with the opportunity to seek industry-recognized digital literacy certifications.

State Course ID: 12055A001 **Course Title:** **Service-Oriented Marketing**

This course explores the basic principles of marketing such as the creation of concepts, strategies, and the development of marketing plans. Students learn about the components of the marketing mix, target marketing, sponsorship, event marketing, promotions, proposals, and execution of planning. This course emphasizes strong decision-making, critical thinking, and collaborative skills to complete group marketing projects throughout the semester. Students will be challenged to create new marketing ideas as they analyze current marketing trends. Students will also explore the legal aspects of these industries. Real life projects allow students to demonstrate their understanding of these areas. This course will examine the impact of marketing in our everyday lives, as well as teach many critical business concepts to ready students for a career in the area of marketing.

Cluster: Finance

Course Descriptions

CIP: 52.1908 - Business and Personal/Financial Services Marketing Operations.

State Course ID: 12104A001 **Course Title:** **Accounting I**

Accounting I is a course assists students pursuing a career in business, marketing, and management. This course includes planned learning experiences that develop initial and basic skills used in systematically computing, classifying, recording, verifying and maintaining numerical data involved in financial and product control records including the paying and receiving of money. Instruction includes information on keeping financial records, summarizing them for convenient interpretation, and analyzing them to provide assistance to management for decision making. Accounting computer applications should be integrated throughout the course where applicable. In addition to stressing basic fundamentals and terminology of accounting, instruction should provide initial understanding of the preparation of budgets and financial reports, operation of related business machines and equipment, and career opportunities in the accounting field. Processing employee benefits may also be included.

State Course ID: 10005A001 **Course Title:** **Information Processing I**

Information Processing I is a skill-level course that includes the concepts and terminology related to the people, equipment, and procedures of information processing as well as skill development in the use of information processing equipment. Students will operate computer equipment to prepare memos, letters, reports, and forms. Students will create rough drafts, correct copy, process incoming and outgoing telephone calls and mail, and transmit and receive messages electronically . Students will create, input, and update databases and spreadsheets. Students will create data directories; copy, rename, move, and delete files, and perform backup procedures. In addition, students will prepare files to merge, as well as create mailing labels and envelopes from merge files. Students will learn to locate and retrieve information from hard copy and electronic sources, and prepare masters for a presentations using presentation software. Students will apply proper grammar, punctuation, spelling and proofreading practices. Accuracy will be emphasized. Workplace skills as well as communication skills (thinking, listening, composing, revising, editing, and speaking) will be taught and integrated throughout this course.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 12152A001 **Course Title:** **Advanced Marketing**

Marketing—Comprehensive courses focus on the wide range of factors that influence the flow of goods and services from the producer to the consumer. Topics may include (but are not limited to) market research, the purchasing process, distribution systems, warehouse and inventory control, salesmanship, sales promotions, shoplifting and theft control, business management, and entrepreneurship. Human relations, computers, and economics are often covered as well.

Cluster: Finance

Course Descriptions

CIP: 52.1908 - Business and Personal/Financial Services Marketing Operations.

State Course ID: 12054A001 **Course Title:** **Business Law**

Introduces law and the origins and necessity of the legal system; provides insight into the evolution and development of laws that govern business in our society; develops an understanding of how organization and operation of the legal system impact business; develops an understanding of rights and duties within the business environment; and includes contractual responsibility, protection of individual rights in legal relationships relative to warranties, product liability, secured and unsecured debts, negotiable instruments, agencies, employer-employee relations, property ownership and transfer, landlord and tenant, wills and estates, community property, social security, and taxation.

State Course ID: 12052A001 **Course Title:** **Business Management**

Business Management courses acquaint students with management opportunities and effective human relations. These courses provide students with the skills to perform planning, staffing, financing, and controlling functions within a business. In addition, they usually provide a macro-level study of the business world, including business structure and finance, and the interconnections among industry, government, and the global economy. The course may also emphasize problem-based, real-world applications of business concepts and use accounting concepts to formulate, analyze, and evaluate business decisions.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 19.0501 - Foods, Nutrition, and Wellness Studies, General. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
16054A001	**Nutrition and Culinary Arts I**	**1.00**	**2011**	
16054A002	**Nutrition and Culinary Arts II**	**1.00**	**2011**	
22203A001	**Food Science**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
16054A003	**Nutrition and Wellness Occupations**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A002	**FCS Cooperative Education**	**3.00**	**2011**	
22201A001	**Introduction to Family and Consumer Sciences Careers**	**1.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	

Cluster: Health Science

Course Descriptions

CIP: 19.0501 - Foods, Nutrition, and Wellness Studies, General.

State Course ID: 16054A001 **Course Title:** **Nutrition and Culinary Arts I**

This course includes classroom and laboratory experiences needed to develop a knowledge and understanding of culinary principles and nutrition for people of all ages. Course content encompass': food service and preparation management using the decision-making process; meeting basic needs by applying nutrition concepts; meeting health, safety, and sanitation requirements; maximizing resources when planning/preparing/preserving/serving food; applying hospitality skills; analyzing nutritional needs in relation to change; and careers in nutrition and culinary arts, including entrepreneurship investigation.

State Course ID: 16054A002 **Course Title:** **Nutrition and Culinary Arts II**

Nutrition and Culinary Arts II provides principles of application into the hospitality industry, including nutrition, culinary, and entrepreneurial opportunities. Course content includes the following: selection, purchase, preparation, and conservation of food, dietary needs and trends, regional & international cuisine, safety and sanitation, and careers in food service industries. All of these concepts can be interpreted through laboratory experiences.

State Course ID: 22203A001 **Course Title:** **Food Science**

The scientific method is used to study foods as a combination of chemical, physical and biological sciences. Laboratory skills in measuring, recording, and analyzing data are used to explore the interrelationship of food science to the other sciences; the scientific evaluation of food, matter, electrolyte solutions, energy, nutrition; food safety; and food chemistry. Experimental methods are used to analyze food mixtures, food microbiology, fermentation, sensory processes, the preservation of foods and complex food systems. Technology is studied as it relates to product development, consumer needs and experimental designs. Emphasis is placed on emerging careers in food science and biotechnology and the application of food science in food service, nutrition, dietetics, and product development.

State Course ID: 16054A003 **Course Title:** **Nutrition and Wellness Occupations**

This course will concentrate on expanding student's knowledge and experiences with nutrition concepts, food science, and healthy lifestyles. Nutritional analysis, nutrient functions, food allergies, diet and disease, menu analysis, energy and wellness, meal planning & management, nutritional needs across the life span, impacts of science and technology on nutrition and wellness issues, and food safety and sanitation management are topics covered in this course through theory, projects, and laboratory experiences. Students will gain experience in preparing a variety of communications to teach the importance nutrition and wellness.

State Course ID: 22153A002 **Course Title:** **FCS Cooperative Education**

Family and Consumer Sciences Cooperative Education is designed for students interested in pursuing careers in occupations in the field family and consumer sciences. Classroom instruction focuses on providing students with workplace skills, post-secondary education opportunities related to the job/career pathway, developing and maintaining positive workplace relationships, planning for the future, legal protection and responsibility, professional organizations, and advancing skills related to the job. Classroom and worksite instruction is based on the duties of the FCS occupation. Students are released from school for their paid cooperative education work experience, participate in 200 minutes per week of related classroom instruction, and supervised on-the-by a qualified instructor ½ hour or more per week per student. A qualified, certified FCS instructor is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations.

State Course ID: 22201A001 **Course Title:** **Introduction to Family and Consumer Sciences Careers**

This course introduces students to the field of family and consumer sciences and the many career opportunities available in this broad field. The course includes theory and laboratory experiences in the following content areas: Nutrition and culinary arts; textiles and design; family, career, and community leadership development; resource management; human development and life-long learning; facility design, care, and management; and interpersonal relationships and life management skills.

Cluster: Health Science

Course Descriptions

CIP: 19.0501 - Foods, Nutrition, and Wellness Studies, General.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0000 - Health Services/Allied Health/Health Sciences, General.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14252A001	**Principles of Biomedical Science (PLTW)**	**3.00**	**2018**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2019**	
14002A001	**Health Occupations Related Skills**	**1.00**	**2019**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14252A001	**Principles of Biomedical Science (PLTW)**	**3.00**	**2011**	**2017**
14251A001	**Human Body Systems (PLTW)**	**3.00**	**2011**	
14254A001	**Medical Interventions (PLTW)**	**3.00**	**2018**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14254A001	**Medical Interventions (PLTW)**	**3.00**	**2011**	**2017**
14299A001	**Biomedical Innovations (PLTW)**	**3.00**	**2011**	
14253A002	**Introduction to Pathophysiology and Pharmacology**	**3.00**	**2019**	
14154A001	**Medical Terminology**	**1.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.0000 - Health Services/Allied Health/Health Sciences, General.

State Course ID: 14252A001 **Course Title:** **Principles of Biomedical Science (PLTW)**

Principles of Biomedical Science courses introduce students to the broad field of biomedical science. It provides the study of human medicine, research processes, and an introduction to bioinformatics. Students investigate how various health conditions and medical treatments impact human physiology. Health conditions covered include: heart disease, diabetes, sickle cell disease, hypercholesterolemia, and infectious diseases.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14252A001 **Course Title:** **Principles of Biomedical Science (PLTW)**

Principles of Biomedical Science courses introduce students to the broad field of biomedical science. It provides the study of human medicine, research processes, and an introduction to bioinformatics. Students investigate how various health conditions and medical treatments impact human physiology. Health conditions covered include: heart disease, diabetes, sickle cell disease, hypercholesterolemia, and infectious diseases.

State Course ID: 14251A001 **Course Title:** **Human Body Systems (PLTW)**

Human Body Systems courses provide the study of basic human anatomy and physiology, especially in relationship to human health. A central theme is research and investigation into how the body systems work together to maintain internal balance and good health. Students use models and data acquisition software to study body structure and to monitor body functions.

State Course ID: 14254A001 **Course Title:** **Medical Interventions (PLTW)**

Medical Interventions courses provides opportunities to investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

State Course ID: 14254A001 **Course Title:** **Medical Interventions (PLTW)**

Medical Interventions courses provides opportunities to investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

Cluster: Health Science

Course Descriptions

CIP: 51.0000 - Health Services/Allied Health/Health Sciences, General.

State Course ID: 14299A001 **Course Title:** **Biomedical Innovations (PLTW)**

Biomedical Innovations courses provide the ability to design innovative solutions for the current pressing health challenges. Students apply knowledge and skills while conducting experiments related to biomedical sciences. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. Students have the opportunity to work on an independent design project with a mentor or advisor from a university, medical facility, health care industry, or biomedical research institution. Students will be expected to make a presentation of their work to an adult audience that may include representatives from the local community or the school's PLTW partnership team.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body's homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0601 - Dental Assisting/Assistant. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14054A001	**Dental Assistant**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14153A001	**Medical Office Procedures**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	
14101A001	**Dental Laboratory Aide**	**3.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.0601 - Dental Assisting/Assistant.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14054A001 **Course Title:** **Dental Assistant**

The course exposes students to the tools, terminology, and procedures necessary for a career in the dental industry. The course is responsible for preparing materials for impressions and restorations; and for exposing, processing, and mounting dental radiographs. The dental assistant maintains infection control according to Occupational Safety and Health Administration (OSHA) and American Dental Association standards. They also prepare tray setups for dental procedures and provide preventative dental patient/client information. The dental assistant is also trained to manage the office. This includes arranging and confirming appointments, greeting patients/clients, maintaining treatment records, mailing statements, receiving payments, and ordering supplies.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.0601 - Dental Assisting/Assistant.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14153A001 **Course Title:** **Medical Office Procedures**

Medical Office Procedures courses expose students to clerical knowledge, abilities, and procedures as they apply to the medical field. These courses typically include (but are not limited to) topics such as medical transcription, medical insurance, financial accounting, scheduling, and patient record -keeping. Medical terminology and routine medical procedures are covered to provide a context for clerical duties.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14101A001 **Course Title:** **Dental Laboratory Aide**

The course exposes students to the principals, tools, terminology, and procedures necessary for a career in a dental laboratory. The student is introduced to working with the dentist, dental assistant, and dental hygienist in the examination of patients /clients. The student learns to arrange and confirm appointments, greet patients/clients, and maintain treatment records. The students learn to maintain infection control according to Occupational Safety and Health Administration (OSHA) and American Dental Association (ADA) standards in assisting the dental assistant or dentist in preparing for dental procedures. The dental laboratory aide may also learn to assist the dental laboratory technologist in making, repairing, and polishing dentures; constructing crowns or bridges for partially destroyed teeth; and making orthodontic appliances (tooth straightening devices).

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0703 - Health Unit Coordinator/Ward Clerk. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14203A001	**Unit Clerk (Ward Clerk)**	**3.00**	**2011**	
14202A001	**Medical Records Assistant**	**3.00**	**2011**	**2018**

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14153A001	**Medical Office Procedures**	**3.00**	**2011**	
14202A001	**Medical Records Assistant**	**3.00**	**2019**	
14154A001	**Medical Terminology**	**1.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.0703 - Health Unit Coordinator/Ward Clerk.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14203A001 **Course Title:** **Unit Clerk (Ward Clerk)**

Unit Clerk (Ward Clerk) courses provide students with instruction and experiences so that they can manage components of nonpatient care activities in health care facilities. This course provides a sequence of organized learning experiences and skills necessary for a person to perform tasks requiring good communication skills, correct terminology and spelling, and an understanding of policies, rules, and regulations regarding visitors, patients/clients, and coworkers. Clerical responsibilities of record keeping, transcribing physicians' orders and requisitions, operating a computer, and using a multiplicity of standard and special chart forms are a necessary part of this occupational training program. Patient/client care activities involving areas of admission, discharge, transfer, death, laboratory listing, etc., are performed under the direction of the professional nurse/unit manager in long-term care facilities, hospitals, or clinics. Topics covered usually include medical terminology, transcription, and general reception duties and responsibilities; recordkeeping; and stocking medical and office supplies and equipment.

State Course ID: 14202A001 **Course Title:** **Medical Records Assistant**

This course provides a sequence of organized learning experiences and skills designed to prepare an individual to assist other medical record personnel by typing, filing, and performing general office duties; organizing, analyzing, and technically evaluating health records; coding symptoms, diseases, or operations; preparing health data for input into computers; and compiling administrative and health statistics for use by public health and/or clinical health care officials under the direction of the medical records administrator or other health care administrator.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

Cluster: Health Science

Course Descriptions

CIP: 51.0703 - Health Unit Coordinator/Ward Clerk.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14153A001 **Course Title:** **Medical Office Procedures**

Medical Office Procedures courses expose students to clerical knowledge, abilities, and procedures as they apply to the medical field. These courses typically include (but are not limited to) topics such as medical transcription, medical insurance, financial accounting, scheduling, and patient record-keeping. Medical terminology and routine medical procedures are covered to provide a context for clerical duties.

State Course ID: 14202A001 **Course Title:** **Medical Records Assistant**

This course provides a sequence of organized learning experiences and skills designed to prepare an individual to assist other medical record personnel by typing, filing, and performing general office duties; organizing, analyzing, and technically evaluating health records; coding symptoms, diseases, or operations; preparing health data for input into computers; and compiling administrative and health statistics for use by public health and/or clinical health care officials under the direction of the medical records administrator or other health care administrator.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0713 - Medical Insurance Coding Specialist/Coder (Non Traditional - Male)

Status: Open **Start Year:** 2019 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14001A001	Orientation to Health Occupations	1.00	2019	
14002A001	Health Occupations Related Skills	1.00	2019	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14202A001	Medical Records Assistant	3.00	2019	
14153A001	Medical Office Procedures	3.00	2019	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	Health Occupations Entry-Level Skill Development	3.00	2019	
14002A003	Health Occupations Skill Development	3.00	2019	
14998A001	Health Occupations Cooperative Education	3.00	2019	
14253A002	Introduction to Pathophysiology and Pharmacology	3.00	2019	
14154A001	Medical Terminology	1.00	2019	

Cluster: Health Science

Course Descriptions

CIP: 51.0713 - Medical Insurance Coding Specialist/Coder

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14202A001 **Course Title:** **Medical Records Assistant**

This course provides a sequence of organized learning experiences and skills designed to prepare an individual to assist other medical record personnel by typing, filing, and performing general office duties; organizing, analyzing, and technically evaluating health records; coding symptoms, diseases, or operations; preparing health data for input into computers; and compiling administrative and health statistics for use by public health and/or clinical health care officials under the direction of the medical records administrator or other health care administrator.

State Course ID: 14153A001 **Course Title:** **Medical Office Procedures**

Medical Office Procedures courses expose students to clerical knowledge, abilities, and procedures as they apply to the medical field. These courses typically include (but are not limited to) topics such as medical transcription, medical insurance, financial accounting, scheduling, and patient record-keeping. Medical terminology and routine medical procedures are covered to provide a context for clerical duties.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.0713 - Medical Insurance Coding Specialist/Coder

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body's homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0801 - Medical/Clinical Assistant. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14151A001	**Medical/Clerical Assisting**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14153A001	**Medical Office Procedures**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2011**	
14253A002	**Introduction to Pathophysiology and Pharmacology**	**3.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.0801 - Medical/Clinical Assistant.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14151A001 **Course Title:** **Medical/Clerical Assisting**

Medical/Clerical Assisting course provides student development in a sequence of organized learning experiences and skills designed knowledge and skills that combine the medical and clerical fields. Students typically develop skills such as patient exam preparation, assessment of vital signs, routine lab procedures, medical transcription, financial accounting, patient and insurance company billing, and record-keeping. This course suggest common clerical duties which include answering phones; greeting patients/clients; handling mail, patient/client data files, and medical histories; ordering supplies; dealing with representatives from pharmaceutical companies and medical suppliers; and performing common clinical duties which include sterilizing instruments; preparing patients/clients for examination or treatment; taking temperatures, pulse, respiration, and blood pressure; measuring height and weight; performing routine laboratory procedures; and assisting the physician with patient/client examinations and treatment under the direction of the professional medical staff. In addition, the medical assistant should be able to understand the health problems of patients/clients, ethics and legal issues, human relationships, and interpersonal relationships.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.0801 - Medical/Clinical Assistant.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14153A001 **Course Title:** **Medical Office Procedures**

Medical Office Procedures courses expose students to clerical knowledge, abilities, and procedures as they apply to the medical field. These courses typically include (but are not limited to) topics such as medical transcription, medical insurance, financial accounting, scheduling, and patient record-keeping. Medical terminology and routine medical procedures are covered to provide a context for clerical duties.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body's homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0805 - Pharmacy Technician/Assistant. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14152A001	**Pharmacy Assisting**	**3.00**	**2011**	
14253A001	**Pharmacology Technician**	**3.00**	**2019**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2011**	
14253A001	**Pharmacology Technician**	**3.00**	**2011**	**2018**
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14253A002	**Introduction to Pathophysiology and Pharmacology**	**3.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.0805 - Pharmacy Technician/Assistant.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14152A001 **Course Title:** **Pharmacy Assisting**

Pharmacy Assisting courses emphasize the knowledge and skills necessary to assist a pharmacist or pharmacy technician. Course topics and experiences enable students to understand medical terminology, keep and maintain records, label medication, perform computer patient billing, perform stock inventory, and order supplies. These courses also emphasize pharmaceutical classification, drug interactions, and interpersonal/communication skills.

State Course ID: 14253A001 **Course Title:** **Pharmacology Technician**

Pharmacy Technician courses provide a sequence of organized learning experiences and skills designed to prepare the person to input information into the computer; obtain the client's records; file requisitions and prescriptions; check and order supplies; perform interdepartmental communications; use pharmacological terminology; observe drug dispensing, drugs, and dosages; understand the Unit Dosage System; and review physician's drug order sheet. All the skills listed above are performed under the supervision of a registered pharmacist. Course topics and experiences enable students to understand medical terminology, keep and maintain records, label medications, perform computer patient billing, perform stock inventory, and order supplies. These courses also emphasize pharmaceutical classification, drug interactions, and interpersonal/communication skills.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

Cluster: Health Science

Course Descriptions

CIP: 51.0805 - Pharmacy Technician/Assistant.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14253A001 **Course Title:** **Pharmacology Technician**

Pharmacy Technician courses provide a sequence of organized learning experiences and skills designed to prepare the person to input information into the computer; obtain the client's records; file requisitions and prescriptions; check and order supplies; perform interdepartmental communications; use pharmacological terminology; observe drug dispensing, drugs, and dosages; understand the Unit Dosage System; and review physician's drug order sheet. All the skills listed above are performed under the supervision of a registered pharmacist. Course topics and experiences enable students to understand medical terminology, keep and maintain records, label medications, perform computer patient billing, perform stock inventory, and order supplies. These courses also emphasize pharmaceutical classification, drug interactions, and interpersonal/communication skills.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body’s homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0806 - Physical Therapy Technician/Assistant. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14060A001	**Physical Therapy Aide**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	
14253A002	**Introduction to Pathophysiology and Pharmacology**	**3.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.0806 - Physical Therapy Technician/Assistant.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14060A001 **Course Title:** **Physical Therapy Aide**

Physical Therapy Aide courses provide students with the knowledge and skills necessary to work with patients who need to achieve and maintain functional rehabilitation and to prevent malfunction or deformity. This course provides a sequence of organized learning experiences and skills designed to prepare a person to be knowledgeable of the organizational structure of the physical therapy department; relationships of anatomical structures to normal and abnormal movement (building upon the unit of body systems in an earlier course); pathophysiological conditions resulting from injury and/or disease; terminology; record keeping; interpersonal relationships; first aid; body mechanics; and uses of electricity, hot and cold packs, paraffin, whirlpool, diathermy, microwave, massage assistive and supporting devices, and therapeutic exercises and tractions. The physical therapy aide assists in implementing the plan of therapy for a patient/client as prescribed by a physician. This knowledge is necessary to perform as a physical therapy aide in hospitals, long-term care facilities and clinics under the direction of a physical therapy assistant or physical therapist. Topics covered typically include therapeutic exercises and activities (such as stretching and strengthening), how to train patients to perform the activities of daily living, the use of special equipment, and evaluation of patient progress.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.0806 - Physical Therapy Technician/Assistant.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body's homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0812 - Respiratory Therapy Technician/Assistant. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14061A001	**Respiratory Therapy**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	
14253A002	**Introduction to Pathophysiology and Pharmacology**	**3.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.0812 - Respiratory Therapy Technician/Assistant.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14061A001 **Course Title:** **Respiratory Therapy**

Respiratory Therapy courses provide students with the knowledge and skills necessary to work with patients who have breathing or other cardiopulmonary difficulties or disorders. This course provides a sequence of organized learning experiences and skills designed for the person to assist in the treatment of patients/clients with heart and lung ailments. Topics covered typically include identifying deficiencies and abnormalities of the cardiopulmonary system, understanding the various methods of therapies, and understanding how to use special equipment. Areas to be included are administration of various types of gases and devices to control temperature, air pressure, and humidity; patient/client exercises that will clear fluid from lungs and improve the patient's/client's ability to breathe; and cleaning and sterilizing equipment under the direction of the Respiratory Therapist.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.0812 - Respiratory Therapy Technician/Assistant.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body's homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0902 - Electrocardiograph Technology/Technician.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14103A001	**Electrocardiograph (EKG) Technician**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	
14253A002	**Introduction to Pathophysiology and Pharmacology**	**3.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.0902 - Electrocardiograph Technology/Technician.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14103A001 **Course Title:** **Electrocardiograph (EKG) Technician**

In EKG Technology courses, students acquire the knowledge and skills to perform electrocardiograph activities and learn about the cardiovascular system (including its function, diseases, and rhythms); EKG machinery; and the use of drugs and their effects. This course provides a sequence of organized learning experiences and skills designed to utilize the electrocardiograph machine to record the variation in time and potential of the electric current associated with action of the heart muscle by learning proper electrode sites and placement; quality control; interpersonal relationships; interdepartmental relationships; anatomy and physiology; and observing and reporting. The student learns the competencies needed to perform as an EKG technician in a hospital, clinic, or doctor's office under the direction of a physician . These courses usually include general health care topics as well, such as basic anatomy and physiology, patient care, first aid and CPR, identification and use of medical equipment, and medical terminology.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.0902 - Electrocardiograph Technology/Technician.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body's homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0904 - Emergency Medical Technology/Technician (EMT Paramedic).

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14055A001	**Emergency Medical Technician**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2015**	
14253A002	**Introduction to Pathophysiology and Pharmacology**	**3.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.0904 - Emergency Medical Technology/Technician (EMT Paramedic).

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14055A001 **Course Title:** **Emergency Medical Technician**

Emergency Medical Technology courses place a special emphasis on the knowledge and skills needed in medical emergencies. Topics typically include clearing airway obstructions, controlling bleeding, bandaging, methods for lifting and transporting injured persons, simple spinal immobilization, infection control, stabilizing fractures, and responding to cardiac arrest. The courses should also cover the legal and ethical responsibilities involved in dealing with medical emergencies. The Illinois Department of Public Health approves EMT training programs in the State of Illinois. Approved programs must meet or exceed the National Emergency Medical Services Education Standards for the Emergency Medical Technician and meet all other applicable requirements contained in 77 Illinois Administrative Code Part 515. To become licensed as an EMT-B in the State of Illinois or nationally certified, the student must be 18 years of age, complete a state-approved EMT program, have a current CPR-BLS for "Healthcare Provider" or equivalent credential, and pass the National Registry of Emergency Medical Technicians examination (required for national certification) or the Illinois Department of Public Health's EMT-B examination.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.0904 - Emergency Medical Technology/Technician (EMT Paramedic).

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body's homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0907 - Medical Radiologic Technology/Science - Radiation Therapist. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14105A001	**Radiological Technology/Technician**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.0907 - Medical Radiologic Technology/Science - Radiation Therapist.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14105A001 **Course Title:** **Radiological Technology/Technician**

Radiological Technology/Technician course provides a sequence of organized learning experiences and skills designed to prepare a person to assist the radiographer by transporting patients/clients from the emergency room or nursing unit to the x-ray department, positioning the patient/client, assisting the patient/client to dress, and putting the patient/client at ease in unfamiliar surroundings. This course introduces the student to the medical equipment and materials used for diagnostic and therapeutic services under the supervision of a radiation therapist or physician.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.0907 - Medical Radiologic Technology/Science - Radiation Therapist.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0909 - Surgical Technology/Technologist. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14056A001	**Surgical Technology**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.0909 - Surgical Technology/Technologist.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14056A001 **Course Title:** **Surgical Technology**

Surgical Technology courses emphasize the care and needs of patients undergoing surgery while covering general health care topics (i.e., patient care, anatomy and physiology, medical terminology, hygiene and disease prevention, first aid and CPR, and laboratory procedures). This course provides a sequence of organized learning activities and skills related to department procedure and policies, interdepartmental relationships, care of surgical equipment, aseptic techniques, handling of specimens, body mechanics and position for surgery, observing and reporting, terminology, and safety under the direction of the professionals in the operating room . In keeping with that focus, topics may include operation room materials, tools, and procedures; aseptic surgical techniques; preparation and handling of surgical instruments; efficiency in the operating room; and the roles of various medical personnel who are present during surgery.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.0909 - Surgical Technology/Technologist.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.0913 - Athletic Training/Trainer.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14062A001	**Sports Management**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	
14253A002	**Introduction to Pathophysiology and Pharmacology**	**3.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.0913 - Athletic Training/Trainer.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14062A001 **Course Title:** **Sports Management**

Sports Management courses introduce students to the basic principles and techniques for the prevention, recognition, treatment, and rehabilitation of common injuries and illnesses. Students may learn to measure cardiorespiratory endurance, muscular strength and endurance, flexibility, body composition, and blood pressure. Topics covered may include taping and bandaging, proper use of protective padding, treatment modalities, medical terminology, budgeting, and ordering supplies, as well as general operation of a training room facility. More advanced topics may include injury assessment, the phases of healing, and the use of exercise and equipment to help in the reconditioning of injured athletes.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.0913 - Athletic Training/Trainer.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body's homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.1005 - Clinical Laboratory Science/Medical Technology/Technologist. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	Health Occupations Related Skills	1.00	2011	
14001A001	Orientation to Health Occupations	1.00	2011	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14102A001	Medical Lab Technician	3.00	2011	
14104A001	Clinical Laboratory Assistant/Phlebotomist	3.00	2011	2018

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A003	Health Occupations Skill Development	3.00	2011	
14154A001	Medical Terminology	1.00	2011	
14998A001	Health Occupations Cooperative Education	3.00	2011	
14104A001	Clinical Laboratory Assistant/Phlebotomist	3.00	2019	
14253A002	Introduction to Pathophysiology and Pharmacology	3.00	2019	
14002A002	Health Occupations Entry-Level Skill Development	3.00	2011	

Cluster: Health Science

Course Descriptions

CIP: 51.1005 - Clinical Laboratory Science/Medical Technology/Technologist.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14102A001 **Course Title:** **Medical Lab Technician**

Medical Lab Technician courses provide students with the knowledge and skills necessary for employment in health care-related laboratories. Topics include basic principles of anatomy and physiology, relevant concepts in microbiology and chemistry, and laboratory techniques (including preparation and analysis of various cultures and specimens). These courses provide a sequence of organized competencies necessary to perform tasks which include laboratory requisitions and reports; care of laboratory equipment; aseptic techniques; basic laboratory mathematics (metrics); handling of specimens; blood collection techniques; and interdepartmental relationships such as introduction to the departments of hematology, urology, serology, bacteriology, and others. The courses may also cover such components as venipuncture, EKG, and CPR procedures.

State Course ID: 14104A001 **Course Title:** **Clinical Laboratory Assistant/Phlebotomist**

In Phlebotomy courses, students acquire knowledge, skills, and experiences related to the drawing of blood and typically learn about such topics as infection control, sterilization practices, medical/hospital procedures and environments, diagnostic procedures, and the process of drawing blood. This course provides a sequence of organized competencies necessary to perform tasks which include laboratory requisitions and reports; care of laboratory equipment; aseptic techniques; basic laboratory mathematics (metrics); handling of specimens; blood collection techniques; and interdepartmental relationships such as introduction to the departments of hematology, urology, serology, bacteriology, and others. In addition, students should be introduced to departmental procedures, policies, and standards.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

Cluster: Health Science

Course Descriptions

CIP: 51.1005 - Clinical Laboratory Science/Medical Technology/Technologist.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14104A001 **Course Title:** **Clinical Laboratory Assistant/Phlebotomist**

In Phlebotomy courses, students acquire knowledge, skills, and experiences related to the drawing of blood and typically learn about such topics as infection control, sterilization practices, medical/hospital procedures and environments, diagnostic procedures, and the process of drawing blood. This course provides a sequence of organized competencies necessary to perform tasks which include laboratory requisitions and reports; care of laboratory equipment; aseptic techniques; basic laboratory mathematics (metrics); handling of specimens; blood collection techniques; and interdepartmental relationships such as introduction to the departments of hematology, urology, serology, bacteriology, and others. In addition, students should be introduced to departmental procedures, policies, and standards.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body’s homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.1009 - Phlebotomy Technician/Phlebotomist.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14104A001	**Clinical Laboratory Assistant/Phlebotomist**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.1009 - Phlebotomy Technician/Phlebotomist.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14104A001 **Course Title:** **Clinical Laboratory Assistant/Phlebotomist**

In Phlebotomy courses, students acquire knowledge, skills, and experiences related to the drawing of blood and typically learn about such topics as infection control, sterilization practices, medical/hospital procedures and environments, diagnostic procedures, and the process of drawing blood. This course provides a sequence of organized competencies necessary to perform tasks which include laboratory requisitions and reports; care of laboratory equipment; aseptic techniques; basic laboratory mathematics (metrics); handling of specimens; blood collection techniques; and interdepartmental relationships such as introduction to the departments of hematology, urology, serology, bacteriology, and others. In addition, students should be introduced to departmental procedures, policies, and standards.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.1009 - Phlebotomy Technician/Phlebotomist.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.1803 - Opthalmic Technician/Technologist. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14057A001	**Vision Care**	**3.00**	**2011**	
14058A001	**Optical Technician Assistant**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.1803 - Opthalmic Technician/Technologist.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14057A001 **Course Title:** **Vision Care**

Vision Care courses expose students to the tools, terminology, and procedures necessary for a career in the optometric or optic field. Vision Care courses typically include the physics of light and refraction; the anatomy, physiology, and terminology associated with the eyes; identification and use of optometric and/or optical equipment; optical procedures; human relations; and the ethical and legal responsibilities of vision care workers.

State Course ID: 14058A001 **Course Title:** **Optical Technician Assistant**

Optical Technician Assistant course provide students with the knowledge, ability, and experiences to prepare, assemble, and/or fit corrective lenses prescribed by a physician, ophthalmologist, or optometrist. This course provides a sequence of organized learning experiences and skills designed to prepare a person to assist with tests to determine normal and/or defective vision, prepare and fit eyeglasses and/or contact lenses, and administer corrective eye exercises and other treatments which do not require drugs or surgery under the supervision of an ophthalmologist, optometrist, or physician. It also includes administrative office duties, such as scheduling of patients/clients, maintenance of the patient/client record, and billing. This course provides a sequence of organized learning experiences and skills designed to prepare a person to adapt and fit corrective eyeglasses as prescribed by the ophthalmologist or optometrist. Topics covered may include layout and marking, cutting and chipping, edging and beveling, inspection, alignment, dispensing, and selection of eyewear.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

Cluster: Health Science

Course Descriptions

CIP: 51.1803 - Opthalmic Technician/Technologist.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.2308 - Physical Therapy/Therapist.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14060A001	**Physical Therapy Aide**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	
14253A002	**Introduction to Pathophysiology and Pharmacology**	**3.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.2308 - Physical Therapy/Therapist.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14060A001 **Course Title:** **Physical Therapy Aide**

Physical Therapy Aide courses provide students with the knowledge and skills necessary to work with patients who need to achieve and maintain functional rehabilitation and to prevent malfunction or deformity. This course provides a sequence of organized learning experiences and skills designed to prepare a person to be knowledgeable of the organizational structure of the physical therapy department; relationships of anatomical structures to normal and abnormal movement (building upon the unit of body systems in an earlier course); pathophysiological conditions resulting from injury and/or disease; terminology; record keeping; interpersonal relationships; first aid; body mechanics; and uses of electricity, hot and cold packs, paraffin, whirlpool, diathermy, microwave, massage assistive and supporting devices, and therapeutic exercises and tractions. The physical therapy aide assists in implementing the plan of therapy for a patient/client as prescribed by a physician. This knowledge is necessary to perform as a physical therapy aide in hospitals, long-term care facilities and clinics under the direction of a physical therapy assistant or physical therapist. Topics covered typically include therapeutic exercises and activities (such as stretching and strengthening), how to train patients to perform the activities of daily living, the use of special equipment, and evaluation of patient progress.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.2308 - Physical Therapy/Therapist.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body's homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.2602 - Home Health Aide/Home Attendant. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14053A001	**Home Health Aide**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	
14253A002	**Introduction to Pathophysiology and Pharmacology**	**3.00**	**2019**	
14059A001	**Geriatric Aide**	**3.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.2602 - Home Health Aide/Home Attendant.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14053A001 **Course Title:** **Home Health Aide**

The course is composed of a combination of subject matter and learning activities designed to prepare a person to care for individuals within their homes. The student learns competencies needed to perform simple tasks involved in the personal care of ill or handicapped individuals under the direction of the attending physician, registered professional nurse, and/or licensed practical nurse. The home health agency assigns a registered nurse to provide continuing supervision of this health care. The home health aide is employed in private homes, hospitals, long-term care facilities, and health care institutions. Course content relates health care practices and procedures to the home environment, and typically includes patient care, comfort, observing, recording, reporting, and safety; process of aging; personal care and daily living activities; family relationships; behavior patterns; home management; the prevention of disease and infection; nutrition and meal preparation; human relations; and first aid and CPR. The student must be a certified nurse assistant before becoming a home health aide.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.2602 - Home Health Aide/Home Attendant.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body's homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

State Course ID: 14059A001 **Course Title:** **Geriatric Aide**

Geriatric Aide courses provide students with knowledge and understanding of the processes of adult development and aging. The geriatric aide course is composed of a combination of subject matter and learning activities designed to prepare a person to perform simple tasks involved in the personal care of elderly individuals receiving nursing services. These tasks are performed under the supervision of a licensed practical nurse or registered nurse. Topics covered may include the study of the biological, economic, psychological, social, health, and special nutritional needs; fitness and maintenance of body processes; aspects of the aging process; activities of daily living; rehabilitation activities; diagnostic and treatment procedures; patient/client care procedures; and special nursing care needs of the elderly.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.2604 - Rehabilitation Aide.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14063A003	**Rehabilitation Aide**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14099A001	**Survey of Psychiatric Rehabilitation**	**3.00**	**2011**	
14099A002	**Psychiatric Rehabilitation Skills**	**3.00**	**2011**	
14099A003	**Health and Safety Skills for Psychiatric Rehabilitation**	**3.00**	**2011**	
14099A004	**Vocational Rehabilitation and Community Living Skills**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	
14063A002	**Occupational Therapy Aide**	**3.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.2604 - Rehabilitation Aide.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14063A003 **Course Title:** **Rehabilitation Aide**

This course provides a sequence of organized learning experiences and skills to prepare a person to perform tasks involved in the personal and rehabilitative care of patients/clients. The rehabilitation aide concept is the integration of three major interdisciplinary teams that are the basic skills in the areas of nursing, occupational therapy, and physical therapy. This health care person can help ensure that the approach to the care of the patient/client is consistent regardless of which specialty area is rendering the service. The rehabilitation aide performs under the supervision of a registered nurse, licensed physical therapist, or licensed occupational therapist in rehabilitation clinics or units in hospitals, extended care facilities, and long-term care facilities. This unit of instruction could be offered after the student has obtained the Certified Nursing Assistant credential.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.2604 - Rehabilitation Aide.

State Course ID: 14099A001 **Course Title:** **Survey of Psychiatric Rehabilitation**

This course should focus on the mental health system and related services, psychiatric disability and related stigma issues, rehabilitative approaches to psychiatric treatment, case management, co-occurring substance abuse disorders, and public policies relevant to mental illness. The units of instruction should include consumer orientation, community supports and public policy, mental health system, wellness and diversity, functional assessment and treatment planning, vocational rehabilitation, substance abuse and mental illness/substance abuse (MISA), disability as disease, legal and ethical issues, case management and Assertive Community Treatment (ACT), knowledge of medications, process model of psychiatric rehabilitation, families, and stigma of mental illness.

State Course ID: 14099A002 **Course Title:** **Psychiatric Rehabilitation Skills**

This course should focus on the mental health system and related services, adult learners and methods for skills training, process model for social and coping skills training, medication management skills, and conducting skills training groups.

State Course ID: 14099A003 **Course Title:** **Health and Safety Skills for Psychiatric Rehabilitation**

This course should focus on the mental health system and related services, basic CPR, first aid, infection control, vital signs, nutrition, and safety. It is suggested that the Certified Nursing Assistant (CNA) course be given at this time as the basic foundation. The student would then become eligible upon successful completion of all of the skills and knowledge for dual certification as both a CNA and a Psychiatric Rehabilitation Services Aide (PRSA) at the end of course of study, as long as the Psychiatric Rehabilitation Services Aide Training Program meets all applicable requirements contained in 77 Illinois Administrative Code Part 395.

State Course ID: 14099A004 **Course Title:** **Vocational Rehabilitation and Community Living Skills**

This course should focus on the mental health system and related services, supported employment, work as therapy, job coaching, Americans with Disabilities Act, and case management for community living.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14063A002 **Course Title:** **Occupational Therapy Aide**

This course provides a sequence of organized learning experiences and skills designed to prepare a person to be knowledgeable of the organizational structure of the occupational therapy department; relationships of anatomical structures to normal and abnormal movement (building upon the unit of body systems in an earlier course); pathophysiological conditions resulting from injury and/or disease; terminology; record keeping; interpersonal relationships; first aid; body mechanics; and assist in implementing the plan of therapy for a patient/client as prescribed by a physician as directed by the occupational therapist in a hospital, long-term care facility, retirement home, or clinic. This knowledge is necessary to perform as an occupational therapy aide in hospitals, long-term care facilities, and clinics under the direction of a occupational therapy assistant or occupational therapist.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.3901 - Licensed Practical/Vocational Nurse Training. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	Health Occupations Related Skills	1.00	2011	
14001A001	Orientation to Health Occupations	1.00	2011	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14052A001	Nursing-LPN	3.00	2011	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	Health Occupations Entry-Level Skill Development	3.00	2011	
14002A003	Health Occupations Skill Development	3.00	2011	
14998A001	Health Occupations Cooperative Education	3.00	2011	
14059A001	Geriatric Aide	3.00	2011	
14154A001	Medical Terminology	1.00	2011	
14253A002	Introduction to Pathophysiology and Pharmacology	3.00	2019	

Cluster: Health Science

Course Descriptions

CIP: 51.3901 - Licensed Practical/Vocational Nurse Training.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14052A001 **Course Title:** **Nursing-LPN**

The course is composed of a combination of subject matter and learning activities designed to prepare a person to perform as a practical nurse under the direction of the physician or professional nurse. LPN courses offer the knowledge and experience needed to provide nursing care for patients of all ages, in various stages of sickness or health, and with a variety of disease conditions. Through classroom, laboratory, and clinical experiences, the student is exposed to the following units of instruction: interpersonal relationships; communications; physiological, psychological, and sociological principles and needs of patients/clients; basic skills; nutrition and special dietary content. Additional topics covered may include community health, nutrition, drug therapy and administration, and mental illness. This program must meet the approval requirements of the Illinois Department of Financial and Professional Regulation.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

Cluster: Health Science

Course Descriptions

CIP: 51.3901 - Licensed Practical/Vocational Nurse Training.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14059A001 **Course Title:** **Geriatric Aide**

Geriatric Aide courses provide students with knowledge and understanding of the processes of adult development and aging. The geriatric aide course is composed of a combination of subject matter and learning activities designed to prepare a person to perform simple tasks involved in the personal care of elderly individuals receiving nursing services. These tasks are performed under the supervision of a licensed practical nurse or registered nurse. Topics covered may include the study of the biological, economic, psychological, social, health, and special nutritional needs; fitness and maintenance of body processes; aspects of the aging process; activities of daily living; rehabilitation activities; diagnostic and treatment procedures; patient/client care procedures; and special nursing care needs of the elderly.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body's homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.3902 - Nursing Assistant/Aide and Patient Care Assistant/Aide. (Non Traditional - Male)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14051A001	**Nursing Assistant**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14253A002	**Introduction to Pathophysiology and Pharmacology**	**3.00**	**2019**	
14059A001	**Geriatric Aide**	**3.00**	**2011**	
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	

Cluster: Health Science

Course Descriptions

CIP: 51.3902 - Nursing Assistant/Aide and Patient Care Assistant/Aide.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14051A001 **Course Title:** **Nursing Assistant**

The course is composed of a combination of subject matter and experiences designed to perform tasks of individuals receiving nursing services. The student learns those competencies needed to perform as a nurse assistant under the direction of the registered nurse. The units of instruction should include the role of the nurse assistant while covering general health care topics; medical terminology; patients/clients and their environment; special feeding techniques; psychological support and, in long-term and terminal illness, death and dying (e.g., chronically ill, children, new mothers, and so on); and all other basic nursing skills. Topics covered typically include normal growth and development; feeding, transporting patients, hygiene, and disease prevention; basic pharmacology; first aid and CPR; observing and reporting; care of equipment and supplies; doctor, nurse, and patient relationships and roles; procedure and policies; medical and professional ethics; and care of various kinds of patients. In order to have an approved nurse assistant program (one in which the students are eligible to sit for the certifying exam), the program must be approved by the Illinois Department of Public Health and meet all applicable requirements contained in 77 Illinois Administrative Code Part 395.

State Course ID: 14059A001 **Course Title:** **Geriatric Aide**

Geriatric Aide courses provide students with knowledge and understanding of the processes of adult development and aging. The geriatric aide course is composed of a combination of subject matter and learning activities designed to prepare a person to perform simple tasks involved in the personal care of elderly individuals receiving nursing services. These tasks are performed under the supervision of a licensed practical nurse or registered nurse. Topics covered may include the study of the biological, economic, psychological, social, health, and special nutritional needs; fitness and maintenance of body processes; aspects of the aging process; activities of daily living; rehabilitation activities; diagnostic and treatment procedures; patient/client care procedures; and special nursing care needs of the elderly.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho-social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

Cluster: Health Science

Course Descriptions

CIP: 51.3902 - Nursing Assistant/Aide and Patient Care Assistant/Aide.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14253A002 **Course Title:** **Introduction to Pathophysiology and Pharmacology**

Introduction to Pathophysiology and Pharmacology courses present the concepts of homeostasis and disease processes. Course topics and experiences enable students to relate how the human body's homeostasis is impacted by both disease and chemical substances, especially by the actions of drugs and other substances commonly used to treat diseases. Pathophysiology emphasizes various human body system disorders and the mechanisms of disease, including (but not limited to) fluid, electrolyte, and acid-base imbalances; pain; inflammation and healing; infection; and immunity. Pharmacology topics typically include (but are not limited to) the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side-effects, adverse effects, and routes of administration. Hands-on activities, projects, and real-world problems are encouraged to attain complete comprehension.

CTE - CIP Course Details Catalog

Cluster: Health Science

CIP: 51.9999 - Health Professions and Related Clinical Sciences, Other.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A001	**Health Occupations Related Skills**	**1.00**	**2011**	
14001A001	**Orientation to Health Occupations**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14059A001	**Geriatric Aide**	**3.00**	**2011**	
14063A001	**Mortuary Assistant**	**3.00**	**2011**	
14201A001	**Central Supply Services**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
14002A002	**Health Occupations Entry-Level Skill Development**	**3.00**	**2011**	
14002A003	**Health Occupations Skill Development**	**3.00**	**2011**	
14998A001	**Health Occupations Cooperative Education**	**3.00**	**2011**	
14154A001	**Medical Terminology**	**1.00**	**2019**	

Cluster: Health Science

Course Descriptions

CIP: 51.9999 - Health Professions and Related Clinical Sciences, Other.

State Course ID: 14002A001 **Course Title:** **Health Occupations Related Skills**

The course provides students with a core of knowledge to the health care industry and helps refine their health care-related knowledge and skills. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

State Course ID: 14001A001 **Course Title:** **Orientation to Health Occupations**

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology), which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities, and the educational, physical, emotional, and attitudinal requirements

State Course ID: 14059A001 **Course Title:** **Geriatric Aide**

Geriatric Aide courses provide students with knowledge and understanding of the processes of adult development and aging. The geriatric aide course is composed of a combination of subject matter and learning activities designed to prepare a person to perform simple tasks involved in the personal care of elderly individuals receiving nursing services. These tasks are performed under the supervision of a licensed practical nurse or registered nurse. Topics covered may include the study of the biological, economic, psychological, social, health, and special nutritional needs; fitness and maintenance of body processes; aspects of the aging process; activities of daily living; rehabilitation activities; diagnostic and treatment procedures; patient/client care procedures; and special nursing care needs of the elderly.

State Course ID: 14063A001 **Course Title:** **Mortuary Assistant**

The course offers a sequence of planned classroom, laboratory, and clinical experience to prepare a person to perform tasks to assist in the embalming and cremation of human remains, to provide funeral and burial services, and to sell funerary equipment to the public. It includes instruction in applicable anatomical, cosmetic, and technical procedures; facilities and equipment management; equipment and services marketing; legal requirements; and professional standards. The Mortuary Assistant maintains infection control according to Occupational Safety Health Administration (OSHA) and other national standards.

State Course ID: 14201A001 **Course Title:** **Central Supply Services**

Central Supply Service course provide students with knowledge and skills related to the procurement, handling, storage, and distribution of sterile goods and equipment. It provides a sequence of organized learning experiences and skills designed to perform tasks that include inspecting, assembling, and evaluating equipment and supplies. Perform aseptic techniques in cleaning and sterilizing equipment and supplies under the supervision of a central supply technician. Course components usually include quality assurance, infection control and isolation techniques, medical terminology and processes, decontamination and sterilization, microbiology, and chemistry.

Cluster: Health Science

Course Descriptions

CIP: 51.9999 - Health Professions and Related Clinical Sciences, Other.

State Course ID: 14002A002 **Course Title:** **Health Occupations Entry-Level Skill Development**

The course should include affective, cognitive, and psychomotor skills that are common to most health occupations. Some degree of occupational competency can be developed at this level. The units of instruction, activities, and skills should be planned and assessed concurrently utilizing the industry or national standards for assessment whenever possible. These units may include diagnostic and therapeutic measures, management functions, transportation and mobility, psycho -social care, anatomy and physiology, administering medications, and patients/clients with special needs. Student performance should be learned and practiced in both classroom and laboratory settings, and supervised closely by teachers or worksite mentors in a facility through extended campus or clinical experiences. Both extended campus and clinical experiences require written agreements between educational and health care facilities to determine the responsibility of each agency.

State Course ID: 14002A003 **Course Title:** **Health Occupations Skill Development**

The course provides a sequence of organized learning experiences and skills to prepare a person to recognize the signs and symptoms of illness and injury; to begin the approved and appropriate life-support procedures, such as cardiopulmonary resuscitation (CPR); to operate emergency vehicles and communications equipment as patients/clients are moved to a hospital emergency room; and to fill out the required records and reports after a call. This course should include identified skills to prepare the student for working in the emergency medical arena. The course should include skills to prepare the student for a specific health occupation or cluster of closely related occupations. This course allows for instruction in multiple occupations.

State Course ID: 14998A001 **Course Title:** **Health Occupations Cooperative Education**

The course provides students with work experience in the health care industry. This course is designed for students interested in pursuing careers in health occupations. Students are released from school for their cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, and improving students' abilities to interact positively with others. For skills related to the job, refer to industry standards of the desired career. Goals are typically set cooperatively by the student, teacher, and employer (students may be paid or unpaid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

State Course ID: 14154A001 **Course Title:** **Medical Terminology**

Medical Terminology courses students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

CTE - CIP Course Details Catalog

Cluster: Hospitality and Tourism

CIP: 12.0500 - Cooking and Related Culinary Arts, General. (Non Traditional - Female)

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
16054A001	**Nutrition and Culinary Arts I**	**1.00**	**2011**	
16054A002	**Nutrition and Culinary Arts II**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
16052A001	**Culinary Occupations I**	**3.00**	**2011**	
16055A001	**Culinary Occupations II**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22203A001	**Food Science**	**1.00**	**2011**	
22201A001	**Introduction to Family and Consumer Sciences Careers**	**1.00**	**2011**	
22153A002	**FCS Cooperative Education**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	
16054A003	**Nutrition and Wellness Occupations**	**3.00**	**2011**	

Cluster: Hospitality and Tourism

Course Descriptions

CIP: 12.0500 - Cooking and Related Culinary Arts, General.

State Course ID: 16054A001 **Course Title:** **Nutrition and Culinary Arts I**

This course includes classroom and laboratory experiences needed to develop a knowledge and understanding of culinary principles and nutrition for people of all ages. Course content encompass': food service and preparation management using the decision-making process; meeting basic needs by applying nutrition concepts; meeting health, safety, and sanitation requirements; maximizing resources when planning/preparing/preserving/serving food; applying hospitality skills; analyzing nutritional needs in relation to change; and careers in nutrition and culinary arts, including entrepreneurship investigation.

State Course ID: 16054A002 **Course Title:** **Nutrition and Culinary Arts II**

Nutrition and Culinary Arts II provides principles of application into the hospitality industry, including nutrition, culinary, and entrepreneurial opportunities. Course content includes the following: selection, purchase, preparation, and conservation of food, dietary needs and trends, regional & international cuisine, safety and sanitation, and careers in food service industries. All of these concepts can be interpreted through laboratory experiences.

State Course ID: 16052A001 **Course Title:** **Culinary Occupations I**

This course provides terminology, culinary math, and practical experiences needed for the development of culinary competencies and workplace skills. Safety and sanitation instruction and classroom application will prepare students for an industry recognized sanitation exam. Classroom experiences will develop skills to work in the front of the house, back of the house, and work stations. Additional content may include: event planning, customer service and relations, food service styles, baking and pastry arts, hors d'oeuveres, and breakfast cookery. Students will be provided opportunity training experiences on commercial equipment.

State Course ID: 16055A001 **Course Title:** **Culinary Occupations II**

Culinary Occupations II places special emphasis for students to develop operational management skills-including design and organization of food service systems in a variety of settings, human relations, and personnel training and supervision. Additional topics include: food cost accounting; taking inventory; advertising; monitoring consumer and industry trends; and individualized mastery of culinary techniques. Training experiences involve equipment and facilities simulating those found in business and industry.

State Course ID: 22201A001 **Course Title:** **Introduction to Family and Consumer Sciences Careers**

This course introduces students to the field of family and consumer sciences and the many career opportunities available in this broad field. The course includes theory and laboratory experiences in the following content areas: Nutrition and culinary arts; textiles and design; family, career, and community leadership development; resource management; human development and life-long learning; facility design, care, and management; and interpersonal relationships and life management skills.

State Course ID: 22153A002 **Course Title:** **FCS Cooperative Education**

Family and Consumer Sciences Cooperative Education is designed for students interested in pursuing careers in occupations in the field family and consumer sciences. Classroom instruction focuses on providing students with workplace skills, post-secondary education opportunities related to the job/career pathway, developing and maintaining positive workplace relationships, planning for the future, legal protection and responsibility, professional organizations, and advancing skills related to the job. Classroom and worksite instruction is based on the duties of the FCS occupation. Students are released from school for their paid cooperative education work experience, participate in 200 minutes per week of related classroom instruction, and supervised on-the-by a qualified instructor ½ hour or more per week per student. A qualified, certified FCS instructor is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations.

Cluster: Hospitality and Tourism

Course Descriptions

CIP: 12.0500 - Cooking and Related Culinary Arts, General.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 16054A003 **Course Title:** **Nutrition and Wellness Occupations**

This course will concentrate on expanding student's knowledge and experiences with nutrition concepts, food science, and healthy lifestyles. Nutritional analysis, nutrient functions, food allergies, diet and disease, menu analysis, energy and wellness, meal planning & management, nutritional needs across the life span, impacts of science and technology on nutrition and wellness issues, and food safety and sanitation management are topics covered in this course through theory, projects, and laboratory experiences. Students will gain experience in preparing a variety of communications to teach the importance nutrition and wellness.

State Course ID: 22203A001 **Course Title:** **Food Science**

The scientific method is used to study foods as a combination of chemical, physical and biological sciences. Laboratory skills in measuring, recording, and analyzing data are used to explore the interrelationship of food science to the other sciences; the scientific evaluation of food, matter, electrolyte solutions, energy, nutrition; food safety; and food chemistry. Experimental methods are used to analyze food mixtures, food microbiology, fermentation, sensory processes, the preservation of foods and complex food systems. Technology is studied as it relates to product development, consumer needs and experimental designs. Emphasis is placed on emerging careers in food science and biotechnology and the application of food science in food service, nutrition, dietetics, and product development.

CTE - CIP Course Details Catalog

Cluster: Hospitality and Tourism

CIP: 19.0604 - Facilities Planning and Management.

Status: Open **Start Year:** 2011 **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19201A001	**Textiles and Design I**	**1.00**	**2011**	
19203A001	**Textiles and Design II**	**1.00**	**2011**	

Group 2

Minimum Course Selection: School: 0 ACC: 1 Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
19206A001	**Facilities Planning and Management Services**	**3.00**	**2011**	
22211A001	**Interior Design: Residential, Commercial, and Public Space**	**3.00**	**2011**	

Group 3

Minimum Course Selection: School: 0 ACC: 0 Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A002	**FCS Cooperative Education**	**3.00**	**2011**	
22153A001	**Cooperative Education**	**3.00**	**2011**	
22201A001	**Introduction to Family and Consumer Sciences Careers**	**1.00**	**2011**	
16054A001	**Nutrition and Culinary Arts I**	**1.00**	**2011**	

Cluster: Hospitality and Tourism

Course Descriptions

CIP: 19.0604 - Facilities Planning and Management.

State Course ID: 19201A001 **Course Title:** **Textiles and Design I**

This course is designed to provide basic knowledge and understanding of the design, development, and production of textile products. Through hands-on and project based learning experiences students will discover fiber characteristics, fabric construction methods, elements of science and design in textiles and apparel, and basic construction skills used in interior furnishings and apparel industries. This course emphasizes awareness and investigation of careers and industry trends in textiles.

State Course ID: 19203A001 **Course Title:** **Textiles and Design II**

This project-based course focuses on the implementation and recognition of design principles in selecting, constructing, altering, and remodeling textile products. Project management skills, including efficient use of time, materials, technique, and tools are incorporated throughout the course. Topics include: engineered fabric constructions; fiber and textile trends; color theory; principles of design; fabric finishes; industry construction techniques; use of industry tools, equipment, and terminology; knowledge of resources and vendors; research and evaluation of textile products for special needs populations; impacts of technology; construction, alteration and re-design skills; and simple flat pattern design and recognition.

State Course ID: 19206A001 **Course Title:** **Facilities Planning and Management Services**

This course focuses on strategic workplace and facility planning and prepares individuals to function as facility and event managers and workplace consultants. Instruction includes the following: principles of aesthetic and functional design; environmental psychology and organizational behavior; real estate planning; principles of occupational health and safety; event planning and management; operations management; and applicable regulatory and policy issues.

State Course ID: 22211A001 **Course Title:** **Interior Design: Residential, Commercial, and Public Space**

This course provides basic knowledge and skills needed to select, acquire, furnish, maintain, and manage residential and commercial environments to meet the needs of the users/occupants. The course includes the application of the interior design elements and principles; selection and care of furnishings, equipment and accessories in relation to socio-economic factors, trends, personal tastes and characteristics, as well as physical and psychological needs; safety, sanitation, and efficiency factors in interior design; and evaluating use and care of textiles. This project based course investigates a variety of related career opportunities, including entrepreneurship. Emphasis is placed on the application of project management skills.

State Course ID: 22153A002 **Course Title:** **FCS Cooperative Education**

Family and Consumer Sciences Cooperative Education is designed for students interested in pursuing careers in occupations in the field family and consumer sciences. Classroom instruction focuses on providing students with workplace skills, post-secondary education opportunities related to the job/career pathway, developing and maintaining positive workplace relationships, planning for the future, legal protection and responsibility, professional organizations, and advancing skills related to the job. Classroom and worksite instruction is based on the duties of the FCS occupation. Students are released from school for their paid cooperative education work experience, participate in 200 minutes per week of related classroom instruction, and supervised on-the-by a qualified instructor ½ hour or more per week per student. A qualified, certified FCS instructor is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations.

Cluster: Hospitality and Tourism

Course Descriptions

CIP: 19.0604 - Facilities Planning and Management.

State Course ID: 22153A001 **Course Title:** **Cooperative Education**

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

State Course ID: 22201A001 **Course Title:** **Introduction to Family and Consumer Sciences Careers**

This course introduces students to the field of family and consumer sciences and the many career opportunities available in this broad field. The course includes theory and laboratory experiences in the following content areas: Nutrition and culinary arts; textiles and design; family, career, and community leadership development; resource management; human development and life-long learning; facility design, care, and management; and interpersonal relationships and life management skills.

State Course ID: 16054A001 **Course Title:** **Nutrition and Culinary Arts I**

This course includes classroom and laboratory experiences needed to develop a knowledge and understanding of culinary principles and nutrition for people of all ages. Course content encompass': food service and preparation management using the decision-making process; meeting basic needs by applying nutrition concepts; meeting health, safety, and sanitation requirements; maximizing resources when planning/preparing/preserving/serving food; applying hospitality skills; analyzing nutritional needs in relation to change; and careers in nutrition and culinary arts, including entrepreneurship investigation.