

DORCHESTER SCHOOL DISTRICT TWO

Career and Technical Education Course Guide



2021 – 2022

DORCHESTER SCHOOL DISTRICT TWO



MISSION

Dorchester School District Two leading the way, every student, every day through relationships, rigor, and relevance.

VISION

Dorchester School District Two desires to be recognized as a “World Class” school district, expecting each student to achieve at his/her optimum level in all areas, and providing all members of our district family with an environment that permits them to do their personal best.

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Dorchester County Career and Technology Center (DCCTC)

MISSION STATEMENT

Dorchester County Career and Technology Center is committed to providing our students with career skills through comprehensive training for tomorrow's workforce.

VISION STATEMENT

Dorchester County Career and Technology Center will be the leader in career and technology education providing a highly skilled and employable workforce capable of continued technical education at the highest level.

Board of Trustees

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Dorchester School District Two Core Values



VISION for SC CTE

ALL students graduate prepared for success in College, Careers, and Citizenship

Career and Technology Education (CTE)

Courses listed by Career Cluster Dorchester School District Two

Environmental and Resource Management (ARHS)

Agricultural Science and Technology
Agricultural Mechanics and Technology
Equipment Operations and Management
Environmental and Natural Resources Management
Outdoor Recreation
Wildlife Management
Agriculture, Food, and Natural Resources Internship, Work-based Credit

Plant and Animal Systems (ARHS)

Agricultural Science and Technology
Agricultural Mechanics and Technology
Agribusiness and Marketing
Farm Animal Production
Agriculture Science and Technology for the Workplace
Agriculture, Food, and Natural Resource Internship, Work-based Credit

Agriculture Food and Natural Resource Courses (DTCCTC)

Agriculture Science and Technology for the Workplace 1
Agricultural Mechanics and Technology
Environmental and Natural Resources Management for the Workplace 2
Heavy Equipment Operation
Equipment Operation and Maintenance
Agriculture, Food, and Natural Resource Internship, Work-based Credit

Architecture and Construction (DCCTC)

Building and Construction 1 & 2
Electricity 1, 2, 3, & 4
Architecture & Construction Internship, Work-Based Credit

Arts, Audio-Video Technology & Communications (SHS)

Media Technology 1, 2, 3, & 4
Arts, Audio Video Technology & Communications Internship, Work-Based Credit

Business, Finance, & Information Systems

Advanced Webpage Design and Development
Account 1 & 2 (ARHS)
Advanced Placement Computer Science A (FDHS)
Advanced Placement Computer Science Principals (FDHS)
Banking Services (SHS)
Business Finance
Entrepreneurship
Exploring Computer Science

Fundamentals of Web Design and Development
Finance Internship, Work-Based Credit
Business Finance Internship, Work-Based Credit
Business Management & Administration Internship, Work-Based Credit
Informational Technology Internship, Work-Based Credit

Health Science (DCCTC and DSD2 – FDHS and SHS)

Emergency Medical Science 1, 2
Health Science 1 & 2
Health Science Internship, Work-Based Learning

Hospitality and Tourism (ARHS, FDHS, and SHS)

Introduction to Culinary Arts
Culinary Arts 1 & 2
Baking and Pastry 1
Hospitality and Tourism Internship, Work-Based Credit

Hospitality and Tourism (DCCTC)

Culinary Arts 1 & 2
Hospitality & Tourism Internship, Work-Based Learning

Human Services (DCCTC)

Cosmetology 1, 2, 3, and 4
Nail Technology 1, 2
Human Services, Internship, Work-Based Credit

Informational Technology Dual Credit Courses – ECPI (ARHS, FDHS, ad SHS)

Introduction to Operating Systems
Network Security Concepts
Networking 1 & 2
UNIX Administration
Cloud Computing Concepts
Computer Configuration 1 & 2
Information Technology Internship, Work-Based Credit

Law, Public Safety, & Security (DCCTC)

Emergency & Fire Management Services 1, 2
Law Enforcement 1, 2
Law, Public Safety, Corrections & Security Internship, Work-Based Credit

Marketing (FDHS, ARHS)

Marketing
Digital Media Marketing
Sports and Entertainment Management
Marketing Internship, Work-Based Credit

Manufacturing Technology (SHS)

Mechatronics Integrated Technology Industrial Safety
Mechatronics Integrated Technologies 1, 2, 3, 4

Manufacturing Internship, Work-Based Credit

Manufacturing Technology (DCCTC)

Marine Technology 1, 2

Welding Technology 1, 2, 3, 4

Manufacturing Internship, Work-Based Credit

Project Lead the Way – Biomedical Sciences (ARHS, FDHS, and SHS)

PLTW Biomedical Sciences

PLTW Human Body Systems

PLTW Medical Interventions

PLTW Biomedical Innovations

PLTW Health Science Internship, Work-Based Credit

Science, Technology, Engineering, and Mathematics (ARHS, FDHS, and SHS)

PLTW Introduction to Engineering Design

PLTW Engineering Essentials

PLTW Principles of Engineering

PLTW Aerospace Engineering

PLTW Environmental Sustainability (ARHS)

PLTW Civil Engineering and Architecture

PLTW Digital Electronics

PLTW Engineering Design and Development (SHS)

Science, Technology, Engineering, and Mathematics Internship, Work-Based Credit

Sports Medicine (ARHS, FDHS, and SHS)

Sports Medicine 1, 2, 3

Medical Terminology

Health Science Internship, Work-Based Credit

Transportation and Logistics (DCCTC)

Automotive Collision Repair 1, 2, 3, 4

Automotive Technology 1, 2, 3, 4

Diesel Engine Technology 1, 2

Transportation, Distribution, & Logistics Internship, Work-Based Credit

DORCHESTER DISTRICT TWO SCHOOLS

CAREER AND TECHNOLOGY EDUCATION PROGRAMS AND COURSE DESCRIPTIONS

The Career and Technology (CTE) Course Catalog is a listing of CTE courses categorized by career clusters which includes course codes, recommended maximum enrollments, number of credits/seat time per course, prerequisites, and course descriptions.

Middle School CTE Courses

Keyboarding (Will not receive high school credit beginning 2019-20)

Course Code 2706

Recommended Maximum Enrollment 24

Grade Level 7, 8

Credits None

Prerequisite None

The Keyboarding course is designed for middle school students to master the skill of entering alphabetic, numeric, and symbolic information on a keyboard and a ten-key pad using the touch method of key stroking. Emphasis is placed on development of accuracy and speed, proper techniques, and correct finger positions. Students will further develop and enhance touch skills for entering information using a keyboard to compose and produce personal, educational, and professional documents. Digital literacy, composition, and language skills are embedded throughout the course.

Digital Literacy (Will not receive high school credit beginning 2019-20)

Course Code 2853

Recommended Maximum Enrollment 24

Grade Level 7, 8

Credits None

Prerequisite None

Digital Literacy is designed to equip students with many of the needed computer skills to find, evaluate, create, and communicate information. Students will be exposed to a broad range of computer technology along with a working knowledge of computer software and hardware. Students benefit from an understanding of wide range of applications (e.g., document processing, presentations, spreadsheets, and web-based resources). This course prepares students to be college and career-ready.

Financial Literacy (Will not receive high school credit beginning 2019-20)

Course Code 2705

Recommended Maximum Enrollment 24

Grade Level 7, 8

Credits None

Prerequisite None

Financial Literacy is designed to introduce the student to basic financial literacy skills to help them make responsible financial decisions. Concepts covered include financial planning, bank accounts, credit and loans, wages and taxes, investments, and insurance. Students will gain the information and skills to implement a life-long plan for financial success.

PLTW App Creators**Course Code** 1782 (6), 2782 (7, 8)**Recommended Maximum Enrollment** 24**Credits** NA**Prerequisite** NA

This unit will expose students to computer science as a means of computationally analyzing and developing solutions to authentic problems through mobile app development, and will convey the positive impact of the application of computer science to other disciplines and to society.

PLTW Design and Modeling**Course Code/Grade Level** 1780 (6), 2780 (7, 8)**Recommended Maximum Enrollment** 24**Credits** NA**Prerequisite** NA

Students discover the design process and develop an understanding of the influence of creativity and innovation in their lives. They are then challenged and empowered to use and apply what they've learned throughout the unit to design a therapeutic toy for a child who has cerebral palsy.

PLTW Automation and Robotics**Course Code/Grade Level** 1781 (6), 2781 (7, 8)**Recommended Maximum Enrollment** 24**Credits** NA**Prerequisite** NA

Students learn about the history and impact of automation and robotics as they explore mechanical systems, energy transfer, machine automation, and computer control systems. Using the VEX Robotics® platform, students apply what they know to design and program traffic lights, robotic arms, and more.

PLTW Science of Technology**Course Code/Grade Level** 1786 (6), 2786 (7, 8)**Recommended Maximum Enrollment** 24**Credits** NA**Prerequisite** NA

Science impacts the technology of yesterday, today, and the future. In this unit, students apply the concepts of physics, chemistry, and nanotechnology to activities and projects, including making ice cream, cleaning up an oil spill, and discovering the properties of nano-materials.

PLTW Medical Detectives**Course Code/Grade Level** 1789 (6), 2789 (7, 8)**Recommended Maximum Enrollment** 24**Credits** NA**Prerequisite** NA

Students play the role of real-life medical detectives as they collect and analyze medical data to diagnose disease. They solve medical mysteries through hands-on projects and labs, measure and interpret vital signs, examine nervous system structure and function, investigate disease outbreaks, and explore how a breakdown within the human body can lead to dysfunction.

AGRICULTURE EDUCATION

Agricultural Education is a program for students interested in pursuing careers in natural resources, environmental and agricultural careers. Hundreds of careers are available to students who complete this program. Each local program is designed and conducted to meet specific local needs as identified by that program's advisory committee, and the school administration. These programs include training for careers in agricultural production, processing, mechanization/engineering, communication/education, scientist, marketing/sales, horticulture, forestry, research, and agribusiness.

The agricultural education program involves the following components: rigorous classroom instruction (contextual learning), hands-on experience and career exploration (work-based learning), and the FFA (connecting activity). Programs are designed to prepare students to fill community needs, enter post-secondary agricultural programs, and develop their personal skills.

Environmental & Natural Resources System Management Pathway

Agricultural Science and Technology (ARHS only) 562400CW Unit: 1
Grades: 9-10

Prerequisite: None

Recommended Maximum Enrollment: 30

Course Description: The Agricultural Science and Technology course teaches essential concepts and understanding related to plant and animal life including biotechnology, the conservation of natural resources, and the impact of agriculture and natural resource utilization on the environment. Emphasis is placed on the role of agriculture in our society and the importance of agriculture to the welfare of the world. Basic personal and community leadership and safety and agricultural mechanical technology are included as a part of the instructional program. Each student is required to design and participate in a supervised agricultural experience.

The Agricultural Science and Technology for the Workplace (ARHS) 562000CW

Units: 2

Grade Level 9, 10, 11

Prerequisite: None

Recommended Maximum Enrollment: 30

The Agricultural Science and Technology for the Workplace course teaches essential concepts and understanding related to plant and animal life including biotechnology, the conservation of natural resources, and the impact of agriculture and natural resource utilization on the environment. Emphasis is placed on the role of agriculture in our society and the importance of agriculture to the welfare of the world. Basic personal and community leadership and safety, and agricultural mechanical technology are included as a part of the instructional program. Each student is required to design and participate in a supervised agricultural experience.

Agricultural Mechanics and Technology (ARHS) 566000CW Unit: 1
Grade Level 9, 10

Prerequisite: None

Course Description: The Agriculture Mechanics and Technology course is designed as an introductory course to the Agriculture Mechanics Career Pathway. In addition, it provides development of general mechanical skills, which are required in all areas of Agricultural

Education. Typical instructional activities include hands-on experiences in woodworking, metalworking, welding, small engine repair, basic farm and homestead improvements, participating in personal and community leadership development activities, planning and implementing a relevant work-based learning transition experience, and participating in Future Farmers of America (FFA) activities.

Agricultural Mechanics and Technology for the Workplace 1 **560400CD** **Unit: 2**
Recommended Maximum Enrollment **20**

Grade Level 9, 10, 11

Prerequisite None

Course Description: The Agriculture Mechanics and Technology for the Workplace 1 course is designed as an introductory course to the Agriculture Mechanics Career Pathway. Typical instructional activities include hands-on experiences in woodworking, metalworking, welding, small engine repair, basic farm and homestead improvements, participating in personal and community leadership development activities, planning and implementing a relevant work-based learning transition experience, and participating in Future Farmers of America (FFA) activities.

Environmental and Natural Resources Management (ARHS) **562600CW** **Unit: 1**
Grade Level 9, 10

Prerequisite: None

Recommended Maximum Enrollment: 30

Course Description: Environmental and Natural Resource Management is the introductory course for the Environmental and Natural Resources Career Pathway. It is a combination of subject matter and planned learning experiences on the principles involved in the conservation and/or improvement of natural resources such as air, soil, water, land, forest, and wildlife for economic and recreational purposes. Instruction also emphasizes such factors as the establishment, management, and operation of land for recreational purposes. Typical learning activities include constructing a model watershed; identifying and/or measuring the levels of air, water, noise, and solid waste pollution in a selected site; participating in hands-on experiences with site analysis; evaluating competing interests; and analyzing biological and physical aspects of the environment and environment-related issues including methods of abating and controlling pollution. Students participate in personal and community leadership development activities, plan and implement a relevant school-to-work transition experience and participate in FFA activities.

Heavy Equipment Operation (Agriculture Mechanics & Technology for the Workplace 1 (DCCTC)

560400CD **Units: 2**

Grades: 10-12

Equipment Operation and Maintenance CP 562100CD

Prerequisite for Equipment Operation and Maintenance – Students must have a grade above 80 in Agriculture Mechanics and Technology for the Workplace 1 or teacher recommendation.

Course Description: The Heavy Equipment Operation program at DCCTC is a continuous, year-long class collectively worth 4 credits. Typical instructional activities include hands-on, immersive training using SimLog heavy equipment simulators for the backhoe loader, bulldozer, hydraulic excavator, and articulated wheel loader, and forklift. Students can work through these simulations independently to learn the fundamental operational techniques of each piece of

equipment and to hone their critical thinking skills for the application of these machines in the construction and agriculture industries. After meeting the required performance standards in the simulator lab, students move to an active quarry site located off campus owned by Austin Construction. Under the supervision of equipment operators employed by Banks Construction, students learn basic safety, operation, and maintenance techniques for each of the four pieces of heavy equipment covered by the simulation software while gaining hours of valuable “real world” operational time.

This career field’s current salary range in South Carolina is \$13.43 to \$27.01 per hour (www.onetonline.org). Students who are or will be 18 by spring semester of their senior year are eligible to take the Class A Commercial Driver’s License (CDL) training at DCCTC leading to permit testing through the Department of Transportation. Upon obtaining the CDL permit, student may then enroll at Orangeburg-Calhoun Technical College to complete their CDL license. On average, having a Class A CDL license will increase the hourly rate an additional \$3.00 - \$4.00 per hour. A \$20 lab fee and \$10 FFA dues is required for these courses each semester.

Environmental and Natural Resources Management for the Workplace 1 (DCCTC) CP 562800CD Units: 2

Grades: 10-12

This is an introductory course in ornamental horticulture and production agriculture. Students will learn fundamental skills relating to plant propagation from small-scale backyard gardening and landscaping to large- scale production agriculture and commercial nursery/greenhouse management for the season of the year in which they are enrolled. Students will work through the steps of planning, implementing, cultivating, harvesting, and evaluating various horticultural and agricultural operations. Students are encouraged to begin and/or expand their own home gardens and are provided plants through the program. Students will also be able join the Dorchester Dust Devils, DCCTC’s clay sports team. A \$20 lab fee and \$10 FFA dues is required for this course.

Environmental and Natural Resources Management for the Workplace 1 CP 562800CD Units: 2

Grades: 10-12

Site: DCCTC Dorchester

This is an introductory course in ornamental horticulture and production agriculture. Students will learn fundamental skills relating to plant propagation from small-scale backyard gardening and landscaping to large- scale production agriculture and commercial nursery/greenhouse management for the season of the year in which they are enrolled. Students will work through the steps of planning, implementing, cultivating, harvesting, and evaluating various horticultural and agricultural operations. Students are encouraged to begin and/or expand their own home gardens and are provided plants through the program. Students will also be able join the Dorchester Dust Devils, DCCTC’s clay sports team. A \$20 lab fee and \$10 FFA dues is required for this course.

Environmental and Natural Resources Management for the Workplace 2 CP 562900CD

Units: 2

Grades: 10-12

Site: DCCTC Dorchester

This is the continuation of introductory course in ornamental horticulture and production agriculture. Students will continue learning fundamental skills relating to plant propagation from small-scale backyard gardening and landscaping to large-scale production agriculture and commercial nursery/greenhouse management for the season of the year in which they are enrolled. Students will work through the steps of planning, implementing, cultivating, harvesting, and evaluating various horticultural and agricultural operations. Students are encouraged to begin and/or expand their own home gardens and are provided plants through the program. This career field's current salary range in South Carolina is \$9.23 to \$26.39 per hour (www.onetonline.org). Students will have the opportunity to join the Dorchester Dust Devils, DCCTC's clay sports team. A \$20 lab fee and \$10 FFA dues is required for this course.

Farm Animal Production (ARHS only)

564700CW Unit: 1

Grades: 10 - 12

Prerequisite: Agricultural Science and Technology or Agricultural Biosystems Science

Recommended Maximum Enrollment: 30

Course Description: Farm Animal Production teaches technical knowledge and skills for entry-level positions in an animal production enterprise by developing students' competency in the selection, breeding, physiology, nutrition, health, housing, feeding, and marketing of farm animals. Typical instructional activities include hands-on experiences with the principles and practices essential in the production and management of farm.

animals and farm animal products for economic, recreational, and therapeutic uses; participating in personal and community leadership development activities; planning and implementing a relevant work-based learning transition experience; and participating in Future Farmers of America (FFA) activities.

Agribusiness and Marketing (ARHS)

560000CW Unit: 1

Grades: 10 - 12

Prerequisite: One of the following courses: Agricultural Science and Technology, Agricultural Mechanics and Technology, Environmental and Natural Resources Management, Introduction to Horticulture, or Agricultural Biosystems Science (depending on the pathway)

Recommended Maximum Enrollment: 30

Course Description: Agribusiness and Marketing is designed for the student who plans to seek employment on, manage, or own a farm or who seeks employment in an agribusiness field. Students will be involved in learning activities that generally prepare them to apply the economic and business principles involved in the organization, operation, and management of a farm, ranch, or agribusiness. Typical hands-on learning experiences include applying modern economic and business principles involved in the organization, operation, and management of agricultural businesses, including the production and marketing of agricultural products and services; applying computer application models; participating in personal and community leadership development activities; planning and implementing a relevant work-based learning transition experience; and participating in Future Farmers of America (FFA) activities.

Wildlife Management (ARHS only)**567400CW Unit: 1****Grades: 10 -12****Prerequisite: Environmental and Natural Resources Management****Recommended Maximum Enrollment: 30**

Course Description: The Wildlife Management course is designed to be introductory course for the Environmental and Natural Resources pathway. The course is a combination of subject matter and planned learning experiences on the principals involved in the conservation and/or improvement of natural resources such as air, soil, water, land, forest, and wildlife for economic and recreational purposes. Instruction also emphasizes such factors as the establishment, management, and operation of land for recreational purposes.

Agriculture, Food and Natural Resources, Internship (ARHS) 569000CW Unit: 1**Grade: 11 - 12****Prerequisite: Completion of two (2) CTE courses/units within a program****Recommended Maximum Enrollment: None**

Course Description: The Agriculture, Food and Natural Resources work-based course is a structured, stand-alone course that is taken in a CTE Classification of Instructional Programs (CIP)-coded program. Each work-based learning (credit bearing) course has an assigned CTE course code. The guidelines listed in the CTE Work-Based Learning Implementation Guide must be followed in order to award the Carnegie unit of credit upon successful completion of the course.

Agriculture, Food, and Natural Resources Internship, Work-Based Learning Credit (DCCTC)**569000CW Unit: 1**

Prerequisites: Senior and completer of a DCCTC career and technology program in Agriculture, Food, and Natural Resources with a grade of 80 or higher and instructor recommendation

Course Description: Natural Resources cluster and instructor recommendation Seniors who have completed a career and technology program and desire work experience in a related field or desire to further enhance their skills may enroll in a work-based learning course. Students should express their interest in enrolling to their instructor and counselor. Students desiring to work in a related field must provide their own transportation to work sites. A \$20 lab fee is required for this course.

Architecture and Construction

Building Construction 1 CP

606000CD Units: 2

Grades: 10-12

Site: DCCTC Dorchester

This course is part of the instructional program that prepares students to perform entry-level building construction tasks under the direction of a supervisor or an experienced craftsman. Primary instruction is given in basic carpentry, masonry, residential electricity, plumbing and safety practices. There is a \$20 shop fee due at the beginning of each semester required for this course.

Building Construction 2 CP

606100CD Units: 2

Grades: 10-12

Site: DCCTC Dorchester

Prerequisite: Building Construction 1 with a grade of 70 or higher

This course provides in-depth instruction on floor systems, wall framing, roofing, and brick masonry. Students learn to read and interpret blueprints, sketches and building plans. Students may be eligible to participate in cooperative work experiences or apprenticeships, which combine career and technology training with supervised work experience in business and industry. This career field's current salary range in South Carolina is \$11.53 to \$19.95 per hour (www.onetonline.org). There is a \$20 shop fee due at the beginning of each semester required for this course.

Electricity 1 (DCCTC)

628700CD Units: 2

Grades: 10-12

Course Description: Electricity 1 students will learn introductory electrical skills for residential buildings in accordance with current national electrical codes. Areas covered in Electricity 1 include: basic and electrical safety, construction math, hand tools, power tools, blueprints, rigging, communication, employability skills and hand bending. All sections include multiple hands-on projects. Students need a grade of 71 or higher to advance to Electricity 2. Students in this course will have the opportunity to participate in the AINautics drone pilot training class. Upon successful completion of this training and passing of the national exam, students can obtain the Federal Aviation Authority (FAA) Remote Drone Pilot license. A \$20 lab fee is required for this course.

Electricity 2 (DCCTC)

628800CD Units: 2

Grades: 10-12

Prerequisite: Electricity 1 with a grade of 71 or above

Course Description: Electricity 2 students will move from small project boards to full scale rooms for all wiring projects. Areas covered in Electricity 2 include: Electrical theory 1 and 2, electrical test equipment, intro to NEC, raceways and boxes, conductors, electrical blueprints, and commercial, residential and industrial wiring. Completers of electricity 2 will have an opportunity to gain employment for summer work with an electrical contractor with the possibility of enrolling into the electrical apprenticeship program. Students need a grade of 81 or higher to advance to electricity 3. This career field's current salary range in South Carolina is \$10.67 to \$19.22 per hour (www.onetonline.org). A \$20 lab fee is required for this course.

Electricity 3 (DCCTC)**628900CD Units: 2****Grade: 12****Prerequisite: Electricity 2 (grade of 81 or higher and instructor recommendation)**

Course Description: The student's main objective in this course is to be placed on a jobsite for work-based learning. In the classroom, the main objective is to teach the students commercial and industrial codes and electrical applications. Course instruction is more in depth in Electrical theory, National Electrical code, and employability skills. DCCTC's goal is to have our students prepared for a simple transition from school to work. A \$20 lab fee is required for this course.

Electricity 4 (DCCTC)**629000CD Units: 2****Grade: 12****Prerequisite: Electricity 3 (grade of 81 or higher and instructor recommendation)**

Course Description: This course is offered only for students who are eligible for work placement with the DCCTC's school to work program. A \$20 lab fee is required for this course.

Architectural & Construction Internship/Work-Based Learning Credit (DCCTC)**669000CW Unit: 1 Grade: 12****Prerequisites: Senior and completer of career and technology program in the construction trades and instructor recommendation**

Course Description: Seniors who have completed a career and technology program and desire work experience in a field related to architecture and construction or desire to further enhance their skills may enroll in a work-based learning (WBL) course. Students should express their interest in enrolling to their instructor and counselor. Students desiring to work in a related field must provide their own transportation to work sites. A \$20 lab fee is required for this course.

Machine Technology 1 CP 623000CD**Units: 2****Grades 10-12****Site: DCCTC Trolley Road**

This course provides classroom instruction and lab experiences related to metalworking. It focuses on the operation of equipment such as the lathe, milling machine, grinders, drilling machines, precision measuring instruments and hand tools. Blueprint reading and math are important parts of the course. Students who register for this course should enjoy working with machines and making metal projects. A \$20 lab fee is required for this course.

Machine Technology 2 CP 623100CD**Units: 2****Grades 10-12****Site: DCCTC Trolley Road**

Prerequisite: Machine Technology 1 with a grade of 71 or above

This course includes advanced instruction machining metal. The course focuses on milling machines, boring and drilling, the use of vertical and horizontal boring and drilling machines, basic study of CNC equipment and

CNC code, job seeking, public relations and manufacturing facilities. Students may be eligible to participate in cooperative work experiences or apprenticeships, which combine career and technology training with supervised work experience in business and industry. This career field's current salary range in South Carolina is \$11.22 to \$28.66 per hour (www.onetonline.org). A \$20 lab fee is required for this course.

Arts, Audio-Video Technology Communications

The competency listings are intended to serve as guides to assist teachers and administrators in providing an instructional program that is current and relevant. Arts, AV Technology, and Communications skill standards address what a worker needs to know and be able to do and contribute to a safe, productive, and effective work environment. Students will be properly prepared for their careers when the standards listed are integrated with quality instructional techniques. The standards provide a secure foundation for future training in the student's career.

The following provide the basis for development of a student profile that can be shared with prospective employers, and in many instances, the standards can be used for planning and implementing articulation agreements with comparable programs at the post-secondary level.

Media Technology

Media Technology 1 DCCTC	612400CD	Units: 2
Media Technology 1 DCCTC	612500CD	Units: 2

Grades: 10-12

Prerequisite: Media Technology 1

Recommended Maximum Enrollment: 24

Course Description: In the Media Technology program, students will explore the general field of communications and will focus primarily on audio and motion media industries. Students will also learn about related fields such as radio, graphic design, computer graphics, animation, special effects, online media development, advertising, public relations, and corporate communications. Students will get hands-on experience in basic production techniques for audio, video, and film. They will learn how to use industry-standard equipment and will develop skills including writing, directing, producing, and editing video pieces of increasing complexity.

Media Technology 1 (SHS only)	612400CW	Unit: 1
Media Technology 2 (SHS only)	612500CW	Unit: 1

Grades: 10 -12

Prerequisite: None, courses taken sequentially

Recommended Maximum Enrollment: 24

Course Description: In the Media Technology program, students will explore the general field of communications and will focus primarily on audio and motion media industries. Students will also learn about related fields such as radio, graphic design, computer graphics, animation, special effects, online media development, advertising, public relations, and corporate communications. Students will get hands-on experience in basic production techniques for audio, video, and film. They will learn how to use industry-standard equipment and will develop skills including writing, directing, producing, and editing video pieces of increasing complexity. Program completers will compile their works for inclusion in a portfolio, for use in this program of study, the workforce, or postsecondary education.

Media Technology 3 (SHS Only)	612500HW	Unit: 1
Media Technology 4 (SHS Only)	612700HW	Unit: 1

Grades: 11-12

Prerequisite: Media Technology 1 and 2 take sequentially

Recommended Maximum Enrollment: 24

Course Description: In the Media Technology program, students will explore the general field of communications and will focus primarily on audio and motion media industries. Students will also learn about related fields such as radio, graphic design, computer graphics, animation, special effects, online media development, advertising, public relations, and corporate communications. Students will get hands-on experience in basic production techniques for audio, video, and film. They will learn how to use industry-standard equipment and will develop skills including writing, directing, producing, and editing video pieces of increasing complexity.

Architectural Design 1 (DCCTC)

617000CD Units: 2

Grades: 10-12

Prerequisites: Students should enjoy math & have passed or be enrolled in Algebra 1-B or Algebra 1

Recommended Maximum Enrollment: 24

Course Description: A \$20 lab fee is required for this course.

This course is intended to develop the basic skills for the completion of architectural design/CAD's two semester program. Skills developed in this course will promote students into a Computer Aided Drafting (CAD) career with emphasis in Architecture and Engineering. This course will introduce AutoDesk AutoCAD and Revit CAD programming through residential floor plans, elevation, and sectional drawings, as well as various construction plans and technical drawings to include freehand sketching. With virtually every career industry utilizing technical drawings to design or manufacture elements, this course is a must. Upon completion of this course with a passing grade of 78, or instructor approval, students may attend the Architectural Design 2 program to further their knowledge and skillset. This will include an opportunity for SkillsUSA competition training and AutoCAD User Certification opportunity. This course is also an option for the computer science credit required for a high school diploma.

Architectural Design 2 (DCCTC)

617100CD Units: 2

Grades: 10-12

Prerequisite: Courses taken sequentially. Pass Architectural Design 1 with a grade of 71 to enroll in Architectural Design. Students should enjoy math & have passed or be enrolled in Algebra 1-B or Algebra 1 Recommended Maximum Enrollment: 24

Grade Level: 10, 11, 12

Course Description: This course is intended to enhance the existing skills attained in Architectural Design 1 to include preparation for an entry-level drafting position in the workforce or admittance into a post-secondary school. Students will extend their knowledge with CAD programming to include three-dimensional design and execution on our 3D printer and/or two-dimensional design and machining on our CNC machine. This course also prepares for SkillsUSA competition in Architecture Drafting or Technical Drafting pending student's desire and instructor's approval. With more emphasis in AutoCAD and/or Revit, students will have the opportunity, per instructor approval, to earn their AutoCAD User Certification (ACU) or their Revit Certification both recognized worldwide. CAD programming is used in various architectural and engineering fields, such as, surveying, civil engineering, electrical engineering, manufacturing, building construction, architect, and landscape architect just to name a few. This career field's current salary range in South Carolina is between \$16.19 to \$41.02 per hour (www.onetonline.org). A \$20 lab fee is required for this course.

Arts Audio Video Technology & Communications, Internship, Work-Based Learning 1 & 2 (SHS) 52900CW Unit: 1

Grades: 11-12

Prerequisite: Completion of two (2) CTE courses/units within a program

Recommended Maximum Enrollment: None

Arts, Audio-Video Technology and Communications work-based course is a structured, stand-alone course that is taken in a CTE Classification of Instructional Programs (CIP)-coded program. Each work-based learning (credit bearing) course has an assigned CTE course code. The guidelines listed in the CTE Work-Based Learning Implementation Guide must be followed to award the Carnegie unit of credit upon successful completion of the course.

Arts, Audio-Video Technology and Communications Internship, Work Based Learning Credit (DCCTC)

529000CW Unit: 1

Prerequisites: Senior and completer of career and technology program in the architectural design program and instructor recommendation

Course Description: Seniors who have completed a career and technology program and desire work experience in a field related to architectural design or desire to further enhance their skills may enroll in a work-based learning (WBL) course. Students should express their interest in enrolling to their instructor and counselor.

Students desiring to work in a related field must provide their own transportation to work sites. A \$20 lab fee is required for this course.

Business Management and Administration

Welcome to the Business World. One of the fastest-growing and highest-paying sectors of the South Carolina job market is Business, Management, and Administration. Why? Every South Carolina company—from small Mom-and-Pop shops to sprawling manufacturing plants—needs employees with strong financial, organizational, time-management, and communication abilities. If you choose the Business, Management, and Administration cluster, you'll acquire all of these valuable skills while also building a rock-solid academic foundation in math, science, and English. Read on to explore whether you are suited for a career in Business, Management, and Administration.

People with business skills are the ones that make the deals that build profitable companies that power the global economy. A career in business can take an individual to the CEO's corner office on the top floor of a skyscraper or around the world making million-dollar deals.

The business management, and administration industry is the highest paying, with nearly half of all jobs in management and professional occupations. For those who have always wanted to be their own boss, this is the cluster to consider. Surveys indicate that about one-fourth of all workers in BMA careers are self-employed.

Entrepreneurship **540000CW Unit: 1**

Grades: 9 –12

Prerequisite: None

Recommended Maximum Enrollment: 24

Course Description: Entrepreneurship is designed to provide students with the knowledge and skills leading to the development of a business plan for small business ownership. An important part of the course will be the incorporation of economics, ethics, legal aspects, logistics, research, staffing, strategies for financing, and technology.

Integrated Business Applications 1 **502000CW Unit: 1**

Grades: 9 –12

Prerequisite:

Recommended Maximum Enrollment: 24

Course Description: Integrated Business Applications 1 provides in-depth instruction in Microsoft (MS) Office applications that will lead to national certifications. The applications covered include MS Word, MS Excel, MS PowerPoint, and Microsoft (MS) Access (optional). Students will learn the features and benefits of the application program and apply their knowledge in various problem-based activities. In addition, students are engaged in applying key critical thinking skills and the practice of ethical and appropriate behavior for the responsible use of technology. This course prepares students for the Microsoft Specialist Associate certifications offered by Certiport etc. (Revision in 20/21)

Integrated Business Applications 1 **502100CW Unit: 1**

Grades: 10-12

Prerequisite: Integrated Business Applications 1

Recommended Maximum Enrollment: 24

Course Description: Integrated Business Applications 2 is designed to provide advanced instruction in Microsoft Office Applications that will lead to Core and Expert national certifications. The applications covered include advanced levels of MS Word, MS Excel, MS PowerPoint, and MS Access. Students will learn the features and benefits of the application programs and apply their knowledge in various problem-based and critical thinking activities. This course prepares students for the Microsoft Specialist Expert certifications offered by Certiport.

Business Management and Administration Internship, Work-Based Learning

549000CW Units: 1

Grade Level: 11-12

Prerequisite: Completion of two (2) CTE courses within a program

Recommended Maximum Enrollment: None

Course Description: Business Management and Administration work-based course is a structured, stand-alone course that is taken in a CTE Classification of Instructional Programs (CIP)-coded program. Each work-based learning (credit bearing) course has an assigned CTE course code. The guidelines listed in the CTE Work-Based Learning Implementation Guide must be followed to award the Carnegie unit of credit upon successful completion of the course.

Finance

Financial Planning combines the skill sets of financial managers with that of a more relationship-oriented individual. They typically work with clients either in daily, one-time transactions at the bank or as lifelong, trusted confidants who fully manage their client's wealth. These are professional people whose expertise and knowledge are valued by those they serve, whether it is to make a deposit, recommend a life insurance policy, or manage a retirement fund. People who enter the pathway of Business Finance are process oriented. They like to see numbers add up and enjoy problem solving as a result. From entry level billing clerks to CFOs of major corporations, everyone in this cluster enjoys math and most likely is skilled with computers and accounting software as well.

Accounting 1 (required) **500100CW Unit: 1**

Grades: 10 -12

Prerequisite: Algebra 1 and/or instructor approval

Recommended Maximum Enrollment: 24

Course Description: Accounting 1 is designed to help the student develop the skills necessary for the highly technical interaction between accounting and business, to develop an understanding of the steps of the accounting cycle as applied to several different kinds of business operations, and to develop an understanding of accounting concepts, principles, and practices. Use of the computer in simulated activities gives the student an opportunity to see the advantages of technology in accounting procedures.

Accounting 2 **500500CW Unit: 1**

Grades: 10 – 12

Recommended Maximum Enrollment: 24

Prerequisite: Accounting 1 with a minimum of C or better and/or instructor approval

Course Description: Accounting 2 expands the student's understanding of accounting subsystems and develops an understanding of various methods of internal control procedures. The students develop competence in using subsidiary ledgers, in preparing financial statements, and in performing end-of- period procedures. The student will demonstrate the use of accounting principles using computer software and stimulated activities.

Banking Services (SHS only) **527100CW Unit: 1**

Grades: 10 – 12

Prerequisite: TBA- subject to change

Recommended Maximum Enrollment: 24

Course Description: Banking Services is designed to offer a unique approach to understanding the banking services. This course introduces banking services and functions, including business of banking, careers in banking and finance, origins and purpose of banking, money and interest, deposits in banking, negotiable instruments, bank loans, mortgages, commercial lending, specialized bank service, promoting the bank, and security and ethics. **OBJECTIVE:** Given the necessary equipment, supplies, and facilities, the student will complete all the following core standards successfully.

Business Finance**527300CW Unit: 1****Grades: 9 -12****Prerequisite: Accounting 1****Recommended Maximum Enrollment: 24**

Course Description: Business Finance is designed to provide students with a foundation in corporate business finance concepts and applications including fundamentals, financial environment, management planning, maintenance, and analysis of financial records, long and short-term financial activities, financial business activities, financial institutions and banking services, consumer credit, business insurance, technology and financial management, and international finance.

Business Finance Internship, Work-Based Learning Credit**619000CW Unit: 1****Finance Internship, Work-Based Learning Credit****619000CW Unit: 1****Prerequisite: Completion of two (2) CTE courses/units within a program**

Course Description: Finance work-based course is a structured, stand-alone course that is taken in a CTE Classification of Instructional Programs (CIP)-coded program. Each work-based learning (credit bearing) course has an assigned CTE course code. The guidelines listed in the CTE Work-Based Learning Implementation Guide must be followed to award the Carnegie unit of credit upon successful completion of the course.

Health Science Education

Health Science Education is a secondary program of study that promotes health career opportunities to students in grades 9-12. Integration of health science courses, work-based learning experiences, HOSA-Future Health Professionals activities, and academics allow students to make informed decisions regarding an array of careers and educational pursuits.

Emergency Medical Services 1 (DCCTC) 553100CD Units: 2
Grades: 10-12

Course Description: This course is an Introduction to the Emergency Medical Responder program. It is designed as a skill-based training. Student/candidates will learn all the basic emergency skills to function until emergency medical technicians and paramedics arrive. Moderate physical activity will be experienced by the student/candidates during indoor and outdoor training scenarios. Students in this course will have the opportunity to participate in the AINautics drone pilot training class. Upon successful completion of this training and passing of the national exam, students can obtain the Federal Aviation Authority (FAA) Remote Drone Pilot license. A \$20 lab fee is required for this course.

Emergency Medical Services 2 (DCCTC) 553200CD Units: 2
Grades: 10-12

Prerequisite: Emergency Medical Services 1 CP with a grade of 71 or higher

Course Description: This course is a continuation of EMS 1. Student/candidates will use the skills learned in EMS 1 and combine it with the course content to successfully work through real-life emergency scenarios and complete required patient contracts. Completion of the course will entitle the student/candidate to take the National Registry Emergency Medical Exam for certification. Completion will also allow the student/candidate to take the Emergency Medical Technician course. This career field's current salary range in South Carolina is \$11.58 to \$23.73 per hour (www.onetonline.org). A \$20 lab fee is required for this course.

Health Science 1 CP 555000CD Units: 2
Grades: 10-12

Curriculum Includes: Health Science 1 (555000CD) and Health Science 2 (555100CD)

Sites: DCCTC Dorchester & DCCTC Trolley Road

Course description: This course is designed to familiarize students with healthcare career opportunities and assist them in acquiring entry-level knowledge and skills applicable to healthcare fields. Emphasis will be placed on selecting a healthcare career, recognizing healthcare facilities and methods of paying for healthcare, professional communication skills, safe work practices and the prevention of infection, and related medical terminology. Students can also participate in HOSA (Health Occupations Students of America), which is a student led organization and community service in healthcare. A \$20 lab fee is required for this course.

Health Science 2 CP (Human Body Systems & Clinical Studies) 555100CD Clinical

Options: Nursing (CNA), Dental, Veterinary, or Medical Back Office

Units: 2

Grades: 10-12

Curriculum Includes: Health Science 3 (555200CD) and Health Science Clinical Studies (556000CD)

Sites: DCCTC Dorchester & DCCTC Trolley Road

Prerequisite: Health Science 1 CP with a grade of 75 or higher and teacher recommendation or completion of Sports Medicine 1 & 2 at their home high school **

** Students completing Sports Medicine 1 and 2 at their home high school are allowed to come to DCCTC for Health Science 2 and after successful completion of this course and state exam, can obtain their Certified Nursing Assistant (CNA) licensure.

**CPCT students must be a senior and turning 18 years old by June to participate in the clinical setting.

Course Description: This course begins with core information in medical math, growth and development, death and dying, and nutrition. After completing the core, students will select one of the following components: nursing, dental, veterinary, or medical back office. Upon completion of the core modules, students will be placed in a local health care facility for a real-world experience. During the course, the student will be instructed in cardiopulmonary resuscitation and can become CPR certified. Students are also provided the opportunity to obtain their CNA (Certified Nursing Assistant) and/or CPCT (Certified Patient Care Technician) license. This career field's current salary range in South Carolina is \$9.60 to \$16.03 per hour (www.onetonline.org). A \$20 lab fee is required for this course. DCCTC is a testing site facility for the Certified Nursing Assistant licensure exam. The cost for this exam is \$101.00. CNA and CPCT students are required to provide their own transportation to the clinical setting, provide immunization records, pay the \$26 fee for the SLED check, pay the \$25 for the 2-step PPD, and pass a drug screening.

Health Science Work Based Learning

559000CW Units: 1

Grade: 12

Sites: DCCTC Dorchester & DCCTC Trolley Road

Prerequisite: Senior and completer of a DCCTC career and technology program in health science and instructor recommendation

Course Description: Seniors who have completed a career and technology program at DCCTC and desire work experience in a field related to their completed program or desire to further enhance their skills may enroll in a Level 3 course.

Students should express their interest in enrolling to their instructor and counselor. Students desiring to work in a related field must provide their own transportation to work sites. A \$20 lab fee is required for this course.

Project Lead the Way (PLTW) Biomedical Science Pathway

PLTW Biomedical Innovation

558300HW Unit: 1

Grades: 11-12

Prerequisites: Concurrent enrollment in Medical Intervention

Recommended Maximum Enrollment: 24

Course Description: Biomedical Innovation is the capstone (fourth course) for the Project Lead the Way Biomedical Science program for high school students. In this capstone course, students apply their knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician's office, or industry.

PLTW Human Body Systems

558100HW Unit: 1

Grades: 9 -12

Prerequisite: Principles of Biomedical Science or Teacher Recommendation

Recommended Maximum Enrollment: 24

Course Description: Students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real-world cases and often play the role of biomedical professionals to solve medical mysteries.

PLTW Medical Interventions

558200HW Unit: 1

Grades: 11-12

Prerequisites: Principles of Biomedical Science and Human Body Systems

Recommended Maximum Enrollment: 24

Course Description: Medical Interventions is a foundation course for the Project Lead the Way (PLTW) Biomedical Sciences program for high school students. In the Medical Interventions course, students will investigate the variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. A "How-To" manual for maintaining overall health and homeostasis in the body, the course will explore how to prevent and fight infection, how to screen and evaluate the code in our DNA, how to prevent, diagnose and treat cancer, and how to prevail when the organs of the body begin to fail. Through these scenarios, students will be exposed to the wide range of interventions related to Immunology, Surgery, Genetics, Pharmacology, Medical Devices, and Diagnostics. Each family case scenario will introduce multiple types of interventions and will reinforce concepts learned in the previous two courses, as well as present new content.

Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders. These interventions will be showcases across the generations for the family and will provide a look at the past, present and future of biomedical science. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important role scientific thinking and engineering design play in the development of interventions of the future.

PLTW Principles of Biomedical Sciences**558000HW Unit: 1****Grades: 9 -2****Recommended Maximum Enrollment: 24****Prerequisite: Teacher Recommendation**

Course Description: Principles of Biomedical Sciences is a foundation course for the Project Lead the Way Biomedical Sciences program for high school students. This course introduces the biomedical sciences through exciting hands-on projects and problems. Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, research processes and bioinformatics. Key biological concepts including homeostasis, metabolism, inheritance of traits, and defense against disease are embedded in the curriculum. Engineering principles including the design process, feedback loops, and the relationship of structure to function are also incorporated. This course is designed to provide an overview of all the courses in the Biomedical Sciences program and lay the scientific foundation for the subsequent courses.

PLTW Health Science, Internship, Work-Based Credit**559000HW Unit: 1****Grades: 11-12****Prerequisite: Successful completion of two (2) Health Sciences courses plus Cardiopulmonary Resuscitation (CPR) and First Aid (FA) certification.**

Recommended Maximum Enrollment: NA

Sports Medicine Pathway**Medical Terminology****554000CW Unit: 1****Grades: 9-12****Recommended Maximum Enrollment: 24****Prerequisite: None**

Course Description: Medical terminology is designed to develop a working knowledge of the language of health professions. Students acquire word-building skills by learning prefixes, suffixes, roots, combining forms, and abbreviations. Utilizing a body systems approach, students will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures, and pharmacology. Students will use problem-solving techniques to assist in developing an understanding of course concepts.

Sports Medicine 1**555500CW Unit: 1****Grades: 9 -12****Prerequisite or Co-requisite: Biology or Health Science I Recommended Maximum Enrollment: 24**

Course Description: Sports Medicine 1 emphasizes sports medicine career exploration and the prevention of athletic injuries, including the components of exercise science, kinesiology, anatomy, principles of safety, first aid, cardiopulmonary resuscitation (CPR), and vital signs. Subject matter also includes legal issues, members of the sports medicine team, nutrition, protective sports equipment, environmental safety issues, taping and wrapping, mechanisms of

injury, and application of another sports medicine concept. Students interested in healthcare careers in athletic training, physical therapy, medicine, exercise physiology, nursing, biomechanics, nutrition, psychology, and radiology will benefit from this course.

Sports Medicine 2

555600CW Units: 2

Grades: 10 - 12

Prerequisite: Required successful completion of Sports Medicine 1, plus CPR and FA certification. Also recommended but not required, Health Science 3 or its substitute. (Medical Terminology, PLTW Human Body Systems, Science department Anatomy and Physiology, AP Biology)

Recommended Maximum Enrollment: 24

Course Description: Sports Medicine 2 emphasizes the recognition and care of common injuries and illnesses sustained by a physically active population. Subject matter will include discussion of specific conditions and injuries that may be experienced by individuals participating in athletic activities. In addition, the concepts of therapeutic modalities and exercise in the care of injuries will be examined. A focus on deeper understanding of body systems and common pathologies will be included. Concepts related to the administrative aspects of the sports medicine program will also be covered. Students will apply legal and ethical principles through real-world scenarios in various sports medicine settings. Other career roles in sports medicine will be discussed at the Athletic Trainer takes the injured athlete through the pathway of recovery. Also recommended but required: Health Science 3 or its substitute (Medical Terminology, Project Lead the Way (PLTW) Human Body Systems, Science department Anatomy and Physiology, Advanced Placement (AP) Biology).

Sport Medicine 3

555700CW Unit: 1

Further Certification is actively being sought for SM area. No CIP code has been assigned. Students will have an opportunity to choose their senior level course in work-based learning or through the medical billing or coding certification.

Sports Medicine, Internship, Work-Based Learning Credit

559100CW Unit:1

Grades: 11 – 12

Prerequisite: Successful completion of two Sports Medicine courses 1 and 2 with a grade of 75 or higher plus Basic Life certification.

Recommended Maximum Enrollment: None

Course Description: Sports Medicine Internship, Work-Based Learning is a structured work-based credit bearing course that is taken as a fourth unit in a three-or four-unit CTE completer program. Each work-based learning (credit bearing) course has an assigned CTE course code. The guidelines listed in the CTE Work-Based Learning Implementation Guide must be followed to award one Carnegie unit of credit upon successful completion of the course. This course will not count as the third unit in the three-unit completer pathway.

Hospitality and Tourism

Hospitality and Tourism is designed to prepare students for entry-level employment in the travel and tourism industry. Industry segments will focus on such areas as planning, marketing, management, finance, operations, technical and production skills, technology, human relations, labor issues, community issues, environmental issues, and safety.

Culinary Arts and Baking and Pastry Pathways

Introduction to Culinary Arts (ARHS, FDHS, SHS) 572200CW Unit: 1

Grades: 9 - 10

Prerequisite: None

Recommended Maximum Enrollment: 24

Course Description: Introduction to Culinary Arts Management provides students with an overview of interest, aptitude, and technical skills to provide foundational skills and knowledge for Culinary Arts 1 and/or the food service industry.

Integration of the Family and Consumer Sciences student organization, Family Career and Community Leaders of America (FCCLA) provides leadership and entrepreneurship experiences. Participation in the career & technology organization SkillsUSA provides the students with the opportunity to compete and display professional baking techniques

Culinary Arts Management 1 CP (ARHS, FDHS, SHS) 572000CW Unit: 1
Grades: 10 – 11 (16 years or older by September 1 – due to the use of industrial equipment)

Prerequisite: None

Recommended Maximum Enrollment: 24

Course Description: Culinary Arts Management 1 prepares students for gainful employment and/or entry into postsecondary education in the food production and service industry. Content provides students the opportunity to acquire marketable skills by examining both the industry and its career opportunities. Laboratory experiences simulate commercial food production and service operations. Integration of the Family and Consumer Sciences student organization, Family Career and Community Leaders of America (FCCLA) provides leadership and entrepreneurship experiences. Participation in the career & technology organization SkillsUSA provides the students an opportunity to compete and display professional baking techniques.

CULINARY ARTS 1 CP (DCCTC) 572000CD Units: 2

Grades: 10-12

Course Description: The DCCTC Culinary Arts Program is a fast forward program, allowing students to EARN COMPLETE CERTIFICATION IN 1 YEAR (STUDENTS CAN EARN 4 HIGH SCHOOL CREDITS

IN 1 YEAR BY COMPLETING LEVELS 1 & 2). This course is a Gold Level ProStart Program that gets students ready to enter the constantly growing Hospitality Industry. Students will learn how to make everything from scratch, including biscuits, muffins, yeast breads, pizzas, pastas, cookies, soups, stocks, and sauces. Also, students will learn many different cooking techniques to get you started on a Culinary Career in a fully equipped industrial kitchen. Students will work hands on to learn safety, sanitation and real-world applications that will benefit in their job search. This class is always up, moving and eating and is like no other high school class you

have ever experienced. The program requires a \$20.00 lab fee. A basic food and nutrition course is helpful but NOT required.

Culinary Arts Management 2 CP (ARHS, FDHS, SHS) 572100CW Unit: 1
Grades: 11-12 (16 years or older by September 1 – due to the use of industrial equipment)
Prerequisites: Culinary Arts 1 CP

Recommended Maximum Enrollment: 24

Course Description: Culinary Arts Management 2 is an advanced level course that prepares the serious culinary student for gainful employment and/or entry into postsecondary education. Content provides students the opportunity to acquire marketable skills by examining both the industry and its career options. Students have opportunities to develop skills in workplace settings. Integration of the Family and Consumer Sciences student organization, Family Career and Community Leaders of America (FCCLA) provides leadership and entrepreneurship experiences. Participation in the career & technology organization SkillsUSA provides the students an opportunity to compete and display professional baking techniques.

Culinary Arts 2 CP (DCCTC) 572100CD Units: 2
Grades: 10-12

Prerequisite: Culinary Arts 1 with a grade of 71 or higher

Course Description: The DCCTC Culinary Arts Program is a fast forward program, allowing students to EARN COMPLETER CERTIFICATION IN 1 YEAR (STUDENTS CAN EARN 4 HIGH SCHOOL CREDITS IN 1 YEAR BY COMPLETING LEVELS 1 & 2). This course is a Gold Level ProStart Program that continues from what students learned in Culinary Arts 1. After completion of Culinary Arts 2, students will be given the opportunity to achieve up to 12 college credit hours at The Culinary Institute of Charleston at Trident Technical College. In this course, students will continue their cooking adventure by learning to grill, sauté, deep fry, pan fry, braise, broil, poach, steam, boil and flambé, applying these techniques on steaks, chicken, fish, pork, shrimp and other shellfish. Students will learn to make the proper accompaniments to complete the meal with risottos, pastas, vegetables, and sauces. Proper table service techniques are mastered by serving meals in the class and at school events. Students can gain experience in safety and sanitation and achieve the National ServSafe Employee Level Certification as well as the opportunity to be a National ProStart Completer both of which will be assets in the culinary field. This career field's current salary range in South Carolina is \$8.83 to \$16.79 per hour (www.onetonline.org). The instructor also chooses one student to represent DCCTC at the SkillsUSA culinary arts state level competition. There is a \$20.00 lab fee and students need to keep their jacket and hat from Culinary Arts 1.

Baking and Pastry (ARHS, FDHS, SHS) 5723000CW Units: 2
Grades: 10 – 12 (16 years or older by September 1 – due to the use of industrial equipment)
Prerequisite: Culinary Arts 1 CP

Recommended Maximum Enrollment: 24

Course Description: The DCCTC Baking and Pastry Program is a fast forward program, allowing students to EARN COMPLETER CERTIFICATION IN 1 YEAR (STUDENTS CAN EARN 4 HIGH SCHOOL CREDITS IN 1 YEAR BY COMPLETING CULINARY ARTS 1 & BAKING & PASTRY). This course uses the basic techniques of measuring & baking that the student learned in Culinary 1 to advance their knowledge of the different types of doughs, pies, pastries, cakes, custards and sauces to mention a few. Students will learn to plate and garnish their delectable desserts and baked goods. Students will use formulas to create their baked goods and understand the actions that happen to make the recipe a success. The student will taste most

of the ingredients in their natural state and then taste the ingredient in the finished product to better understand how to create their own recipes when they enter the industry. Students will make, display, and serve desserts for certain events hosted at our school to give them a real-world experience. The instructor also chooses one student to represent DCCTC at the SkillsUSA baking and pastry state level competition. This career field's current salary range in South Carolina is \$8.88 to \$17.10 (www.onetonline.org). There is a \$20.00 lab fee.

Hospitality & Tourism Internship, Work-Based Learning (ARHS, FDHS, SHS) 519000CD

Unit: 1

Grades: 11 -12

Prerequisite: Completion of two (2) CTE courses/credits within a program

Course Description: Hospitality and Tourism work-based course is a structured, stand-alone course that is taken in a CTE classification of Instructional Programs (CIP)-coded program. Each work-based learning (credit bearing) course has an assigned CTE course guide must be followed to award the Carnegie unit of credit upon successful completion of the course.

Hospitality and Tourism, Internship, Work-Based Learning Credit (DCCTC) 519000C

Unit: 1 Grades 11- 12

Prerequisite: Completer of career and technology program at DCCTC in Culinary Arts and instructor recommendation

Course Description: The hospitality and tourism work-based learning course allows students to be placed in a position in the food service industry and receive high school credit and on the job experience. They can use this experience on their resume and can be hired permanently at their placement. This also gives students the opportunity for early enrollment at the Trident Technical College Culinary Institute, which allows them to begin college classes while they are still in high school. Students may also continue working in our culinary arts lab in a Sous Chef (2nd in command) position while performing demonstrations and learning leadership skills. Students should express their interest in enrolling to their instructor and counselor. A \$20 lab fee is required for this course.

Human Services

Cosmetology 1 CP (DCCTC) 615000CD Units: 2
Cosmetology 2 CP (DCCTC) 615100CD Units: 2

Grade: 10-11

Prerequisite for Cosmetology 2: Students must have a grade of 75 or higher in Cosmetology and a minimum of 500 clock hours. Daily attendance is necessary for reaching the required Cosmetology State Board hours. Students are only allowed 5 absences per semester. Daily attendance is necessary for reaching the required Cosmetology State Board hours. Students are only allowed 5 absences per semester.

Course Description: Cosmetology is the scientific study of the hair, nails, and skin. The course is designed to teach the student the basics of how to care for, cut, style, and chemically change the hair. The course also teaches the student the basic care of the skin and nails, which includes application of makeup and nail artistry. The first and second nine weeks are spent in the classroom training, with work being done on mannequins.

Students are required to purchase a cosmetology kit through the school for each year of the program, which is approximately \$195 (\$20 lab fee included/fee is subject to change each year). State ID and Social Security card as well as required fees are due within the first 10 days of enrollment.

Cosmetology 3 CP (DCCTC) 615200CD Units: 2
Cosmetology 4 CP (DCCTC) 615300CD Units: 2

Grades: 11-12

Prerequisite for Cosmetology 3: Cosmetology 2 with a grade average of 75 or higher and a minimum of 500 clock hours.

Prerequisite for Cosmetology 4: Cosmetology 3 with a minimum grade average of 75 or higher and a minimum of 740 clock hour.

Daily attendance is necessary for reaching the required Cosmetology State Board hours. Students are only allowed 5 absences per semester. Completer requirements: 1,000 Cosmetology hours and 540 Academic hours equaling 1,540 hours required and a minimum of 8 units to be a completer.

Course Description: This course is a basic overview of Cosmetology 1 with emphasis on clinical work. Students will do clinical work on mannequins and clients. The clinical work will incorporate hair coloring, hair styling, hair cutting, facials, hair removal, and permanent waving. Cosmetology 1, 2, 3 and 4 are designed to teach and prepare students for the Cosmetology State Board Exam at the end of the senior year. Successful completion of 1,000 training hours and both written and practical portions of the State Board of Cosmetology exam results in State Certification as a Licensed Cosmetologist. Students will be required to purchase a \$170 kit restocking fee (\$20 lab fee included) for this course and are responsible for the cost of the state board exam, which is \$175 (fees are subject to change). Students are also required to have a state picture ID, social security card and required fees within the first 10 days of enrollment in this course. This career field's current salary range in South Carolina is \$8.13 to \$23.00 per hour (www.onetonline.org).

Nail Technology 1CP ((Nail Designs and Technology) (DCCTC) 615401CD Unit: 2
Nail Technology 2 CP (Nail Designs and Technology) (DCCTC) 615501CD Unit: 2
Grades: 11-12

Daily attendance is necessary for reaching the required Cosmetology State Board hours. Students are only allowed 5 absences per semester.

Course Description: This course is designed to prepare students to become licensed nail technologists. Students learn the art and science of nail technology that includes designing nails, adding extensions, acrylics, gels, wraps and dip powder application. This is a one-year course, and upon successful completion of 300 training hours and passing the State Board of Nail Technology written and practical exams, students will receive their Nail Technologist license. This career field's current salary range in South Carolina is \$9.23 to \$25.13 (www.onetonline.org). Students must have a nail technology kit purchased through the school, which is approximately \$170 (includes \$20 lab fee) and is subject to change each year. Students are also responsible for the cost of the state board exam, which is \$175 (fee is subject to change). Students are also required to have a state picture ID and a social security card as well as the required fees within the first 10 days of enrollment in this course.

Human Services Internship, Work-Based Learning Credit (DCCTC) 579000CW Unit: 1
Grade: 12

Prerequisite: Senior and completer of a DCCTC career and technology program in cosmetology or nail technology and instructor recommendation

Course Description: Seniors who have completed a career and technology program at DCCTC and desire work experience in a field related to their completed program or desire to further enhance their skills may enroll in this course. Students should express their interest in enrolling to their instructor and counselor. Students desiring to work in a related field must provide their own transportation to work sites. A \$20 lab fee is required for this course.

Information Technology

Information Technology cluster includes courses and/or programs related to designing, developing, managing, and operating communication and information technology networks and related hardware and software for the recording, storage, transformation, transmission and distribution of voice, video, images, and data including both telecommunications and computing services. Information Technology careers involves the design, development, support, and management of hardware, software, multimedia, and systems integration services. Technological advances and global competition have transformed the nature of work. Tomorrow's jobs will require more knowledge, better skills, and more flexible workers than ever before. Tomorrow's workers must be prepared to change jobs and careers several times.

Fundamentals of Computing (Exploring Computer Science-name change) 502300CW

Unit: 1 Grades: 9 -12 (Preference 9 - 10)

Prerequisite: IT Cluster declared on IGP or Algebra I (or equivalent), and/or teacher recommendation

Recommended Maximum Enrollment: 24

Course Description: Exploring Computer Science introduces students to the field of computer science through an exploration of engaging and accessible topics. Rather than concentrating entirely on learning particular software tools or programming languages, students focus on the conceptual ideas of computing and get an understanding of the tools and languages that might be used to solve problems. The goal of Exploring Computer Science is to develop students' problem solving and critical thinking skills within the context of problems that are relevant to their lives. Students will also be introduced to topics such as interface design, limits of computers, and societal and ethical issues.

Web Page Design and Development

503100CW Unit: 1

Grades: 10 -12

Prerequisite: Keyboarding 5100 or (SCDE State Proficiency Test)

Recommended Maximum Enrollment: 24

Course Description: This course is designed to provide students with the knowledge and skills needed to design and develop websites. Students will attain skills in designing, implementing, and maintaining websites using authoring tools.

Advanced Web Page Design and Development

503300CW Unit: 1

Grades: 11- 12

Prerequisite: Web Page Design and Development 1

Recommended Maximum Enrollment: 24

Course Description: This advanced course is designed to provide students with the knowledge and skills necessary to pursue careers in web design and development. Students will develop skills in advanced HTML and CSS coding, scripting, layout techniques, and other industry-standard practices. In Advanced Web Design and Development, students must be able to edit source code directly rather than using a WYSIWYG editor.

NOTE: Websites created by students in this course are not to be published without following district guidelines. Available Certification: CIW Web Foundations Associate and Adobe Certified Associate.

Information Technology Internship, Work-Based Learning 539000CW Unit: 1

Grades: 11-12

Prerequisite: Completion of two (2) CTE courses/units within a program

Recommended Maximum Enrollment: None

Course Description: The information Technology work-based is a structured, stand-alone course that is taken in a CTE Classification of instructional Programs (CIP)-coded program. Each work-based learning credit (credit bearing) course has an assigned CTE course code. The guidelines listed in the CTE Work-Based Learning Implementation Guide must be followed to award the Carnegie unit of credit upon successful completion of the course.

Advanced Placement Computer Science A (FDHS only) 477100AW Unit: 1

Grades: 9 – 12

Prerequisite: Basic English and Algebra 1

Recommended Maximum Enrollment: None

Course Description: Using the object-oriented programming language Java, students will write both structured and object-based software applications. The emphasis will be placed on creating classes of objects, methods that operate their data, inheritance, and class associates. Topics to be covered include arrays, classes and object-based programming, techniques, searching and sorting algorithms, and an introduction to algorithm analysis. Students who successfully master all requirements of this course should be prepared to take the College Board Advanced Placement Computer Science “A” Exam.

AP Computer Science Principles (FDHS and ARHS) 477500AW Unit: 1

Grades: 9 -12

Prerequisite: Algebra 1

Recommended Maximum Enrollment: None

Course Description: This course introduces students to the central ideas of computer science, inviting student to develop the computational thinking vital for success across multiple disciplines. The course is unique in its focus on fostering students to be creative and encouraging students to apply creative processes when developing computational artifacts. Students design and implement innovative solutions using an iterative process like what artists, writers, computer scientists, and engineers use to bring ideas to life. Students who successfully master all requirements of this course should be prepared to take the College Board Advanced Placement Computer Science Principles Exam.

Informational Technology Dual Credit Courses

Dorchester School District Two has partnered with ECPI University to offer dual credit opportunities to our students. Completion of coursework may result in students having the following professional opportunities upon graduation: Routing Specialist, Networking Specialist, and Electronics Sales Representative. If students choose to continue and receive additional training by earning a two-year degree, they may have the following professional opportunities: Telecommunications Manager, LAN Administrator, and Network Technician. By completing a four-year degree or higher students may have the following professional opportunities: Telecommunications Engineer, Network Administrator, Network Systems Engineer, and Systems Analyst.

School counselors encourage students who are interested in the Information Technology career cluster of study to take advantage of accessing coursework in this field.

Information Technology (Nationally Recognized)

Major: Networking Systems – (NS)

Major: Information Support and Services (ISS)

Major: Programming and Software Development (PSD)

Careers in Network Systems involve network analysis, planning, and implementation, including design, installation, maintenance, and management of network systems. Individuals in Networking Systems design and manage sets of computers called network systems that are connected to each other or to one main computer.

They also develop and install network software operating system, and hardware. Available certifications include:

Introduction to Operating Systems **532000EW (CIS106) ECPI** **Unit: 1**
Grades: 10 – 12

Course Description: This course introduces the major hardware/software components of computer-based operating systems. (NS, ISS, and PSD)

Network Security Concepts **676200EW (CIS 212) ECPI** **Unit: 1**
Grades: 10 -12

Prerequisite: CIS150

Course Description: The course conducts an overview of networking, network communications, network security, and basic troubleshooting methodologies to identify and resolve common network connectivity problems, common vulnerabilities, and network performance problems. (NS)

Networking 1 **675900EW (CIS 150) ECPI** **Unit: 1**
Grades: 10 - 12

Course Description: This course focuses on an introduction to networking technology and its implementation. The course conducts an in-depth examination of microcomputer setup and troubleshooting skills, networking implementation, networking troubleshooting, basic security implementation, basic security troubleshooting, interpersonal communication skills and personal management, introduction to topologies for different types of networks, familiarity of connectivity devices, and various LAN and WAN services. (NS)

UNIX Administration **676100EW (CIS 206) ECPI** **Unit: 1**

Grades: 10 - 12

Course Description: This course provides the student with knowledge and understanding of UNIX using a generic platform operating system. Topics covered include operating system architecture, system customization, and mounting, unmounting, and basic network administration including administering user accounts, problems diagnostics, system commands, and utilities. (NS)

Networking 2 **676000EW (CIS- 225) ECPI** **Unit: 1**

Grades: 10 - 12

Prerequisite: CIS150

Course Description: The course conducts an overview of networking, network communications, network security, and basic troubleshooting methodologies to identify and resolve common network connectivity problems, common vulnerabilities, and network performance problems. (NS)

Software Logic and Design **675000EW (CIS 121) ECPI** **Unit: 1**

Grades: 10 -12

Course Description: This course introduces students to programming fundamentals, environments, and planning tools. Topics include introductions to computer architecture, code translators, primitive data types, data organization, and flowcharting. Emphasis is placed on modeling processes using structured, procedural logic. (ISS and PSD)

Cloud Computing Concepts **675100EW (CIS-142) ECPI** **Unit: 1**

Grades: 10 - 12

Course Description: This course introduces cloud computing architecture and security concepts. Students will learn about the benefits of cloud computing, cloud characteristics, cloud models and solutions along with deployment methods. Students will also gain an understanding of hardware, storage, thin clients, and virtualization in the cloud. Students will implement cloud security fundamentals using virtualization security management. Upon successful course completion, students will understand current cloud computing technologies and environments. (ISS)

Computer Configuration **675200EW (EET-250) ECPI** **Unit: 1**

Grades: 10 - 12

Course Description: This course provides a basic understanding of the current state of computer organization. Students will learn about memory types, basic CPU architecture, memory access, supporting bus systems and I/O ports. Students are introduced to detailed procedures of installation, configuration, and upgrade of personal computers. Upon successful course completion, students will be able to troubleshoot, maintain and repair PCs. (ISS)

Computer Configuration 2 675300EW (EET-251) ECPI Unit: 1 Grades: 10 - 12

Course Description: This course covers computer peripheral devices. Students will learn about the operation, installation, configuration, maintenance, and repair of these devices. Upon successful course completion, students will be able to address safety and environmental concerns as they relate to peripheral devices. (ISS)

Law, Public Safety & Security

Emergency & Fire Management Services 1 (FIREFIGHTING) CP (DDCTC) 651200CD
Units: 2 Grades: 10-12

Course Description: This course provides the basic skills necessary to get Firefighting personnel operational and performing the duties to save lives and property. Students will learn firefighter orientation and safety; fire behavior; portable extinguishers; protective equipment; search and rescue; ladders, fire hose, ropes, and knots; building construction; and fire prevention and public education. This course satisfies the intent of the IFSTA (International Fire Service Training Association) standards for basic Firefighting. Successful completion of written and performance testing is required. Students in this course will have the opportunity to participate in the AINautics drone pilot training class. Upon successful completion of this training and passing of the national exam, students can obtain the Federal Aviation Authority (FAA) Remote Drone Pilot license. A \$20 lab fee is required for this course.

Emergency & Fire Management Services 2 (FIREFIGHTING) CP (DCCTC) 651300CD
Units: 2 Grades: 10-12

Prerequisite: Emergency & Fire Management Services 1 with a grade of 71 or higher

Course Description: This course provides students with the knowledge and skills to meet the National Firefighter Standards of NFPA 1001. Subjects include fire streams, interior fire control, forcible entry, ventilation, salvage, overhaul, water supply, wild land firefighting and communications. Successful completion of written and performance testing is required. This career field's current salary range in South Carolina is \$10.45 to \$25.28 per hour (www.onetonline.org). A \$20 lab fee is required for this course.

Law Enforcement I CP (DCCTC) 651000CD Units: 2
Grades: 10-11

Course Description: Law Enforcement I is an introductory level course designed to teach entry level requirements of a police officer. Instruction will include hands-on police drills, demonstration, and some lecture. Students will learn the duties and responsibilities of the police, court, and corrections. Included in this course are the historical development of the system and the study of landmark Supreme Court decisions that impact criminal justice. Students will participate in demonstrations of search and arrest techniques, Finger printing and gain an understanding of forensic science and how it is used in the field, along with investigative procedures used to solve crimes. Students will be required to wear a uniform and participate in physical exercises. Students in this course will have the opportunity to participate in the AINautics drone pilot training class. Upon successful completion of this training and passing of the national exam, students can obtain the Federal Aviation Authority (FAA) Remote Drone Pilot license. A \$20 lab fee is required for this course.

Law Enforcement 2 CP (DCCTC) 651100CD Units: 2
Grades: 11-12

Prerequisite: Law Enforcement 1 with a grade of 71 or higher

Course Description: Law Enforcement 2 is a continuation of Law enforcement 1, focusing on more advanced police officer techniques. Instruction will include more hands-on drills, demonstrations, and some lectures. Students will learn report writing, felony traffic stops, testifying in court and many more police scenarios. Students will have the opportunity to become CPR certified in this course. Guest speakers from the law enforcement field will speak to

students about their professions. Students will be required to wear a uniform and participate in physical exercise. This career field's current salary range in South Carolina is \$15.04 to \$28.59 per hour (www.onetonline.org). A \$20 lab fee is required for this course.

Law, Public Safety, Corrections and Security Internship, Work Based Learning (DCCTC)

659000CW Unit: 1

Grades 11- 12

Prerequisite: Completer of career and technology program at DCCTC in Emergency and Fire Management Services or Law Enforcement and instructor recommendation

Course Description: Students who have completed a career and technology program at DCCTC and desire work experience in a field related to emergency and fire management services or law enforcement can choose to further enhance their skills by enrolling in our work-based learning course. Students will learn daily duties and participate in in-house training and public service events. Students should express their interest in enrolling to their instructor and counselor. Students desiring to work in a related field must provide their own transportation to work sites. Students will have the opportunity to join the Dorchester Dust Devils, DCCTC's clay sports team. A \$20 lab fee is required for this course.

Manufacturing

Many Manufacturing jobs are so specialized, they require high levels of skills and training. Manufacturing is a highly competitive industry that continues to grow in South Carolina.

The standards listed are intended to serve as guides to assist teachers and administrators in providing an instructional program that is current and relevant. The Manufacturing skill standards address what a worker needs to know and be able to do to contribute to a safe, productive, and effective work environment. Students will be properly prepared for their careers when the standards are integrated with quality instructional techniques. The standards provide a secure foundation for future training in the student's career.

Basic Technical Knowledge, Skills Safety and Soft Skills

Machine Technology 1 CP (DCCTC) 623000CD Units: 2
Grades 10-12

Course Description: This course provides classroom instruction and lab experiences related to metalworking. It focuses on the operation of equipment such as the lathe, milling machine, grinders, drilling machines, precision measuring instruments and hand tools. Blueprint reading and math are important parts of the course. Students who register for this course should enjoy working with machines and making metal projects. A \$20 lab fee is required for this course.

Machine Technology 2 CP (DCCTC) 623100CD Units: 2
Grades:10-12

Prerequisite: Machine Technology 1 with a grade of 71 or above

Course Description: This course includes advanced instruction machining metal. The course focuses on milling machines, boring and drilling, the use of vertical and horizontal boring and drilling machines, basic study of CNC equipment and CNC code, job seeking, public relations and manufacturing facilities. Students may be eligible to participate in cooperative work experiences or apprenticeships, which combine career and technology training with supervised work experience in business and industry. This career field's current salary range in South Carolina is \$13.29 to \$26.39 per hour (www.onetonline.org). A \$20 lab fee is required for this course.

Mechatronics Integrated Technologies Pathway

Mechatronics 1-Electrical Components/Industrial Safety

(1st Semester – double blocked)

Mechatronics 2-Mechanical Components Electric Drives/Hand and Power Tool Operations

(2nd Semester– double blocked)

Mechatronics 3-Electro Pneumatics and Hydraulics

(1st. Semester – double blocked)

Mechatronics 4-Digital Fundamentals and Programmable Controllers

(2nd Semester – double blocked)

Grades: 9 – 12

621000, 621100, 621200, 621300

Unit: 1 (each)**Prerequisite: Contren® Core Modules, Introduction to Manufacturing, Courses are offered in sequential order****Recommended Maximum Enrollment: 24**

Course description: Mechatronics is a new interdisciplinary field involving electrical, mechanical, instrumentation, electronics, robotics/automation, computer components, and control systems. The program prepares students who enjoy working with their hands as well as understanding simple to complex systems. Mechatronics is a dynamic field that changes daily with the rapid improvements in technology and computer systems. Systems are networked to meet the demands of automated manufacturing processes, and technicians are trained to meet necessary entry-level industrial skills and entry into a postsecondary program at a technical college. Dual credit may be available through some SC technical colleges. Work Readiness Skills are listed in appendix A.

Provided a student takes Introduction to Construction and scores 70% on all assessments (00101-8-15), he or she does not have to repeat these modules in HVAC, Building Construction, Cabinetmaking, Carpentry, Electricity, Masonry, Mechatronics, Plumbing, and Welding

Manufacturing Internship, Work-Based Credit **649000CD** **Unit: 1****Grade Level: 11 - 12****Prerequisite: Completion of two (2) CTE courses within a program****Recommended Maximum Enrollment: None**

Course Description: Manufacturing work-based course is a structured, stand-alone course that is taken in a CTE Classification of Instructional Programs (CIP)-coded program. Each work-based learning (credit bearing) course has an assigned CTE course code. The guidelines listed in the CTE Work-Based Learning Implementation Guide must be followed in order to award the Carnegie unit of credit upon successful completion of the course.

Welding Technology 1 CP (DCCTC) **634000CD** **Units: 2****Grades: 10-12****Sites DCCTC Dorchester (Fall semester only) & DCCTC Trolley Road Prerequisite: Foundations and Structure of Algebra**

Course Description: Welders join metals using intense heat produced by electric arcs and special gases. Parts are fabricated and welded to produce structures such as buildings, ships, and bridges. This course will help students learn basic skills in the art of shielded metal arc as well as oxyacetylene cutting. Measurement and layout procedures are introduced along with proper tool usage and equipment safety. Students taking this course should enjoy physical activity, being creative, and doing detailed work. A \$20 lab fee is required for this course.

Welding Technology 2 CP (DCCTC) **634100CD** **Units: 2****Grades: 10-12****Prerequisite: Welding Technology 1 with a grade of 71 or higher**

Course Description: Students completing this second semester welding program will have sufficient skills to gain entry-level employment in the job market. These skills include advanced techniques in shielded metal arc, v-groove, gas metal arc, and flux core arc welding, oxyacetylene cutting, plasma arc cutting, basic blueprint reading, identification of metal types, and layout and fabrication procedures. This career field's current salary range in South Carolina is \$13.86 to \$29.47 per hour (www.onetonline.org). A \$20 lab fee is required for this course.

Welding Technology 3 CP (DCCTC) 634200CD Units: 2

Grade: 12

Prerequisite: Welding Technology 2 (grade of 85 or higher and instructor recommendation)

Course Description: Welding 3 requires that the student must have passed Level 2 with an average of 85 and have the instructor's recommendation. Students will further their welding skills in v-groove welds in all positions and fabrication of small projects. Projects will be awarded per instructor's discretion and student's skills level. Student's instruction will be geared toward on the job placement in welding. The student may be eligible for DCCTC's LIFE program (Learners in Field Experiences). A \$20 lab fee is required for this course.

Welding Technology 4 CP (DCCTC) 634300CD Units: 2

Grade: 12

Prerequisite: Welding Technology 3 (grade of 85 or higher and instructor recommendation)

Course Description: The Welding 4 students will focus on fabrication and job placement. The student will sharpen their welding skills, employability skills, communication, and soft skills as well as visit job sites, send applications, and prepare for interviews in preparation for a job through the LIFE program. Students must have ID and dependable transportation as well as their own welding personal protective equipment (PPE). The student may be eligible for the LIFE program. A \$20 lab fee is required for this course.

Manufacturing Internship (DCCTC) 49000CW Unit: 1

Grade: 12

Prerequisites: Senior and completer of a Welding career and technology program at DCCTC and instructor recommendation

Course Description: Seniors who have completed a career and technology program at DCCTC and desire work experience in a field related to their completed program or desire to further enhance their skills may enroll in a work-based learning (WBL) course. Students should express their interest in enrolling to their instructor and counselor. Students desiring to work in a related field must provide their own transportation to work sites.

Manufacturing Internship, Work-Based Credit (ARHS, FDHS, SHS) 49000CW Unit: 1

Grade: 11-12

Prerequisites: Senior and completer of a Welding career and technology program at DCCTC and instructor recommendation

Course Description: Seniors who have completed a career and technology program at DCCTC and desire work experience in a field related to their completed program or desire to further enhance their skills may enroll in a work-based learning (WBL) course. Students should express their interest in enrolling to their instructor and counselor. Students desiring to work in a related field must provide their own transportation to work sites.

Marketing

The Marketing cluster includes courses and/or programs related to planning, managing, and performing wholesaling and retailing services and related marketing and distribution support services including merchandise/product management and promotion.

There are thousands of challenging educational and training opportunities within the high-skilled world of Marketing. Learners need a solid background in communication, math, and technical skills. Education and training can be obtained in high school, technical colleges, and four-year colleges and universities. Learners participate in relevant education opportunities framed in the context of the cluster. They gain knowledge and skills through coordinated workplace learning experiences such as site visits, job shadowing, and internships. According to the latest statistics, there are 16 million jobs in sales and related occupations. Advertising, marketing, promotions, public relations and sales managers hold more than 700,000 jobs. Employment opportunities for retail salespeople are expected to be good. Individuals with a college degree and/or computer skills will be sought for managerial positions in sales, logistics, management information systems, marketing, and e-marketing. A background in marketing will provide transferable skills and knowledge for other fields of study as well.

Marketing

542100CW Unit: 1

Grades: 9-12

Prerequisite: None

Recommended Maximum Enrollment:

Course Description: Marketing introduces students to the world of marketing. Students will learn about marketing fundamentals, economics, and the Marketing functions of price planning and strategies, promotion, selling, and product distribution. Creativity, problem-solving, research, teamwork, communication, and critical thinking skills are stressed. A coherent, comprehensive marketing plan will be the cumulative project which will demonstrate skills marketing students learned in the course. This is the fundamental course in all the Marketing programs and should be taken before specialized marketing courses.

Digital Marketing

542200CW Unit: 1

Grades: 11-12

Prerequisite: Marketing

Recommended Maximum Enrollment: 24

Course Description: Digital Media Marketing is an overview of techniques in digital marketing media, including non-linear editing introducing students to the primary feature set and basic interface of industry standard editing software. Students will plan and execute a storyboard for producing their final product, to include podcasts, DVDs, video blogs, and webcasts. Students learn to demonstrate basic digital video camera technique, digital sound, and lighting. In addition, students will perform basic editing functions while familiarizing themselves with the software's user interface. Topics include basic setup, adjusting and customizing preferences and settings, capturing video and audio, various editing and trimming techniques, audio editing and audio creation, finishing and final output.

Sports and Entertainment Management

542600CW Unit: 1

Grades: 11, 12

Recommended Maximum Enrollment: 24

Prerequisite: Marketing

Course Description: Students will apply concepts learned in Sports and Entertainment Marketing and study the key concepts in management and managerial principles as related to the sports and entertainment industry. Topics that will be addressed include leadership, finance, product management, people management, information management, legal and ethical issues, customer relations, sales management, change management, and career development.

Marketing Internship, Work-based Credit

509100CW Unit: 1

Grades: 11, 12

Prerequisite: Completion of two (2) CTE courses/unites within a program

Course Description: Marketing Internship is a structured work-based credit bearing course that is taken as a fourth unit in a three- or four-unit CTE completer program. Each work-based learning (credit bearing) course has an assigned CTE course code. The guidelines listed in the CTE Work- Based Learning Implementation Guide must be followed to award one Carnegie unit of credit upon successful completion of the course. This course **will not** count as the third unit in the three-unit completer pathway.

Science, Technology, Engineering, and Mathematics

Project Lead the Way (PLTW) Gateway to Technology (GTT) courses feature a project-based curriculum designed to challenge and engage the natural curiosity and imagination of middle school students. The ten courses listed below envision, design and test ideas with the same advanced modeling software used by companies like Lockheed Martin, Intel and Sprint. The knowledge that students gain and the skills they build from the GTT courses create a strong foundation for further Science, Technology, Engineering, and Mathematics (STEM) learning in high school and beyond.

Project Lead the Way (PLTW) Engineering Pathway

PLTW Introduction to Engineering Design, Level 1 (IED) **609510HW** **Unit: 1**

Grades: 9 -12

Prerequisites: None

Recommended Maximum Enrollment: 24

Course Description: Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software and document their work in an engineering notebook.

PLTW Principles of Engineering, Level 2 (POE) **605000HW** **Unit: 1**

Grades: 10 -12

Prerequisites: Introduction to Engineering Design (IED)

Recommended Maximum Enrollment: 24

Course Description: Through problems that engage and challenge students, they explore a broad range of engineering topics including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

PLTW Aerospace Engineering (AE) **605600HW** **Unit: 1**

Grades: 10 -12

Prerequisites: Introduction to Engineering Design (IED), Principles of Engineering (POE) or Teacher Recommendation

Recommended Maximum Enrollment: 24

Course Description: This PLTW course propels students' learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts to life by designing an airfoil, propulsion system, and rockets. They learn basic orbital mechanics using industry-standard software and explore robot systems through projects such as remotely operated vehicles.

PLTW- Engineering Essentials (EE) **614400HW** **Unit: 1**

Grades: 9-10

Recommended Maximum Enrollment: 24

Prerequisite: None

Course Description: Engineering Essentials is a brand-new course designed as a first-exposure experience to inspire students of all backgrounds to explore the breadth of engineering-related career opportunities. Throughout the course, students explore global engineering challenges and

sustainability goals, the impact of engineering, and the variety of career paths available to them. Engineering Essentials is geared toward a first-year engineering high school student.

PLTW Environmental Sustainability (ES) 605703HW Unit: 1
Grades: 10 -12

Prerequisites: Introduction to Engineering Design (IED), Principles of Engineering (POE) or Teacher Recommendation

Recommended Maximum Enrollment: 24

Course Description: This PLTW course develops students' thinking skills and prepares them for emerging careers through topics such as genetic engineering, biofuels, and bio manufacturing.

PLTW Civil Engineering and Architecture, Level 4 (CEA) 605800HW Unit: 1
Grades: 10 -12

Prerequisites: Introduction to Engineering Design (IED), Principles of Engineering (POE) or Teacher Recommendation

Recommended Maximum Enrollment: 24

Course Description: Students learn important aspects of building and site design and development, applying math, science, and standard engineering practices to design both residential and commercial projects. They document designs using 3D architecture design software. Some students have seen these designs come to life through partnerships with local housing organizations.

PLTW Digital Electronics, Level 3 (DE) 605200HW Unit: 1
Grades: 10 -12

Prerequisites: Introduction to Engineering Design, Principles of Engineering or Teacher Recommendation

Recommended Maximum Enrollment: 24

Course Description: From smart phones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry including logic gates, integrated circuits, and programmable logic devices.

PLTW Engineering Design and Development (EDD) - Capstone Course 605400HW Unit: 1
Grades: 11-12

Prerequisites: Introduction to Engineering Design, Principles of Engineering or Teacher Recommendation

Recommended Maximum Enrollment: 24

Course Description: The knowledge and skills student acquire on the “Pathway to Engineering” come together in EDD as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards. Completing EDD prepares students to be ready to take on any post-secondary program or career.

PLTW Pre-Engineering, Internship, Work-Based Learning Credit 609000HW Unit: 1
Grades: 11-12

Prerequisite: Completion of two (2) CTE courses/units within a program Science, Technology, Engineering, and Mathematics

Recommended Maximum Enrollment: NA

Course Description: Mathematics work-based course. Each work-based learning (credit bearing) course has an assigned CTE course code. The guidelines listed in the CTE Work-Based Learning Implementation Guide must be followed in order to award the Carnegie unit of credit upon successful completion of the course.

Transportation, Distribution, & Logistics

Automotive Collision Repair 1 CP (DCCTC)

602000CD Units: 2

Grades: 10-12

Course Description: This course is designed to instruct students in the repair and refinishing with some restoration of today's vehicles using specialized tools and equipment. Areas of study will include automotive construction and restoration, body shop operations, safety, automotive tools, and equipment, refinishing and customizing preparations, simplified metal straightening and repairs, abrasives, automotive paints, and paint applications equipment. Students will also be trained in the process of powder coating.

Students interested in this field should enjoy the challenge of working with their hands to repair, remodel and customize automobiles and trucks. Students in this course will have the opportunity to participate in the AINautics drone pilot training class. Upon successful completion of this training and passing of the national exam, students can obtain the Federal Aviation Authority (FAA) Remote Drone Pilot license. A \$20 lab fee is required for this course.

Automotive Collision Repair 2 CP (DCCTC)

602100CD Unit: 2

Grades: 10-12

Prerequisite: Automotive Collision Repair 1 with a grade of 71 or higher

Course Description: Students in the second year will enhance their abilities to repair and customize from Auto Collision 1. They will "MIG" weld, use a plasma cutting torch, plastic welding and use of fiberglass, operate a unitized bench repair system, operate a downdraft paint booth, and refinish a vehicle using computerized paint mixing equipment. The student will use the latest in base/clear and urethane refinishing systems and will perform powder coating on various metals. The student will develop the attitudes, knowledge, and skills required in today's workplace. This career field's current salary range in South Carolina is \$10.42 to \$34.48 per hour (www.onetonline.org). A \$20 lab fee is required for this course.

Automotive Collision Repair 3 CP (DCCTC)

602200CD Units: 2

Grades: 11-12

Prerequisite: Automotive Collision Repair 2 with a grade of 80 or higher

Course Description: In Automotive Collision Repair 3, students who have completed Auto Collision 2 are able to be placed on a job with a company in the auto collision industry under an apprentice status. Students receive credit for the class by working in an auto collision shop for a minimum of 3 hours per day. If a job is not available, students will work with the instructor as a class apprentice allowing students to help with setting up projects and assisting with Level 1 and 2 students. A \$20 lab fee is required for this course.

Automotive Collision Repair 4 CP (DCCTC)

602300CD Units: 2

Grades: 11-12

Prerequisite: Automotive Collision Repair 3

Course Description: In Level 4, students who have completed Auto Collision 3 are able to be placed on a job with a company in the auto collision industry under an apprentice status. Students receive credit by working in an auto collision shop for a minimum of three hours per day and will utilize their skills to do body repairs and paint repairs. If a job is not available, students will work at DCCTC with the instructor as a class apprentice. These students will also assist the instructor in managing the students and be involved with more in-depth projects. A \$20 lab fee is required for this course.

Automotive Technology 1 CP (DCCTC)**603000CD Units: 2****Grades: 10-12**

Course Description: This course provides instruction in the components, systems, and repairs related to maintenance and light repairs on modern automobiles. The students learn to identify parts, explain system operations, and perform complete common service operations on braking systems, steering and suspension systems, and engine and transmission systems. Upon successful completion of all course objectives, the student should be qualified for an entry-level position in an automotive quick service business where minimal training and experience are required, or the continuation of training by enrollment in Automotive Technology 2. It is strongly recommended that the students have a valid driver's license for this class. Students in this course will have the opportunity to participate in the AINautics drone pilot training class. Upon successful completion of this training and passing of the national exam, students can obtain the Federal Aviation Authority (FAA) Remote Drone Pilot license. A \$20 lab fee is required for this course.

Automotive Technology 2 CP (DCCTC)**603100CD Units: 2****Grades: 10-12**

Prerequisite: Automotive Technology 1 with a grade of 75 or higher and teacher recommendation

Course Description: This course refines skills in areas including brakes and MLR (Maintenance and Light Repair). Working closely with the Automotive Service Excellence (A.S.E.) standards, second semester students receive intense training in these subjects. This also offers students a greater chance in passing the A.S.E. test (along with 1-year work experience) which most of the automotive industry now requires. The students will have access to tools, equipment, and information on today's vehicles. Without direct supervision, students will be able to perform course objectives using logic and problem-solving skills with emphasis on safety and proper techniques. Upon successful completion of all course objectives, the student should be able to secure employment in an entry level position in an automotive garage, new car dealership, or continue further education in a post-secondary automotive program or factory school. This career field's current salary range in South Carolina is \$10.86 to \$29.65 per hour (www.onetonline.org). A \$20 lab fee is required for this course.

Automotive Technology 3 CP (DCCTC)**603200CD Units: 2****Grades: 10-12**

Prerequisite: Automotive Technology 2 with a grade of 75 or higher and teacher recommendation

Course Description: The Automotive Technology program provides technical skill proficiency and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills and occupation-specific skills, and knowledge of all aspects of this career cluster. The content includes but is not limited to broad, transferable skills and stresses understanding and demonstration of the following elements of the automotive industry: planning, management, finance, technical and product skills, underlying principles of technology, community issues and health, safety, and environmental issues. This program also includes a work-based component depending on job availability. A \$20 lab fee is required for this course.

Automotive Technology 4 CP (DCCTC)**603300CD Units: 2****Grades: 11-12****Prerequisite: Automotive Technology 3 with a grade of 75 or higher and teacher recommendation**

Course Description: This course will continue with the skills and competencies learned in Automotive Technology 3 with more emphasis placed on work-based learning. A \$20 lab fee is required for this course.

Diesel Engine Technology 1**631000CD Units: 2****Grades: 10-11**

Course Description: The Diesel Technology 1 program provides a broad foundation in the diesel repair field by preparing students for entry level positions in the field of heavy-duty diesel vehicle repair. Students gain skills in engine repair, fuel supply and management, suspension and brakes, hydraulics systems operation, and lighting and instrumentation. Students learn the use of typical technician hand tools and gauges and how to accurately measure critical engine parts. Students will learn truck preventative maintenance tasks as well as exposure to all other technical areas of the vehicle. Shop safety is emphasized and stressed. Students entering this program should exhibit mechanical aptitude, the ability to read and follow instructions as outlined in service repair manuals and enjoy precision work and problem solving. Students in this course will have the opportunity to participate in the AINautics drone pilot training class. Upon successful completion of this training and passing of the national exam, students can obtain the Federal Aviation Authority (FAA) Remote Drone Pilot license. A \$20 lab fee is required for this course.

Diesel Engine Technology 2 CP (DCCTC)**631100CD Units: 2****Grades: 11-12****Prerequisite: Diesel Technology 1 or Automotive Technology 1 with a grade of 71 or higher**

Course Description: In this course, students learn the function of engine components and principles of operation of a medium duty V8 diesel engine. They completely disassemble, measure, and inspect critical engine wear parts, reassemble, start and monitor running engine performance parameters. Students will learn how to perform engine diagnostics. Students are challenged with more individual lab activities regarding vehicle preventative maintenance, transmission, steering, suspension, and brake systems. Shop safety is emphasized and stressed. This course is designed for students who want to pursue a career in the diesel technology industries.

This career field's current salary range in South Carolina is \$14.75 to \$30.88 per hour (www.onetonline.org). Students who are or will be 18 by spring semester of their senior year are eligible to take the Class A Commercial Driver's License (CDL) training at DCCTC leading to permit testing through the Department of Transportation. Upon obtaining the CDL permit, student may then enroll at Orangeburg-Calhoun Technical College to complete their CDL license. On average, having a Class A CDL license will increase the hourly rate an additional \$3.00 - \$4.00 per hour. A \$20 lab fee is required for this course.

Transportation, Distribution and Logistics Internship (DCCTC) 679000CW Unit: 1

Grade: 12

Prerequisites: Senior and completer of a DCCTC career and technology program in Auto Technology, Auto Collision, or Diesel Technology with a grade of 80 or higher and instructor recommendation

Course Description: Seniors who have completed a career and technology program at DCCTC and desire work experience in a field related to their completed program or desire to further enhance their skills may enroll in a work-based learning (WBL) course. Students should express their interest in enrolling to their instructor and counselor. Students desiring to work in a related field must provide their own transportation to work sites. A \$20 lab fee is required for this course.

CTE Student Organizations

Career and Technical Student Organizations (CTSO) develop, in students, essential skills for success such as learning, thinking, communication, technology, and interpersonal skills. They help students gain a positive image through competitive skills events, leadership development, and service-learning projects. Students with exposure to CTOS serve their communities and nation and gain a competitive edge in the workforce.

The National FFA Organization Agriculture, Food, and Natural Resources

"It's definitely not your father's FFA" is a recurring theme for the largest Career and Technical Student Organization in South Carolina. Over 4500 students take advantage of contests that test skills ranging from Equine Science to Floriculture. Students can seek leadership positions in the FFA well into their postsecondary years and often do so at Clemson University, home of SC FFA. Competitions are held yearly statewide with the culminating event the summer conference in June.

Future Business Leaders of America (FBLA) Business, Management, and Administration

FBLA Business competencies are demonstrated through skill and leadership events sponsored by SC FBLA. As the second largest Career and Technical Student Organization in South Carolina, FBLA is represented in comprehensive high schools and technology centers across South Carolina and serves over 2000 members. The state association sponsors district and state level events that for many years have produced top ten national winners. The South Carolina association has also produced national leaders in FBLA such as the national treasurer in 1996-1997 and the national president in 2000-2001 and 2019-2020.

Business Professionals of America (BPA) Business Management and Administration

The mission of Business Professionals of America is to contribute to the preparation of a world-class workforce through the advancement of leadership, citizenship, academic, and technological skills and to help students pursue careers in business management, office administration, information technology and other related career fields. <https://bpa.org/>

Family, Career and Community Leaders of America, Inc. (FCCLA) Human Services Hospitality & Tourism Education & Training Arts, AV Technology, and Communications Science, Technology, Engineering, and Mathematics

Because South Carolinians view the family and nutrition as fundamentals to the survival of the state and nation, it is no small wonder that SC FCCLA has the support of secondary schools and culinary art institutions. The organization was introduced to the state in the early 1900's and continues to support curriculum in the Family and Consumer sciences. State advisors and officers coordinate the yearly culinary arts competitions and leadership events in SC FCCLA.

Educators Rising

Education (Teaching and Related Education Careers)

Educators Rising is transforming how America develops aspiring teachers. Starting with high school students, Educators Rising provides passionate young people with hands-on teaching experience, sustains their interest in the profession, and helps them cultivate the skills they need to be successful educators. The result is a pipeline of accomplished teachers who are positioned to make a lasting difference — not only in the lives of their students, but also in the field of teaching more broadly. Every teacher should enter the profession with the necessary skills. Educators Rising is a powerful way to help communities grow the next generation of well-prepared teachers.

FIRST South Carolina

Information Technology

Science, Technology, Engineering and Mathematics (STEM)

FIRST South Carolina (dba South Carolina FIRST LEGO League & Robotics Education, Inc) supports the development of future scientists and engineers through robotics and STEM (Science, Technology, Engineering, and Mathematics) education. First is the Affiliate Partner in South Carolina for *FIRST* LEGO League.

First South Carolina works with South Carolina school districts, individual schools, teachers, parents, and community groups to provide support needed to effectively and provocatively teach K-12 STEM through the implementation of *FIRST* programs. First engages in education through professional development, enrichment activities for students, and public advocacy – all designed to engage and inspire students in STEM fields. <https://www.firstsouthcarolina.org>

Health Occupations Students of America (HOSA)

Health Science

The health care profession continues to provide professional development for those hands that care for the nation's populace. In South Carolina, HOSA is dedicated to providing learning experiences for those students who have interest in the health occupations. With membership at the secondary schools, career centers, and postsecondary institutions, SC HOSA includes five regions that serve a membership of over 1500 students, teachers, and administrators. Hospital administrators, faculty, and other business partners comprise the state executive council.

DECA

Marketing

An Association of Marketing Students supports the Marketing Education curriculum. Students enjoy competitions grounded in marketing theory and application. The association sponsors 36 leadership and skill competitions ranging from DECA Quiz Bowl to Marketing Research Event with competitors from all over the state. The DECA association in South Carolina has over 1900 members, and state winners continuously taking honors in national competitions. <https://www.deca.org/>

National Society of Black Engineers (NSBE)

Science, Technology, engineering, and Mathematics (STEM)

Information Technology

Throughout its history, NSBE has had an incredible journey of successes and has been supported by the likes of Shirley Chisolm, the first Black woman to run for President of the United States in 1979, and launching its first international chapter in London, England in 1992. It has grown from six (6)

founding members to over 30,000 at its height, and from one (1) chapter to more than 790 chapters. As the guiding principles suggest and as the logo symbolizes, then to now, NSBE members continue to have a burning desire (flame) to achieve engineering excellence and have a striking impact (lightning bolts) on society and industry for generations to come (torch). <https://www.nsbe.org/>

Skills USA

Architecture and Construction

Arts, AV Technology, and Communications

Manufacturing

Transportation, Distribution, and Logistics

SkillsUSA is a national membership association serving high school, college and middle school students who are preparing for careers in trade, technical, skilled service occupations, including health occupations. SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. SkillsUSA helps each student excel. (www.skillsusa.org or www.scskillsusa.org)

In South Carolina, Skills USA coordinates state competitions that support the curriculum of all 16 Career Clusters in the National Career Clusters Framework. Over 70 events allow students to demonstrate skills and competencies in such areas as welding auto mechanics, cosmetology, and computer-assisted drafting. The South Carolina association enjoys the support of business partners that host state and local competitions by supplying necessary materials and scholarships.

Technology Student Association (TSA)

Scientific Research and Engineering

The South Carolina Technology Student Association (SCTSA) is for all students that are interested in STEM. SCTSA chapters prepare students to be successful inventors, designers, creative problem solvers, responsible citizens and leaders in a technological society! The mission of the Technology Student Association is to prepare its membership for the challenges of a dynamic world by promoting technological literacy, leadership, and problem solving skills, resulting in personal growth and opportunities. There are over 70 different competitions from where students can compete with others. There is something for everyone. Some of the competitions include website design, dragster design, biotechnology and more! Students that get through the State Conference are able to move to the National Conference. (www.tsaweb.org or www.southcarolinatsa.org)

VEX Robotics

Information Technology

Science, Technology, Engineering, and Mathematics (STEM)

Robotics is not only the future, it is also the present. By familiarizing students with programming, sensors, and automation, they hone critical computational thinking skills needed to succeed in both the 21st century's workforce and in everyday life. Beyond science and engineering principles, VEX Robotics solutions encourage creativity, teamwork, leadership, passion, and problem-solving among groups. That's why VEX is committed to advancing robotics education as leaders in STEM, making it easy to implement and being your partner along the way! <https://www.vexrobotics.com/>

Dorchester School District Two Youth Apprenticeships



Rising juniors, seniors and graduating seniors may apply for a youth apprenticeship through Trident Technical College. Positions are available in a variety of career fields, and students who are hired by one of the participating employers receive paid on-the-job training under the mentorship of an industry professional. Youth apprentices take apprenticeship-related college classes at TTC, and all costs related to those courses are paid for by the Charleston Metro Chamber of Commerce.

To be eligible, a student must:

- Be a rising junior or senior (at least 16 years of age) or a graduating senior
- Achieve qualifying placement test scores
- Demonstrate academic readiness and responsibility
- Have reliable transportation to work and to school
- Be legally able to work in the U.S.

Apprentices who complete the two-year program will receive:

- Two years paid employment and mentoring from an industry professional
- A high school diploma (if not already granted)
- One year of college credit from TTC free of charge
- National credentials from the U.S. Department of Labor
- Two years of work experience
- Marketable skills for life

Youth apprenticeship opportunities are available in many career pathways!

For more information contact the Office of High School Programs at Trident technical College:

ellen.kaufman@tridenttech.edu

Alexis.Parrill@tridenttech.edu

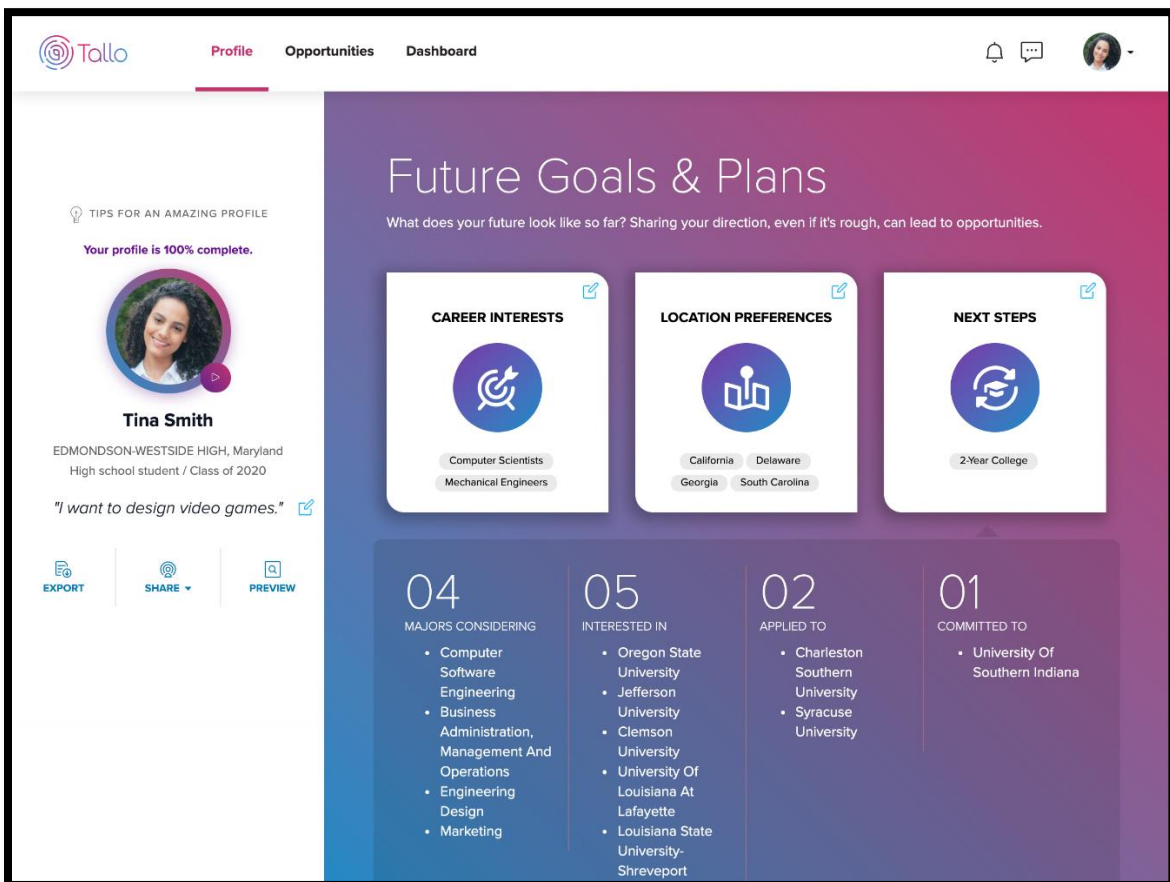


Tallo is a networking platform to connect students with colleges and opportunities with companies from across the country.

Our goal in Dorchester School District Two is to have each student create and maintain a student profile account in Tallo.

Students will have the opportunity to showcase their talents through digital profiles, find resources and scholarships, receive guidance and coaching, and connect with prospective colleges, scholarship opportunities, and employers.

Sample Student Profile screen below shows features of the Tallo account:



CTE Dual Enrollment Opportunities

Dorchester School District Two

https://www.tridenttech.edu/start/highschool/ad_dualcredit.htm

<https://www.ecpi.edu/locations/charleston-sc>

ECPI University - CYBER and NETWORK SECURITY

ECPI University provides a student-centered learning environment that promotes the enhancement of each student's professional and personal life through education.

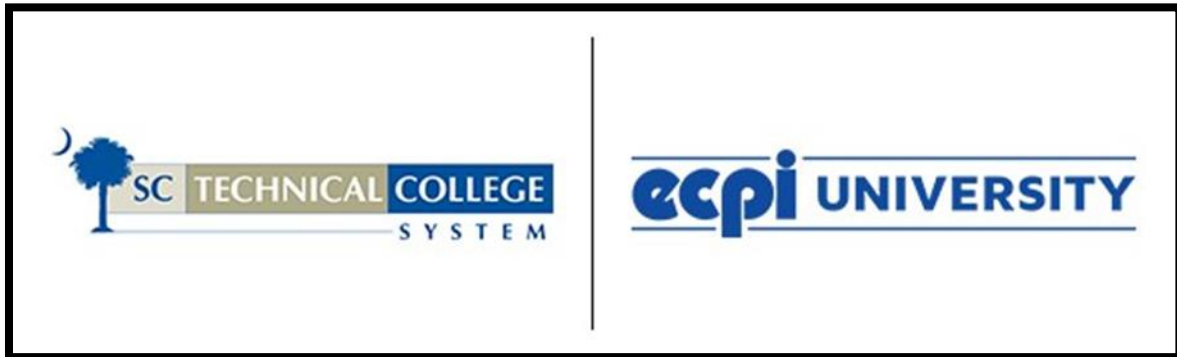
- Classes meet during the regular school day
- Students receive college credit and dual enrollment credit for successful completion of coursework
- Technology Cooperative Learning Opportunities (Student CoOps, Internships, etc.)

Dual Enrollment in the CYBER and NETWORK SECURITY program provides students the following certification opportunities:

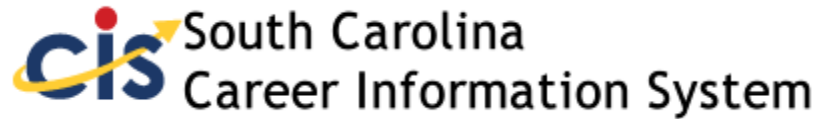
- Network Protocols and Services – Certification
- Computer Configuration II – Certification
- Principles of Cybersecurity – Certification
- Introduction to Cloud Solutions – Certification

Students participating in the ECPI Cyber and Network Security program have additional opportunities through partnerships with Trident Technical College and other technical colleges in the SC Technical College System, students have an opportunity for:

- Tuition Reduction
- Scholarships extended to eligible employees and immediate family
- Streamlined Enrollment Process
- Efficient Tuition Reimbursement



Other opportunities for CTE Dual Enrollment are available and students should speak with their school guidance department or counselor for more information.



SCOIS

Mission: Our mission is to provide accurate and up-to-date educational and career information to S.C. schools and other sites through the use of South Carolina's own Career Information Delivery system (SCOIS). The SCOIS Career System will assist educators with incorporating integrative learning strategies that address state curriculum standards in conjunction with current and practical educational and career information. It will further allow teachers to develop efficient long range academic achievement plans for students.

SCOIS (S.C. Occupational Information System) is South Carolina's Official Career Resource Network. As a State Program, SCOIS is authorized by both Federal and State Law and is mandated to provide a vast array of Career Development products and services including the State's Computerized Career Information System.

SCOIS is strongly supported by school districts all across South Carolina and by the State Legislature. SCOIS has most recently been authorized by the State Legislature in the S.C. Education and Economic Development Act of 2005.

South Carolinians have been using SCOIS since 1977 to prepare for careers that will be in future demand. SCOIS is used in all grades K-12 as well as post-secondary institutions and guides you all the way to state and national job openings. Students who use SCOIS can better prepare their Individualized Graduation Plans (IGPs.)

SCOIS is an on-line system and you need a password to enter. You will have access to several Career Assessments, College Information, Occupational Information, College Major Information, Career Clusters, School Subjects matched to careers, Financial Aid Information, Private Trade Schools, Career Videos, Building and Posting Resumes, Career Electronic Portfolios, Salary and Outlook information on Careers, Lesson Plans for Teachers, Career Guidance Tools for Parents, Accountability Reports for Administrators and much more.

Students are also encouraged to use SCOIS at home using the www.scois.net website. Please see your School Counselor for a login and password for your school.

Call the SCOIS office today for more information 1-800-264-9038.

CTE Approved Industry Credentials List 2019-2020

Additional stackable Certifications can be located at: <https://ed.sc.gov/instruction/career-and-technical-education/programs-and-courses/cate-programs/cte-approved-industry-credentials-18-19-and-19-20/>

Career Cluster	Assessment/Certification/Industry	SRPG#	Certifying Agency/Industry
ALL	Microburst EmployABILITY Soft Skills	A94	Microburst
ALL	OSHA 10 General	63	Occupational Safety and Health Admin.
Agriculture, Food, & Natural Resources	Livestock Selection & Evaluation Certification	A84	iCEV Multimedia/National Collegiate Livestock Coaches
Arts, A/V Technology and Communications	Adobe Certified Associate – Visual Communication with Adobe Photoshop	80	Adobe
Arts, A/V Technology & Communications (Also Business Management and Administration)	Adobe® Certified Associate-Web Communication with Adobe Dreamweaver	81	Adobe®
Arts, A/V Technology & Communications	Adobe® Certified Expert	65	Adobe®
Business	QuickBooks Certified User (Intuit Quickbooks)	158	Certiport
Business Management & Administration <i>(also Arts, A/V Technology & Communications)</i>	Adobe® Certified Associate - Visual Communication with Adobe Photoshop	80	Adobe®
Business Management & Administration <i>(also Arts, A/V Technology & Communications)</i>	Adobe® Certified Associate-Web Communication with Adobe Dreamweaver	81	Adobe®
Business Management & Administration	Entrepreneurship & Small Business	168	State
Business Management & Administration <i>(also Information Technology)</i>	IC 3 (Internet and Computer Core Certification)	19	IC3 Digital Literacy Certification by Certiport
Business Management & Administration <i>(also Finance)</i>	MOS Office 2016 – Excel 2016 Expert	103	Microsoft®
Business Management & Administration	MOS: Microsoft Office Access 2013	A36	Microsoft®

Business Management & Administration	MOS: Microsoft Office – Outlook 2016	106	Microsoft®
Business Management & Administration	MOS: Office –Power Point 2016	104	Microsoft®
Business Management & Administration	MOS: Office 2010 - Access 2010	92	Microsoft®
Business Management & Administration	MOS: Office 2010 - Excel 2010 Expert	89	Microsoft®
Business Management & Administration	MOS: Office 2010 - Word 2010 Expert	87	Microsoft®
Business Management & Administration	MOS: Office 2016 – Access 2016	105	Microsoft®
Business Management & Administration	MOS: Office 2016 – Word 2016 Expert	101	Microsoft®
Education & Training	Early Childhood Education Assessment Certification	67	American Association of Family and Consumer Sciences (AAFCS)
Education & Training	Education Fundamentals	70	American Association of Family and Consumer Sciences (AAFCS)
Education & Training	ParaPro Assessment	A17	ParaPro
Finance (<i>also Business Management & Administration</i>)	MOS Office 2016 – Excel 2016 Expert	103	Microsoft®
Finance (<i>also Business Management & Administration, Marketing</i>)	OSHA 10 - General On Line Modules	247	Occupational Safety and Health Administration (OSHA)
Finance	WBL Credit Bearing Course		State
Finance	QuickBooks Certified User	158	Certiport
Health Science	Career Safe OSHA 10-Hour General Industry (Healthcare) Credential	A76	Occupational Safety and Health Administration (OSHA)
Health Science	Certified Nurse Aide (CNA)	12	South Carolina Department of Health and Human Services (SCDHHS)
Health Science	First Responder	18	American Red Cross
Health Science	Healthcare Providers Basic Life Support (BLS)	A93	American Heart Association (AHA)
Health Science	Pharmacy Technician	35	Pharmacy Technician Certification Board (PTCB)
Hospitality & Tourism (<i>also Human Services</i>)	ServSafe® Food Handler	49	ServSafe®

Hospitality & Tourism(<i>also Human Services</i>)	ServSafe® Manager	A15	ServSafe®
Human Services(<i>also Hospitality & Tourism</i>)	ServSafe® Food Handler	49	ServSafe®
Human Services(<i>also Hospitality & Tourism</i>)	ServSafe® Manager	A15	ServSafe®
Information Technology	Digital Literacy (EVERFI)	A31	National
Information Technology	Autodesk User Certification for Maya	A54	Autodesk®
Information Technology	CompTIA A+ (Same as Microsoft A+)	01	CompTIA: Information
Information Technology	CompTIA Cloud Essentials	275	CompTIA: Information
Information Technology	CompTIA CySA+: Cybersecurity Analyst	274	CompTIA: Information Technology (IT) Industry & Association
Information Technology	Cloud Essentials		National
Information Technology	CompTIA IT Fundamentals	A7	CompTIA: Information Technology (IT) Industry & Association
Information Technology	Networking Fundamentals		National
Information Technology	CompTIA Linux+/LPIC-1	297	CompTIA: Information Technology (IT) Industry & Association
Information Technology	CompTIA Network+	32	CompTIA: Information Technology (IT) Industry & Association
Information Technology	CompTIA Security+ Certification	A52	CompTIA: Information Technology (IT) Industry & Association
Information Technology	Security Fundamentals		National
Information Technology	Linux Essentials	295	Linux Professional Institute
Information Technology	LPIC-1 Certified Linux Administrator	296	Linux Professional Institute
Information Technology	Network Systems Technician Certification - NST	A22	Accredited Information Technology Certifications – ETA International

Information Technology	Oracle®	47	Oracle®
Manufacturing	LEAN (Six Sigma) Manufacturing Certification	235	Council for Six Sigma/SME/AME
Manufacturing	MSSC: CPT Safety	239	Manufacturing Skill Standards Council (MSSC)
Manufacturing	NCCER - Mechatronics	28	(NCCER) Manufacturing Skills Standards Council (MSSC) CPT Certified Production Technician
Manufacturing	NCCER – Welding Technology	31	National Center for Construction Education and Research (NCCER)
Manufacturing	NIMS	33	National Institute for Metalworking Skills (NIMS)
Manufacturing	Workkeys (industry Preferred)		National
Marketing (<i>also Business Management & Administration, Finance</i>)	OSHA 10 - General On Line Modules	247	Occupational Safety and Health Administration (OSHA)
Marketing	Retail Industry Fundamentals, National Retail Federation	214	National Retail Industry
Science, Technology, Engineering & Mathematics	Autodesk Inventor Certified User Exam	A54	Autodesk®

Concentrator Courses

Dorchester School District Two

The Strengthening Career and Technical Education for the 21st Century Act (Perkins V) requires a Career and Technical Education (CTE) concentrator to complete at least two courses in a single career and technical education program. The Office of Career and Technical Education (OCTE) defines a concentrator as a secondary student with an assigned Classification of Instruction Programs (CIP) code who has completed at least two courses in a state-recognized CTE Program.

The courses are listed in the following table are categorized by cluster, CIP code, program name, course code, and course options. Additional courses not included in this listing can be taken to count toward completer status requirements, if needed.

Note: All programs require the completion of at least two identified courses in a state-recognized CTE program with the exception of Barber/Master Hair Care and Cosmetology which require three courses. If the courses are not sequential, it does not matter what order they are taken in.

CIP Code	Program	Course Code	Course Name Course Selection (Select One)	Course Code	Course Name Course Selection (Select One)
Agriculture, Food, and Natural Resources					
010205	Agricultural Mechanics and Technology	5691	Agricultural and Biosystems Science	5692	Biosystems Mechanics and Engineering
		5660	Agricultural Mechanics and Technology	5610	Agricultural Power Mechanics
		5604	Agricultural Mechanics and Technology for the Workplace 1	5605	Agricultural Mechanics and Technology for the Workplace 2
		5624	Agricultural Science and Technology	5660	Agricultural Mechanics and Technology
		5692	Biosystems Mechanics and Engineering	5611	Agricultural Structural Mechanics
				5621	Equipment Operations and Maintenance
140301	Biosystems Engineering Technology	5691	Agricultural and Biosystems Science	5692	Biosystems Mechanics and Engineering
		5693	Biosystems Technology Career Development 1	5694	Biosystems Technology Career Development 2
030101	Environmental and Natural Resources Management	5691	Agricultural and Biosystems Science	5626	Environmental and Natural Resources Management
		5624	Agricultural Science and Technology		

		5628	Environmental and Natural Resources Management for the Workplace 1	5629	Environmental and Natural Resources Management for the Workplace 2
		5626	Environmental and Natural Resources Management	5627	Soil and Water Conservation
				5642	Forestry
				5674	Wildlife Management
010601	Horticulture	5691	Agricultural and Biosystems Science	5650	Introduction to Horticulture
		5624	Agricultural Science and Technology		
		5652	Horticulture for the Workplace 1	5653	Horticulture for the Workplace 2
		5650	Introduction to Horticulture	5634	Floriculture
				5667	Golf Course Technology
				5670	Landscape Technology
				5672	Nursery, Greenhouse, and Garden Center Technology
				5655	Sports Turf Management
				5654	Turf and Lawn Management
011101	Plant and Animal Systems	5691	Agricultural and Biosystems Science	5614	Agricultural Crop Production and Management
		5624	Agricultural Science and Technology	5603	Animal Science
		5620	Agricultural Science and Technology for the Workplace	5663	Aquaculture
				5646	Cattle Production
				5679	Equine Science
				5647	Farm Animal Production
				5657	Food Processing
				5613	Introduction to Veterinary Science
				5612	Small Animal Care
5627	Soil and Water Conservation				
		5608	Animal Science for the Workplace 1	5609	Animal Science for the Workplace 2

Architecture and Construction					
460000	Building Construction Cluster	6060	Building Construction Cluster 1	6061	Building Construction Cluster 2
480703	Cabinetmaking	6080	Cabinetmaking 1	6081	Cabinetmaking 2
460201	Carpentry	6091	Carpentry 1	6092	Carpentry 2
460303	Electrical Line Worker	6305	Electrical Line Worker 1	6306	Electrical Line Worker 2
460301	Electricity	6287	Electricity 1	6288	Electricity 2
470201	HVAC Technology	6003	HVAC Technology 1	6004	HVAC Technology 2
460101	Masonry	6250	Masonry 1	6251	Masonry 2
460503	Plumbing	6280	Plumbing 1	6281	Plumbing 2
Arts, Audio-Video Technology, and Communications					
151301	Architecture/Mechanical Design	6170	Architecture Design 1	6171	Architecture Design 2
		6172	Mechanical Design 1	6173	Mechanical Design 2
500402	Digital Art and Design	6120	Digital Art and Design 1	6121	Digital Art and Design 2
500407	Fashion Design and Apparel Construction	5710	Fashion Design and Apparel Construction 1	5711	Fashion Design and Apparel Construction 2
100301	Graphic Communications	6200	Graphic Communications 1	6201	Graphic Communications 2
500408	Interior Design	5455	Interior Design 1	5456	Interior Design 2
100299	Media Technology	6124	Media Technology 1	6125	Media Technology 2
Business Management and Administration					
520401	Administrative Services	5122	Administrative Support Technology	5020	Integrated Business Applications 1
521206	Business Information Management	5340	Image Editing	5176	Digital Publication Design
520201	General Management	5001	Accounting 1	5400	Entrepreneurship
521001	Human Resources Management	5093	Fundamentals of Human Resources Management	5044	Business Law

520204	Operations Management	5150	Virtual Enterprise 1	5151	Virtual Enterprise 2
Education and Training					
131210	Early Childhood Education	5700	Early Childhood Education 1	5701	Early Childhood Education 2
130101	Introduction to Teaching	5703	Introduction to Teaching 1	5704	Introduction to Teaching 2
Finance					
520301	Accounting	5001	Accounting 1	5005	Accounting 2
520803	Banking Services	5273	Business Finance	5271	Banking Services
520804	Business Finance	5273	Business Finance	5001	Accounting 1
521701	Insurance	5273	Business Finance	5275	Insurance and Risk Management
520807	Securities and Investments	5273	Business Finance	5277	Securities and Investments
Government and Public Administration					
440501	Governance	6570	Foundations of Leadership	6572	Community and Regional Planning
440401	Public Management and Administration	6570	Foundations of Leadership	6571	Principles of Public Management and Administration
Health Science					
260102	Biomedical Sciences (Project Lead the Way)	5580	PLTW – Principles of Biomedical Science	5581	PLTW – Human Body Systems
510999	Emergency Medical Services	5531	Emergency Medical Services 1	5532	Emergency Medical Services 2
510000	Health Science	5550	Health Science 1 – Foundations of Healthcare Professionals	5551	Health Science 2 – Advanced Healthcare Applications
511600	Practical Nursing	5550	Health Science 1 – Foundations of Healthcare Professionals	5551	Health Science 2 – Advanced Healthcare Applications
		5531	Emergency Medical Services 1	5532	Emergency Medical Services 2

		5555	Sports Medicine 1	5556	Sports Medicine 2
		5580	Principles of Biomedical Sciences	5581	Human Body Systems
310505	Sports Medicine	5555	Sports Medicine 1	5556	Sports Medicine 2
Hospitality and Tourism					
520905	Culinary Arts Management	5720	Culinary Arts Management 1	5721	Culinary Arts Management 2
				5723	Baking and Pastry
		5723	Baking and Pastry	5724	Advanced Baking and Pastry
				5720	Culinary Arts Management 1
520904	Hospitality and Tourism Management	5478	Introduction to Hospitality and Tourism Management	5473	Lodging Management
				5475	Event and Entertainment Management
				5474	Travel and Tourism Management
Human Services/Family and Consumer Sciences					
120402	Barber/Master Hair Care	6158	Barber/Master Hair Care 1 (Three courses for concentrator)	6159	Barber/Master Hair Care 2
				6160	Barber/Master Hair Care 3 (see note)
120401	Cosmetology	6150	Cosmetology 1 (Three courses for concentrator)	6151	Cosmetology 2
				6152	Cosmetology 3 (see note)
120409	Esthetics	6162	Esthetics 1	6163	Esthetics 2
120410	Nail Technology	6154	Nail Technology 1	6155	Nail Technology 2
190101	Family and Consumer Sciences	5800	Child Development 1	5801	Child Development 2
		5820	Family Life Education 1	5821	Family Life Education 2
	Note: Any two of these courses would qualify for concentrator status. The combination can be levels one and two of one course or level one of two different courses that prepare a student to earn an industry or	5808	Family and Consumer Sciences 1	5809	Family and Consumer Sciences 2
		5804	Fashion, Fabric, and Design 1	5805	Fashion, Fabric, and Design 2
		5812	Financial Fitness 1	5813	Financial Fitness 2
		5824	Foods and Nutrition 1	5825	Foods and Nutrition 2

	postsecondary recognized credential.	5830	Housing and Interiors 1	5831	Housing and Interiors 2
		5834	Human Development: Responsible Life Choices 1	5835	Human Development: Responsible Life Choices 2
		5816	Parenting Education 1	5817	Parenting Education 2
		5759	Sports Nutrition 1	5760	Sports Nutrition 2
Information Technology					
500411	Game and Interactive Media Design	5350	Foundations of Animation	5352	Game Design and Development
151202	Information Support and Services	5320	Computer Repair and Service	5321	Advanced Computer Repair and Service
110901	Networking Systems	5310	Networking Fundamentals	5311	Advanced Networking
110201	Programming and Software Development	5050	Computer Programming 1	5051	Computer Programming 2
		5056	Computer Programming 1 with C++	5057	Computer Programming 2 with C++
		5052	Computer Programming 1 with Java	5053	Computer Programming 2 with Java
		5054	Computer Programming 1 with Visual Basic	5055	Computer Programming 2 with Visual Basic
		5064	Computer Programming 1 with Python	5065	Computer Programming 2 with Python
		5066	Computer Programming 1 with Swift	5067	Computer Programming 2 with Swift
		5324	Database Design and Programming with SQL	5326	Database Programming with PL/SQL
110801	Web and Digital Communications	5031	Fundamentals of Web Page Design and Development	5033	Advanced Web Page Design and Development
111003	Computer and Information Systems Security/ Information Assurance	5370	Cyber Security Fundamentals	5372	Advanced Cyber Security
Law, Public Safety, Corrections, and Security					

430203	Emergency and Fire Management Services	6514	Firefighter 1	6515	Firefighter 2
430107	Law Enforcement Services	6510	Law Enforcement Services 1	6511	Law Enforcement Services 2
220301	Paralegal Systems	6526	Legal Systems Technology 1	6527	Legal Systems Technology 2
Manufacturing					
470101	Electronics Technology	6133	Electronics Technology 1	6134	Electronics Technology 2
480503	Machine Technology	6230	Machine Tool Technology 1	6231	Machine Tool Technology 2
150613	Integrated Production Technology	6222	Advanced Technology for Design and Production – Course 1	6223	Systems of Advanced Technology – Course 2
150404	Mechatronics Integrated Technologies	6210	Mechatronics 1 – Electrical Components/Industrial Safety	6211	Mechatronics 2 – Mechanical Components Electric Drives/Hand & Power Tool Op.
480501	Metal Fabrication	6260	Metal Fabrication 1	6261	Metal Fabrication 2
480508	Welding Technology	6340	Welding Technology 1	6341	Welding Technology 2
Marketing					
521402	Marketing Analytics	5421	Marketing	5423	Marketing Analytics
090903	Marketing Communications	5470	Advertising	5421	Marketing
		5422	Digital Media Marketing		
521401	Marketing Management	5421	Marketing	5431	Marketing Management
				5426	Sports and Entertainment Management
521802	Merchandising	5421	Marketing	5430	Merchandising
Science, Technology, Engineering, and Mathematics					
150801	Aerospace Engineering Technology	6386	Fundamentals of Aerospace Technology	6387	Advanced Aerospace Technology
149999	Clean Energy	6380	Clean Energy Systems – Course 1	6381	Clean Energy Applications – Course 2

110701	Computer Science (Project Lead the Way)	6372	PLTW – Computer Science Essentials	6377	PLTW – Computer Science Principles
		6378	PLTW – Cyber Security		
143501	Core Engineering	6370	Core Engineering 1	6371	Core Engineering 2
190501	Food Science	5757	Food Science 1	5758	Food Science 2
110104	Informatics	6891	Computers, Networks and Databases – Course 1	6892	Design for the Digital World – Course 2
410000	Innovations in Science and Technology	6140	The Nature of Science and Technology – Course 1	6141	Core Applications of Science and Technology – Course 2
140101	Pre-Engineering (Project Lead the Way)	6051	PLTW – Introduction to Engineering Design	6050	PLTW – Principles of Engineering
		6051	PLTW – Introduction to Engineering Design	6144	PLTW – Engineering Essentials
		6144	PLTW – Engineering Essentials	6050	PLTW – Principles of Engineering
Transportation, Distribution, and Logistics					
470603	Automotive Collision Repair Technology	6020	Automotive Collision Repair Technology 1	6021	Automotive Collision Repair Technology 2
470604	Automotive Technology	6030	Automotive Technology 1	6031	Automotive Technology 2
470605	Diesel Engine Technology	6310	Diesel Engine Technology 1	6311	Diesel Engine Technology 2
520203	Global Logistics & Supply Chain Management	6191	Introduction to Logistics – Course 1	6192	Functional Areas in Logistics – Course 2
470606	Power Equipment Technology	6300	Power Equipment Technology 1	6301	Power Equipment Technology 2

