This Course Description lists all of the CTE Programs in the district. Some programs may not be available for the Educational Program Opportunity (EPO), but are available for those students zoned for a school or chosen for Educational Location Opportunity (ELO). Please check the Matrix to see which schools offer the program and/or the opportunity to choose a school based on the program. Palm Bay Magnet High School has its own application due to the Magnet status (Please contact the school directly).

# AQUACULTURE\* 8004100

### Agriscience Foundations 1 8106810

This course is designed to develop competencies in the areas of agricultural history and the global impact of agriculture; career opportunities; scientific and research concepts; biological and physical science principles; environmental principles; agriscience safety; principles of leadership; and agribusiness, employability, and human relations skills in agriscience.

### Aquaculture 2 8112010

This course is designed to develop competencies in the areas of nature and origin, career opportunities, biological principles, safety, water quality, seed production, market outlets, rules and regulations, technological advances, problem solving and leadership employability communication and human relations skills.

### Aquaculture 3 8112020

This course is designed to develop competencies in the area of management and use of water, the propagation and rearing of seed, producing aquaculture species, control of diseases, pests and water quality problems, harvesting and processing, marketing and transportation, management skills and leadership, employability, communication and human relation skills.

# ADVANCED MANUFACTURING TECHNOLOGY\* 9200200

### Advanced Manufacturing 1 9200210X

Students gain an understanding of technology and the concept of Design for Manufacturing, workplace safety and organization, communication skills, and basic machine operation.

### Advanced Manufacturing 2 9200220X

Emphasizes skills key to the manufacturing industry. Students study blueprint reading, computer-aided design, quality control concepts; precision measurement tools, and understanding modern business practices.

### Advanced Manufacturing 3 9200230X

Prepares students for entry into the advanced manufacturing industry. Topics include: production processes; computer-

aided manufacturing, lathe and milling machines, computer-numeric-control machines, and welding systems; and robotic systems.

#### AIR CONDITIONING, REFRIGERATION, AND HEATING TECHNOLOGY\* 8723000

#### Air Conditioning, Refrigeration, and Heating Technology 1 8713010X

Stresses the understanding of the technical skills required for the heating, air conditioning, refrigeration, and ventilation industries. Includes elements of planning, management, finance, safety, and environmental issues.

#### Air Conditioning, Refrigeration, and Heating Technology 2 8713020X

Technical skills needed to fabricate and service piping, tubing, and fittings used in the heating, air conditioning, and refrigeration industry.

#### Air Conditioning, Refrigeration, and Heating Technology 3 8713030X

Students demonstrate a practical knowledge of the electrical components of heating, air conditioning, and refrigeration equipment.

#### Air Conditioning, Refrigeration, and Heating Technology 4 8713040X

Apply principles of heating, air conditioning, and refrigeration. Assist in the installation of residential heating and air conditioning systems.

#### Air Conditioning, Refrigeration, and Heating Technology 5 8713050X

This course provides students with competencies in the following topics essential to the air-conditioning, refrigeration, and heating industry: selection, testing and maintenance of commercial compressors.

# APPLIED CYBERSECURITY\* 9001300

### IT Fundamentals 9001310

This course introduces students to the essential concepts, components, terminology, and knowledge about computers, computer systems, peripherals, and networks.

### Computer and Network Security Fundamentals 9001320X

This course introduces students to cybersecurity and provides them with essential computer and networking knowledge and skills, particularly those related to cybersecurity.

### Cybersecurity Essentials 9001330X

This course provides students with insight into the many variations of vulnerabilities, attack mechanisms, intrusion detection systems, and some methods to mitigate cybersecurity risks, including certificate services and cryptographic systems.

## **APPLIED ENGINEERING TECHNOLOGY\* 8401100**

### Applied Engineering Technology I 8401110X

This program provides students with a foundation of knowledge and technical experiences in the study of engineering and prepares students for postsecondary engineering programs by developing an indepth mastery of associated mathematics, science, and technology knowledge and skills with opportunities to further their mastery of engineering-related design solutions to real world problems.

### Applied Engineering Technology II 8401120X

This course provides students with opportunities to further their mastery of engineering-related math and science principles to design solutions to real world problems. The course also includes a more in-depth look into the relationship between technology and design.

### Applied Engineering Technology III 8401130X

The course features multiple options for providing context-based projects oriented to specific fields of engineering. This feature enables instruction in complex projects involving multi-faceted project teams by providing instruction oriented to four key engineering disciplines: mechanical, electrical, civil, and environmental.

# APPLIED ROBOTICS 9410100

### Foundations of Robotics 9410110X

Provides a foundation in content and skills associated with robotics and automation, artificial intelligence, electronics, physics, and principles of engineering.



### Robotic Design Essentials 9410120X

Students study the operation of robotics, artificial intelligence, sensors, electronic devices, engineering technologies, motion physics, electrical motors, programming, simulation and modeling, and critical thinking skills.

#### Robotic Systems 9410130X

Extended content and skills essential to the design and operation of robotic systems, environmental physics, manufacturing, topographical considerations, programming, communications, simulation, and modeling.

### Robotic Applications Capstone 9410140X

This course provides students with extended content and skills essential to the design and operation of autonomous robotic systems in the context of a capstone project.

# ARCHITECTURAL DRAFTING\* 8101100

#### Drafting 1 8725010X

This course provides students with fundamental knowledge and skills of architectural drawing using Autodesk Revit software, a three-dimensional parametric modeling application. Along with acquiring language arts and mathematics knowledge and skills, students will be able to prepare multi-view drawings, prepare sectional views, prepare auxiliary drawings, apply basic dimensioning, and describe the importance of professional ethics and legal responsibilities.

#### Drafting 2 8725020X

This course provides students with intermediate knowledge and skills of architectural drawing using Autodesk Revit software, a three-dimensional parametric modeling application. Along with acquiring language arts and mathematics knowledge and skills, students will be able to use information technology tools, prepare pictorial drawings, prepare surface developments, prepare basic architectural drawings, solve problems using critical thinking skills, creativity and innovation, demonstrate understanding of civil drawings and demonstrate basic electrical/electronic literacy.

### Drafting 3 8725030X

This course provides students with advanced knowledge and skills of architectural drawing using Autodesk Revit software, a three-dimensional parametric modeling application. Along with acquiring language arts and mathematics knowledge and skills, students will understand how to work within teams, demonstrate an understanding of health, safety and environmental management

systems, construct geometric figures, utilize editing commands, control drawing properties by layer, color and line type and demonstrate proficiency in using Revit modeling software by attainment of the student industry credential.

#### Drafting 4 8725040X

This course provides students with advanced knowledge and skills of architectural drawing using Autodesk Revit software, a three-dimensional parametric modeling application. Along with acquiring language arts and mathematics knowledge and skills, students will design, develop, draw and construct an individual architectural model, demonstrate applied math skills, demonstrate science knowledge and skills, demonstrate personal money-management concepts and practices, demonstrate leadership and teamwork skills, and develop employability and entrepreneurship skills.

# AUTOMOTIVE COLLISION TECHNOLOGY\* 9514000

#### Automotive Collision Paint & Body Assistant 9514010X

Introduction to use of hand and power tools, panel repairs, use of spray equipment, application of body fillers, paint systems and materials, glass replacement and use of welders. The course content will include the following: basic trade skills, communication, leadership, human relations and employability skills and safe, efficient work practices. Handson technical activities are an integral part of the program.

# Automotive Collision Paint & Refinishing Assistant 1 9514020X

Application of refinishing skills, sheet metal repair skills, frame aligning, use of fillers, paint systems and undercoats, related welding skills, related mechanical skills, trim-hardware maintenance, glass servicing, and other miscellaneous repairs.

#### Automotive Collision Paint & Refinishing Assistant 2 9514030X

Projects and research using refinishing skills, sheet metal repair skills, frame aligning, use of fillers, paint systems and undercoats, related welding skills, related mechanical skills, trim-hardware maintenance, glass servicing, and other miscellaneous repairs.

# Automotive Collision Paint & Refinishing Assistant 3 9514040X

Instruction in the application of procedures for occupational safety skills and preparation of vehicles for repair. Advanced skills in damage assessment and repair, damage reports at industry standards and standard specifications and crash manual documentation.

#### Automotive Collision Non-Structural Damage Assistant 1 9514050X

Instruction in various procedures for in structural damage analysis and repair of vehicle structure. Learn to assess damage to auto parts, develop plans for repair and measure and pull frames using manufacture specifications.

#### Automotive Collision Non-Structural Damage Assistant 2 9514060X

The Automotive Collision Non-Structural Damage Assistant 2 course prepares students for entry into the Automotive Collision and Repair industry. Students study safety the preparation; movable glass and hardware; plastics and adhesives; electrical; and brakes.

# AUTOMOTIVE MAINTENANCE & LIGHT REPAIR\* 9504100

#### Automotive Maintenance & Light Repair 1 9504110X

Introduction to the basics of automotive mechanics, including automotive systems, tools, basic service, and safety practices.

#### Automotive Maintenance & Light Repair 2 9504120X

Routine maintenance/ consumer services, in heating, air conditioning and engine cooling systems, and in engine theory and repairs.

#### Automotive Maintenance & Light Repair 3 9504130X

Diagnosing, troubleshooting electrical and electronic components related to power train and engine performance service.

#### Automotive Maintenance & Light Repair 4 9504140X

Operation and servicing of automotive brake systems, heating, air conditioning and engine cooling systems, and in the operation and servicing of manual drive trains and axles.

#### Automotive Maintenance & Light Repair 5 9504150X

Prepares students for entry into the automotive workforce or into post-secondary training. Student's study and service automotive engine repair, electrical/electronic systems, suspension and steering systems, brakes as well as practice workplace soft skills.



#### Automotive Maintenance & Light Repair 6 9504160X

Prepares students for entry into the automotive workforce or into post-secondary training. Student's study and service automotive heating and air conditioning, engine performance, automatic transmission/transaxles, manual drive train and axles, as well as practice workplace soft skills

# **AVIATION ASSEMBLY & FABRICATION\* 9540700**

### Private Pilot Ground School 9540610X

Students explore career opportunities and requirements of a professional aviation pilot/mechanic. Topics include: shop safety, fundamentals of flight, FAA regulations, meteorology, communications, propulsion, navigation systems, flight planning, safe aircraft operation and principles, flight training processes, and airport environments.

### Aviation Assembly Technician 1 9540710X

Provides students with an introduction to the knowledge, human relations, and technical skills of aviation maintenance & fabrication technology.

### Aviation Assembly Technician 2 9540720X

Students study human relations, and technical skills of aviation maintenance & fabrication technology.

### Aviation Assembly Technician 3 9540730X

Advanced studies and skill development in the technical skills of aviation maintenance & fabrication technology.

#### BUILDING CONSTRUCTION TECHNOLOGIES\* 8720300

### **Building Construction Technologies 1** 8720310X

The purpose of this course is to develop the competencies essential to the building construction industry. These competencies include skills and knowledge related to safety practices, the proper use of hand and power tools, plan reading, basic rough carpentry and framing.

### **Building Construction Technologies 2** 8720320X

The purpose of this course is to develop the competencies necessary for the building, construction, and repair industry. These competencies relate to construction components, materials and hardware, concrete, and masonry skills.

### **Building Construction Technologies 3** 8720330X

This course is designed to provide students with a more in-depth knowledge of construction documents, as well as competencies in construction management. These include heavy equipment selection, knowledge of codes and regulations, site preparation, estimating, scheduling and knowledge of sustainability issues relevant to the construction industry.

#### BUSINESS MANAGEMENT AND ANALYSIS 8301100\*

### Digital Information Technology 8207310X

Basic overview of current business and information systems and trends. Emphasis on developing fundamental computer skills and includes the opportunity for MOS certification in Word, Excel, and PowerPoint.

#### Business and Entrepreneurial Principles 8215120X

This course is designed to provide an introduction to business organization, management, and entrepreneurial principles. Topics include communication skills, various forms of business ownership and organizational structures, supervisory/management skills, leadership skills, human resources management activities, business ethics, and cultural diversity. Emphasis is placed on job readiness and career development. The use of computers is an integral part of this program.

### Accounting Applications 1 8203310X

This course emphasizes double-entry accounting; methods and principles of recording business transactions; the preparation of various documents used in recording income, expenses, acquisition of assets, incurrence of liabilities, and changes in equity; and the preparation of financial statements. The use of computers and appropriate software is required.

### Management and Human Resources 8301110X

This course explores the reach and impact of managing people, one of the most important resources of an organization. Students are required to perform higher level strategic thinking. Topics include; management policy development, evaluating organizational effectiveness, sourcing and recruitment, hiring and retention planning, employee training, performance appraisals, compensation and benefit programs, maintaining working conditions and providing a safe working environment.

### Business Analysis 8301120X

This course is designed to provide a higher level of understanding of business systems, accounting concepts, working with financial information, data analysis skills, managing business information with appropriate software, requirements analysis of information systems, data modeling, and database management.

### Legal Aspects of Business 8215130X

This course is designed to provide an introduction to the legal aspects of business. Topics include business law concepts, forms of business ownership, insurance awareness, governmental regulations, management functions, human resources management issues, and career development. The use of computers is an integral part of this program.

# **CARPENTRY** 8104300\*

### Carpentry Fundamentals 8104310X

The purpose of this course is for the student to develop competencies essential to the carpentry industry including safety, use of manual and power tools, applied math, construction plan drawing, building materials, fasteners and hardware, rigging and scaffolding, sustainability and employability skills.

### Carpentry Layout 8104320X

The purpose of this course is for the student to continue developing competencies essential to the carpentry profession. These competencies include site preparation and layout, building foundations, engineered structural lumber and floor system framing.

### Carpentry Framing 8104330X

This Course focuses on framing walls and roofs, and provides an understanding of hurricane codes.

### Carpentry Exterior 8104340X

This course provides students with knowledge and skills pertaining to cold-formed steel framing, exterior stair construction, roofing applications, thermal and moisture protection and window and door installation.

### Carpentry Finish 8104350X

This course provides students with knowledge and skills pertaining to finish carpentry. Competencies covered include drywall installation, cabinetry and an overview of construction documents.



# CLOUD COMPUTING & VIRTUALIZATION\* 9001500

### Digital Information Technology 8207310X

Basic overview of current business and information systems and trends. Emphasis on developing fundamental computer skills and includes the opportunity for MOS certification in Word, Excel and PowerPoint.

### Computer Engineering and Support 9001510X

This course is designed to develop competencies needed for employment in computer operations and technology including leadership and the ability to diagnose and resolve computer problems. The content includes instruction in basic hardware configuration, hardware and software troubleshooting, operating systems, and computer networking.

### Network Engineering and Support 9001520X

This course is designed to develop competencies needed for employment in network operations and technology including leadership and the ability to diagnose and resolve systemic or network computer problems. The content includes instruction in basic hardware configuration, hardware and software troubleshooting, operating systems, and computer networking.

### Essentials of Cloud Technology 9001530

This course is designed to develop competencies needed for employment in computer engineering including knowledge of networking, storage, and database technologies. The content includes instruction in hardware and software and developing a functional understanding of the technologies and troubleshooting methods used to support guests in a virtualization layer.

### Basics of Cloud Computing & Virtualization 9001540

This course is designed to develop competencies needed for employment in computer engineering including knowledge of networking, storage, and database technologies. The content includes instruction in cloud technologies and troubleshooting methods. The content will provide a foundation for skills to analyze and resolve software and/or hardware problems; diagnose and resolve complex problems and work as a team.

### Advanced Cloud Computing & Virtualization 9001550

This course is designed to develop competencies needed for employment in computer engineering including knowledge of networking, storage, and database technologies. The content includes instruction in cloud technologies and troubleshooting methods. The content will allow students to demonstrate

their ability to analyze and resolve software and/or hardware problems; diagnose and resolve complex problems and work as a team. Experiential learning is designed to increase students' understanding of networking protocols, operating systems, software development, web protocols, device programming, or other computing and systems paradigms.

# CRIMINAL JUSTICE OPERATIONS\* 8918000

#### Criminal Justice Operations 1 8928010X

Introduction to the fields of law enforcement, the court and correctional system, career opportunities in these fields, interpersonal, communication, and employability skills.

### Criminal Justice Operations 2 8928020X

This course is designed to develop competencies in patrol, traffic control, defensive tactics, and physical proficiency skills, and first aid and CPR skills.

### Criminal Justice Operations 3 8918030X

Develops competencies in crime and accident investigation procedures, forensic science tasks, crime prevention, and property control procedures.

#### Public Service Officer 8918050X

The purpose of this program is to prepare students for employment as a Private Security Officer and Public Service Aide. The content includes, but is not limited to, legal issues, basic first aid, emergency procedures, ethics and professional conduct, access control, patrol techniques, report writing, interview techniques, fire safety, crime and accident prevention and protection, terrorism awareness, public relations, courtroom procedures, communication skills, and personal protection.

### Certified Legal Assistant 8918060X

This course prepares the student for a career as an Accredited Legal Professional (ALP). The curriculum covers comprehension and communication of legal knowledge skills, develop awareness of the ALS certification requirements, rules and guidelines and how to develop communication skills in technical reading and writing of legal documents. The student will learn about the legal office functions and responsibilities, and knowledge of legal operating systems.

### Code Enforcement 8918070X

This course prepares the student for a career as a Code Enforcement Officer.

The curriculum covers an understanding of the Administrative Aspects of Code Enforcement and proper report writing skills. The student will demonstrate officer safety in field applications and demonstrate an awareness of legal issues facing the code enforcement specialist.

# CULINARY ARTS\* 8800500

#### Culinary Arts 1 8800510X

This course is designed to acquaint students with procedures in a commercial kitchen. Topics covered include safety, breakfast, vegetable, and starch cookery. The second semester is based on commercial baking and includes breads, cakes, and pies. Lab fee required.

#### Culinary Arts 2 8800520X

Students will acquire knowledge and skill in the preparation of food. Included are basic principles and techniques of food preparation, use of recipes, use and care of equipment. The student will acquire the knowledge, principles, and skills necessary for service and quantity food preparation used by cafeterias, restaurants, and institutions. ServSafe®, Certified Professional Food Manager (NRLAEF), credential will be attained by students. Lab fee required. This course requires block course with Culinary Arts 3, 8800530X.

#### Culinary Arts 3 8800530X

This course will illustrate the fundamentals of pastry science, equipment, technology, ingredients, formula conversions, and costing. Product preparations will include cakes, icings, fillings, puff pastries, classical pastries, and petit fours. Designed to develop the student's understanding and skills appropriate to a variety of cooking techniques typical of various regions throughout the world. Diversity of menu, available foods, ingredients, and cultures will be studied. Students will have the opportunity to prepare complete meals typical of several cultures during the term. You'll research and prepare representative regional menu items from the European, American, Asian, and African continents. Timing, organization, mise en place, and plate presentation are stressed. Contemporary trends will be included. Lab fee required. This course requires block course with Culinary Arts 2, 8800520X.

#### Culinary Arts and Hospitality Management 8800540X

Qualified students will learn and practice kitchen management as it relates to food cost, item analysis, employee management and prepare various meals and food products. Students enrolled in this course will have earned the ServSafe Food Protection Manager Exam in Culinary 2 and are projected to earn the ProStart Certificate of Achievement.



### Culinary Arts Advanced Baking Techniques 8800550X

Qualified students will learn and practice This is a culminating course to develop advanced culinary techniques and skills. Students will learn using modern technology and culinary trends. Students enrolled in this course will have earned the ServSafe Food Protection Manager Exam in Culinary 2 and are projected to earn the ProStart Certificate of Achievement.

### **Culinary Arts Gastronomy and Garde Manger Skills 8800560X**

Qualified students will learn and practice skills focused on Gastronomy and Garde Manger Skills. This is a culminating course to develop advanced culinary techniques and skills. Students enrolled in this course will have earned the ServSafe Food Protection Manager Exam in Culinary 2 and are projected to earn the ProStart Certificate of Achievement.

#### **DENTAL AIDE\* 8417140**

### Health Science Anatomy & Physiology 8417100X

This course is part of the secondary Health Core consisting of an overview of the human body, both structurally and functionally with emphasis on the pathophysiology and transmission of disease. Medical terminology is an integral part of the course.

### Health Science Foundations 8417110X

This course is part of the Secondary Health Core designed to provide the student with an in-depth knowledge of the health care system and associated occupations. Emphasis is placed on communication and interpersonal skills, use of technology, ethics and the development of critical thinking and problem-solving skills. Students may shadow professionals throughout the course.

#### Dental Aide 3 8417141X

Use dental terminology; identify equipment, specialty procedures, and functions and pathologies of dental anatomy. Learn legal and ethical responsibilities of the dental health care worker.

#### DIGITAL DESIGN\* 8209600

### Digital Information Technology 8207310X

Basic overview of current business and information systems and trends. Emphasis on developing fundamental computer skills and includes the opportunity for MOS certification in Word, Excel, and PowerPoint.

#### Digital Design 1 8209510X

Develops basic entry-level skills required by the digital publishing industry. Includes computer skills, digital publishing concepts and operations, layout, design and digital imaging.

#### Digital Design 2 8209520X

Continues the development of basic entrylevel skills required by the digital publishing industry.

#### Digital Design 3 8209530X

Application of industry-standard skills and includes the use of a variety of software and equipment to perform digital publishing and digital imaging activities.

#### Digital Design 4 8209540X

This course is designed to develop advanced industry-standard skills required for careers in digital design. The content includes the use of software and equipment, including digital video cameras and video/audio editing software.

#### Digital Design 5 8209550X

This course is designed to develop advanced industry-standard skills required for careers in digital design. The content includes the use of software and equipment, including digital video cameras and video/audio editing software.

#### DIGITAL MEDIA / MULTIMEDIA DESIGN\* 8201600

#### Digital Media/Multimedia Foundations 1 8201210X

This course provides competencies in presentation production issues, basic computer knowledge, illustration software, digital still photography, and photo editing software.

#### Digital Media/Multimedia Foundations 2 8201220X

This course provides additional competencies in interactive presentation production, digital still photography and photo editing software, including advanced design, color modes, and fonts.

#### Digital Media/Multimedia Foundations 3 8201230X

This course covers competencies in design layout software.

#### Digital Media/Multimedia Web Production 8201610X

This course covers competencies in web page design, HTML and CSS, authorizing software, animated webpage design, and use the interactive design software.

#### Digital Media/Multimedia Motion Graphics Production 8201620X

This course covers competencies in preparing graphics for animation, video editing, and video post-production.

#### DIGITAL VIDEO TECHNOLOGY 8201400

#### Digital Video Technology 1 8201410X

This course provides students with an introduction to the digital video production process; content includes safe work practices, planning a production set, designing lighting plans, camera operation, and audio/ video recording, mixing, and editing.

### Digital Video Technology 2 8201420X

This course provides students with intermediate level instruction in the digital video production process.

### Digital Video Technology 3 8201430X

Students will participate in the digital video pre-production, production, and post-production processes.

### Digital Video Technology 4 8201440X

Students will demonstrate proficiency in all phases of the digital video production process (pre-production, production, post-production).

### Digital Video Technology 5 8201450X

Students will demonstrate professionalism, develop interviewing skills, perform on camera in video productions, and complete all phases in the digital video production process.

#### **DRAFTING\* 8725000**

#### Drafting 1 8725010X

This course provides students with fundamental knowledge and skills of architectural drawing using Autodesk Revit software, a three-dimensional parametric modeling application. Along with acquiring language arts and mathematics knowledge and skills, students will be able to prepare multi-view drawings, prepare sectional views, prepare auxiliary drawings, apply basic dimensioning, and describe the importance of professional ethics and legal responsibilities.

#### Drafting 2 8725020X

This course provides students with intermediate knowledge and skills of architectural drawing using Autodesk Revit software, a three-dimensional parametric



modeling application. Along with acquiring language arts and mathematics knowledge and skills, students will be able to use information technology tools, prepare pictorial drawings, prepare surface developments, prepare basic architectural drawings, solve problems using critical thinking skills, creativity, and innovation, demonstrate understanding of civil drawings and demonstrate basic electrical/electronic literacy.

### Drafting 3 8725030X

This course provides students with advanced knowledge and skills of architectural drawing using Autodesk Revit software, a three-dimensional parametric modeling application. Along with acquiring language arts and mathematics knowledge and skills, students will understand how to work within teams, demonstrate an understanding of health, safety and environmental management systems, construct geometric figures, utilize editing commands, control drawing properties by layer, color and line type and demonstrate proficiency in using Revit modeling software by attainment of the student industry credential.

#### Drafting 4 8725040X

This course provides students with advanced knowledge and skills of architectural drawing using Autodesk Revit software, a three-dimensional parametric modeling application. Along with acquiring language arts and mathematics knowledge and skills, students will design, develop, draw, and construct an individual architectural model, demonstrate applied math skills, demonstrate science knowledge and skills, demonstrate personal money-management concepts and practices, demonstrate leadership and teamwork skills, and develop employability and entrepreneurship skills.

# EARLY CHILDHOOD EDUCATION\* 8405100

#### (High School Course Offerings) Early Childhood Education 1 8405110X

Covers competencies for the 30-hour DCF mandated training and the 10-hour preschool appropriate practices course.

### Early Childhood Education 2 8405120X

This course covers competencies on professionalism, community resources, the importance of relationship skills and communicating with children's families, use of technology in the childcare profession, and observing and recording methods.

### Early Childhood Education 4 8405140X

Applications of competences in mentoring, workshop development, team building, advocacy, brain research and professional

development prepare students to be child development specialists.

#### (Dual Enrollment Course Offerings) Early Childhood Practicum EEC 1942X

This course provides students with the opportunity to observe children and gain experience in student teaching. Students will learn to provide a safe and healthy learning environment, as well as plan, implement and evaluate lesson plans for young children.

### Early Childhood Curriculum EEC 1200X

Preparation of child learning centers through choosing and constructing learning materials used in instructing children in music, art, math, science, literacy, fine and gross motor skills. One of three courses that combined meets the CDAE requirements for the state of Florida. Music, art, math, science, literacy, and fine and gross motor. One of three courses that combined meets the CDAE requirements for the State of Florida.

### Conflict Resolution in Early Childhood EEC 2710X

Students will learn create safe, caring, and respectful learning environments for young children and their families using professional techniques. One of three courses that combined meets the CDAE requirements for the State of Florida.

### Assessment in Early Childhood Education EEC 1601X

Students will study the physical, social, emotional, and cognitive development of infants and toddlers while participating in the care giving environment.

# **EMERGENCY MEDICAL RESPONDER\* 8417170**

### Health Science Anatomy & Physiology 8417100X

This course is part of the secondary Health Core consisting of an overview of the human body, both structurally and functionally with emphasis on the pathophysiology and transmission of disease. Medical terminology is an integral part of the course.

### Health Science Foundations 8417110X

This course is part of the Secondary Health Core designed to provide the student with an in-depth knowledge of the health care system and associated occupations. Emphasis is placed on communication and interpersonal skills, use of technology, ethics and the development of critical thinking and problem-solving skills. Students may shadow professionals throughout the course.

### Emergency Medical Responder 3 8417171X

This is an instructional program that prepares individuals to provide initial care to sick or injured persons or as ambulance drivers and attendants. An Emergency Medical Responder may use this training for employment. The Emergency Medical Responder is the first to arrive at the scene of an injury but does not have the primary responsibility for treating and transporting the injured person(s). Emergency Medical Responders may include law enforcement, lifeguard, fire services or basic life support non-licensed personnel who act as part of an organized emergency medical services team.

# ENVIRONMENTAL WATER & RECLAMATION TECHNOLOGY\* 8007300

### Introduction to Environmental Water Technology 8007110X

This course is designed to develop competencies in the area of hydrology, safety skills and procedures, geological principles of water resources, management of wetlands, storm water systems, environmental water resources, equipment and facility maintenance, scientific and research concepts; principles of leadership; and employability, and human relations skills. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing, and observation equipment.

### Intermediate Environmental Water Technology 8007120X

This course is designed to develop competencies in the area of standards and regulations, site assessments, safety, managing data and physical resources, prepare a plan, perform remediation, collect and dispose of solid waste, record keeping and sampling procedures, career opportunities, leadership, teamwork, and money management concepts.

Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing, and observation equipment.

### Advanced Environmental Water Technology 8007130X

This course is designed to develop competencies in the area of career opportunities, scientific concepts in water treatment, safety hazards, government regulations, facility operational principles, and equipment inspections. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing, and observation equipment. This course prepares students for the Florida Department of Environmental Protection Operator



#### SY 2024-2025

Certification Program Level C Examination.

#### Advanced Environmental Water Reclamation Technology 8007210X

This course focuses on the techniques and procedures performed by an operator during the collection, treatment, and disposal processes of domestic wastewater.

# EXERCISE SCIENCE\* 8417000

### Health Science Anatomy & Physiology 8417100X

This course is part of the secondary Health Core consisting of an overview of the human body, both structurally and functionally with emphasis on the pathophysiology and transmission of disease. Medical terminology is an integral part of the course.

### Health Science Foundations 8417110X

This course is part of the Secondary Health Core designed to provide the student with an in-depth knowledge of the health care system and associated occupations. Emphasis is placed on communication and interpersonal skills, use of technology, ethics and the development of critical thinking and problem-solving skills. Students may shadow professionals throughout the course.

### Exercise Science 8417120X

This course prepares students to be employed as Personal Trainers. Content includes, but not limited to, identifying and practicing within the appropriate scope of practice for a personal trainer, develop and implement exercise programs for apparently healthy individuals or those who have medical clearance to exercise, proficiency in the appropriate fitness equipment used, as well as a foundation in the musculo-skeletal system of the body.

#### **FINANCE\* 8815100**

### Digital Information Technology 8207310X

Basic overview of current business and information systems and trends. Emphasis on developing fundamental computer skills and includes the opportunity for MOS certification in Word, Excel, and PowerPoint.

### Business Communication & Technology 8815150X

An overview of current business, finance, and information trends. Emphasis is placed on developing proficiency with fundamental computer applications and opportunities to earn MOS industry certification in Word, Excel, and PowerPoint.

### Economics and Financial Services 8815110X

Basic principles

in macro and microeconomics. Additional emphasis placed on money, credit, banking, and modern trends in the finance industry.

#### Personal Finance 8815120X

Organization in planning for the use of economic resources and financial products available through a study of savings, credit, insurance, banking, and financial goals.

### Financial Internship 8815130X

These internships provide students the opportunity to demonstrate human relations, communications, and employability skills necessary for entry-level employment in the financial services industry.

### Accounting Applications I 8203310X

Introduction to the accounting cycle and basic accounting concepts. Emphasis is placed on the use of special journals, ledgers, controlling accounts, as well as analysis and interpretation of financial reports.

#### GAME / SIMULATION / ANIMATION / PROGRAMMING\* 8208300

### Game & Simulation Foundations 8208110X

An introduction to game and simulation concepts and careers and basic game/simulation design concepts such as rule design, play mechanics, and media integration

### Game & Simulation Design 8208120X

Fundamental principles of designing a game or a simulation application, rules and strategies of play, conditional branching, design and development constraints, use of sound and animation, design tools, and implementation issues. Emphasis is placed on the techniques needed to develop well-documented, structured game or simulation programs.

### Game & Simulation Programming 8208330X

This course is focused on students acquiring the appropriate programming skills for rendering a game or simulation product, including program control, conditional branching, memory management, scorekeeping, timed event strategies and methodologies, and implementation issues.

#### Multiuser Game & Simulation Programming 8208340X

This course is focused on students acquiring the appropriate programming skills for rendering a game or simulation

product, including program control, conditional branching, scorekeeping, timed event strategies and methodologies, and implementation issues specific to multiuser game/simulation products.

## HOSPITALITY & TOURISM MANAGEMENT\* 8703100

### Introduction to Hospitality & Tourism Management 8850110X

The purpose of this course is to introduce students to the skills necessary for success in the hospitality and tourism industry. Students will also have the opportunity to learn hospitality and tourism terminology and the mathematical, economic, marketing, and sales fundamentals of the industry.

#### Hospitality & Tourism Entrepreneurship 8703130X

The purpose of this course is to provide students with the academic and technical preparation to pursue high-demand and high-skill careers in hospitality related industries. In addition, this course is designed so that performance standards meet employer expectations, enhancing the employability of students.

### Hospitality & Tourism Marketing Management 8703120X

Students will learn sales and management techniques, marketing principles, and entrepreneurship skills necessary to succeed in the hospitality and tourism industry.

### Nutrition and Food Science 8801101X

Content includes but is not limited to instruction in the application of biological, chemical, and physical principles of converting raw agricultural products into processed forms for human consumption and safe food preparation, handling, packaging, food storage and distribution, and related aspects of human health and safety including toxicology and pathology. Qualified students may sit for the ServSafe Food Protection Manager

### Hospitality & Tourism Internship 8845130X

The Hospitality and Tourism Internship course provides students the opportunity to demonstrate human relations, communications, and employability skills necessary for entry-level employment in the travel and tourism industry. Additionally, it will enhance the instruction and competencies developed through classroom instruction.

### Hospitality & Tourism Cooperative Ed OJT 8800420X

The purpose of this course is to provide the on-the-job training component. Whenever the cooperative method is offered, the following is required for each student: a training agreement; a training plan signed by the student, teacher, and employer, including instructional



objectives; a list of on-the-job and inschool learning experiences; a workstation which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal; and a site supervisor with a working knowledge of the selected occupation. The workstation may be in an industry setting or in a virtual learning environment.

## INTERNATIONAL BUSINESS\* 8216100

### Digital Information Technology 8207310X

Basic overview of current business and information systems and trends. Emphasis on developing fundamental computer skills and includes the opportunity for MOS certification in Word, Excel, and PowerPoint.

### Accounting Applications 1 8203310X

This course emphasizes double-entry accounting; methods and principles of recording business transactions; the preparation of various documents used in recording income, expenses, acquisition of assets, incurrence of liabilities, and changes in equity; and the preparation of financial statements.

### International Business Systems 8216110X

This course is designed to prepare students to live and work in a global economy. Students develop an understanding of business principles, management styles, economics, and customs which affect business systems in the international environment

### International Finance and Law 8216120X

This course is designed to introduce students to the laws and regulations governing international trade including knowledge of import-export activities, banking, treaties, and currency exchange rates.

### Business Internship 8216130X

This course is designed to provide students with the opportunity to stimulate their career interest in business. Students will also enhance and apply the instructional competencies learned in the classroom with the internship experience. Students will be able to develop human relations skills, communications and employability skills needed to secure a position in the business environment.

## INTRODUCTION TO FIRE FIGHTING 8918200

#### Fire Fighting 1 8918210X

This course introduces a career of Fire Science that can lead to employment, after further instruction, to a career as a

fire fighter or other disciplines in the Fire Science realm. Emphasis is placed on fire service basic mission, the roles with in, and skills needed. Science of fire behavior, proper use and care for PPE, search and victim removal are a few topics covered.

#### Fire Fighting 2 8918220X

This course focuses on applying tactical ventilation knowledge and practices following AHJ policies and procedures, discuss the various components of water supply systems, describes fire hose characterizes, inspection and maintenance procedures, and skills to control structural fires, Class C and D fires, vehicle, and ground cover fires.

#### Fire Fighting 3 8918230X

This course applies loss control knowledge and practices following AHJ policies and procedures, describes the role of Firefighter 1 in the development and implementation of a fire and life safety program, and demonstrates JPR's.

## JOURNALISM AND MULTIMEDIA 8771101

### Foundations of Journalism 8203000X

This course is designed to develop basic entry-level skills required for careers in the writing and editing industry.

#### Digital Design 1 8209510X

This course is designed to develop basic entry-level skills required for careers in the digital publishing industry. The content includes computer skills; digital publishing concepts and operations; layout, design, and measurement activities; decision-making activities; and digital imaging.

### Photojournalism 8203001X

This course is designed to introduce students to basic photojournalism techniques, including camera operation, lighting, composition, photo manipulation, and storytelling for print and online publications. Students will become familiar with Digital Single Lens Reflex (DSLR) and as well as cameras on mobile devices and learn how to create authentic journalistic documents. An emphasis will be placed on using the camera as a reporting tool and will cover industry expectations for professional photojournalists.

#### JUNIOR ACHIEVEMENT/ ENTREPRENEURSHIP 8815100\*

### Digital Information Technology 8207310X

Basic overview of current business and information systems and trends. Emphasis on developing fundamental computer skills and includes the opportunity for MOS certification in Word, Excel and PowerPoint.

# Business Communication and Technology 8815150X

This course is designed to provide an overview of current business, finance and information systems and trends and to introduce students to the foundations required for today's business environments. Emphasis is placed on developing proficiency with computer applications, so that they may be used as communication tools for enhancing personal and work place proficiency in an information-based society. This also includes proficiency with computers using databases, spreadsheets, presentation applications, financial and tax software applications and the integration of these programs using software that meets industry standards.

### Accounting Applications 1 8203310X

This course emphasizes double-entry accounting; methods and principles of recording business transactions; the preparation of various documents used in recording income, expenses, acquisition of assets, incurrence of liabilities, and changes in equity; and the preparation of financial statements. The use of computers and appropriate software is required.

### **Economics and Financial Services** 8815110

This course presents basic topics in economics, including the principles and practices of banking, credit, and consumer lending in the United States. Additional emphasis is placed on money, credit and banking, economic growth and stability, characteristics of different economic systems and institutions. Students become familiar with the major functions of banks and other financial intermediaries, central banking by the Federal Reserve System, and modern trends in the finance industry. The students are also introduced to credit functions, principles of credit risk evaluation, loan creation, debt collection, and stocks and bonds.



#### LOCKHEED MARTIN APPLIED CYBERSECURITY\* 9001300

### Computer Fundamentals 9003410X

This course introduces students to the essential concepts, components, terminology, and knowledge about computers, computer systems, peripherals, and networks.

### Programming Essentials 9003450X

This course is designed to introduce students to plan program design, code programs, test programs, perform program maintenance, create, and maintain documentation. It also teaches students to develop an awareness of software quality assurance, develop an understanding of programming techniques and concepts, and design structured programs.

### Computer Networking Fundamentals 9003480X

This course emphasizes demonstrating understanding of network technologies, understanding, installing, and configure network hardware, devices, management software, and networking tools. Students will also install, configure, and manage network security hardware and software devices.

### Cybersecurity Fundamentals 9003490X

This course emphasizes demonstrating understanding of cybersecurity, the terminology used, its history and culture, and trends. Students will recognize malicious code and specify the appropriate actions to take to mitigate vulnerability and risk.

### Advanced Placement Computer Science Principles 0200335X

AP Computer Science Principles was created with significant support from the National Science Foundation and more than 50 leading high school and higher education computer science educators who piloted the program at their institutions. The rigorous process of development and testing produced a course that reflects the latest scholarship in the field and provides students with a relevant and engaging learning experience.

#### MACHINING TECHNOLOGY\* 9202100

### Machining Technology 1 9202110X

Students explore career opportunities and requirements of a professional machinist. Topics include: safety and organization blueprints, precision measurement, benchwork skills, and the history of manufacturing.

### Machining Technology 2 9202120X

Content emphasizes knowledge of manufacturing processes, generating computer-aided design drawings, precision measurement, power saws, grinders, drill presses, and understanding employability and entrepreneurship skills.

### Machining Technology 3 9202130X

Content emphasizes knowledge of working in the machining industry. Topics include teamwork & critical thinking skills, mathematics, quality control and inspection, plan machining operations, CAD/CAM processes, and set-up and program a CNC machine for lathe operations.

# MARITIME TECHNOLOGY\* 8404100

### Maritime 1 8404110X

This course provides students with an understanding of the field of maritime studies by developing an in-depth mastery of maritime industry related concepts and their relationship to the business of shipping. The Maritime program works in close partnership with Port Canaveral

### **Maritime 2** 8404120X

This course provides students with opportunities to further their mastery on maritime related concepts in preparation for postsecondary education and the world of work. The course builds on material presented in Maritime 1 by increasing the depth and breadth of student knowledge.

#### Maritime 3 8404130X

Students will take field trips to the port, discover the vast career options the port has to offer and in time, intern with and shadow professionals in the maritime industry. The course builds on material presented in Maritime 2.

### **Maritime 4** 8404140X

This course provides students with opportunities to further their mastery on maritime related concepts in preparation for postsecondary education and the world of work. The course builds on the material presented in Maritime 3 by increasing the depth and breadth of student knowledge.

#### MARKETING, MANAGEMENT AND ENTREPRENEURIAL PRINCIPLES\* 9200500

### Marketing Essentials 8827110X

Develop fundamentals skills of marketing and selling as well as human relations, employability, communication, and economic skills.

### Marketing Applications 827120X

In-depth study of marketing in a free enterprise society and skills required for entry level employment in a wide variety of marketing occupations.

### Marketing Management 8827130X

Applying skills related to marketing functions and required for success in the marketing industry.

### Marketing Cooperative Education – OJT 8800410X

Enhance and further develop marketing competencies through a paid, supervised, on-the-job training experience.

## MEDICAL ADMINISTRATIVE SPECIALIST\* 8212300

### Digital Information Technology 8207310X

Basic overview of current business and information systems and trends. Emphasis on developing fundamental computer skills and includes the opportunity for MOS certification in Word, Excel, and PowerPoint.

#### Medical Office Technology 1 8212201X

This course is designed to assist with administrative office duties and procedures specific to the medical environment. The course promotes application of higher-level office procedures tasks and communication skills

### Medical Office Technology 2 8212202X

This course expands the competencies learned in Medical Office Technology 1. Students are required to perform higher level thinking and decision making and to use technology as a resource to efficiently perform systematic procedural tasks and to produce quality work in an efficient manner.

#### NURSING ASSISTANT (PATIENT CARE ASSISTANT)\* 8417210

### Health Science Anatomy and Physiology 8417100X

This course is part of the secondary Health Core consisting of an overview of the human body, both structurally and functionally with emphasis on the pathophysiology and transmission of disease. Medical terminology is an integral part of the course. The course Anatomy and Physiology (2000350) or Anatomy and Physiology (2000350) or Anatomy and Physiology Honors (2000360) may be substituted for the course Health Science Anatomy & Physiology (8417100). The course Health Science Anatomy & Physiology (8417100) is designated as an equally rigorous (EQ) science credit.



### Health Science Foundations 8417100X

This course is part of the Secondary Health Core designed to provide the student with an in-depth knowledge of the health care system and associated occupations. Emphasis is placed on communication and interpersonal skills, use of technology, ethics and the development of critical thinking and problem-solving skills. Students may shadow professionals throughout the course

### Introduction to Health Care HSC 1000X

The course focuses on core concepts common to all health care occupations. Content includes health care delivery systems with emphasis on health occupations, communication skills, legal and ethical responsibilities, wellness and disease concepts, infection control, CPR, introductory first aid and safety, medical terminology, employability, and computer skills. Students will receive AHA CPR, oxygen therapy and tank transport skills. This course requires dual enrollment with EFSC.

### Advanced Medical Terminology HSC 1532X

Advanced review of medical language used throughout the healthcare delivery system. Emphasis is placed on anatomy, physiology, and pharmaceutical terms. Emphasis will also be placed on the ability to infer understanding of medical subjects, communicate utilizing medical terminology with proper pronunciation and spelling. This course requires dual enrollment with EFSC.

### Basic Healthcare Worker HSC 0003X

Classroom, laboratory, and clinical instruction prepare students to function as a member of the health-care team in varied settings and roles.

### Articulated Nursing Assistant HCP 0621X

Classroom, laboratory, and clinical course prepares for employment as a Nursing Assistant. Basic patient care principles and the role of the Nursing Assistant in delivering resident care. Content includes nutrition, physical comfort and safety functions, personal patient care, and infection control. Special emphasis is placed on the care of the geriatric resident in the long-term care setting.

### Advanced Home Health Aid HCP 0332X

Florida requirements for the Home Health Aide including classroom and clinical experience. Includes skills and knowledge in communication, legal and ethical responsibilities, comfort and safety functions, nutrition, and infection control.

### Patient Care Assistant HCP 0020X

Clinical experiences, at a local hospital, including the care of patients with acute common health problems, pre- and post- op patients, and special procedures.

### Health Science Education Directed Study 8400100X

The purpose of this course is to provide students with learning opportunities in a prescribed program of study within the Health Science cluster that will enhance opportunities for employment in the career field chosen by the student.

#### OUTBOARD MARINE SERVICE TECHNOLOGY\* 9504200

### Outboard Marine Service 1 9504210X

Introduction to marine industry standards, including basic maintenance and repair of four-stroke engines, two-stroke engines, and electrical systems.

### Outboard Marine Service 2 9504220X

Concentrates on routine maintenance of fuel systems, two-stroke cycle carburetors and marine trailers. Skills are developed in sales, communications, math, science, employability, and entrepreneurship.

### Outboard Marine Service 3 9504230X

Focus on the skills needed to be parts specialist and computer skills needed in the marine service industry. Maintenance and repair of cooling and lubrication systems are a significant component of lab activity.

### Outboard Marine Service 4 9504240X

Maintenance and repair of two-stroke cycle outboard engines, outboard fuel systems, and cooling systems.

### Advanced Marine Technology 1 9504250X

Outboard lubrication systems, lower cases, cranking systems, and magneto systems.

### Advanced Marine Technology 2 9504260X

Maintenance and repair of outboard battery ignition systems, capacitor discharge ignition systems, and outboard charging systems.

# PRINCIPLES OF TEACHING\* 8909000

### Introduction to the Teaching Profession 8909010X

This course is designed to focus on the profession of teaching and related with an emphasis on identifying the current, historical, philosophical, and social perspectives of American education, including trends and issues.

### Human Growth and Development 8909020X

This course prepares students to understand the nature of human development from conception through adolescence with an emphasis on theories of physical, cognitive, and psychosocial development, the effect of heredity and the environment, the role of caregivers and the family, health and safety concerns, and contemporary issues.

### Foundations of Curriculum and Instruction 8909030X

This course is designed for students to develop the knowledge and skills of curriculum delivery models in response to the developmental needs of all children.

### Principles of Teaching Internship 8909040X

The course is designed as an internship for students to apply their knowledge in real world education settings.

#### PUBLIC SAFETY TELECOMMUNICATION\* 9101000

### Dispatcher: Police, Fire, Ambulance 9101100X

This program prepares students for employment as a dispatcher: police, fire, ambulance. The content includes, ethics and the role of the telecommunicator; standard telecommunication operating procedures; relationship to field personnel; understanding of the command levels; typical layouts of message centers; use of performance aids; overview of emergency agencies; functions and terminology.

#### TECHNICAL DESIGN\* 8401000

#### Technical Design 1 8401010X

This program provides students with instruction in the characteristics and evolution of technology, underlying principles of design, and fundamental knowledge and skills in the use of illustration and drafting software, architectural design, technical illustration, and advanced imaging techniques.

#### Technical Design 2 8401020X

Students learn more about the nature of design and drafting techniques for architectural purposes. Students are also provided with instruction in a variety of technical illustrations commonly produced to depict architectural concepts and designs. Students are expected to



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continue collating their portfolio using exemplars of their work.

#### **Technical Design 3** 8401030X

This course provides students with instruction in advanced imaging techniques relative to both static and animated illustrations. In addition to learning more advanced techniques, students will have an opportunity to research a project, design an appropriate solution, and present their results. The ultimate output of this course is the student's presentation of a completed portfolio illustrating their best exemplars.

# TELEVISION PRODUCTION TECHNOLOGY\* 8201500

#### Television Production Technology 1 8201510X

Introduction to overall production of television studio activities including scripts, lighting, filming and directing, electronic news gathering, field production, communication skills, leadership skills, human relations and employability skills, safe and efficient work practices. Studio activities are an integral part of this program. Instruction in camera principles, audio and video control, lighting methods, control room operation, station operation, and set preparation.

### Television Production Technology 2 8201520X

Application of overall production of television studio activities including scripts, lighting, filming and directing, electronic news gathering, and field production, communication skills, leadership skills, human relations and employability skills, safe and efficient work practices.

### Television Production Technology 3 820153030X

Research and advanced application of overall production of television studio activities including scripts, lighting, filming and directing, electronic news gathering and field production, communication skills, leadership skills, human relations and employability skills and safe and efficient work practices.

# WEB APPLICATION DEVELOPMENT & PROGRAMMING\* 9007500

### Digital Information Technology 8207310X

Basic overview of current business and information systems and trends. Emphasis on developing fundamental computer skills and includes the opportunity for MOS certification in Word, Excel and PowerPoint.

### Foundations of Programming 9007210X

This course introduces concepts, techniques, and processes associated with computer programming and software development.

### Web Programming 9007510X

Computer programming concepts specific to the Internet and Internet-based software applications.

### Java Script Programming 9007520X

Computer programming concepts specific to client-side JavaScript.

# Object-Oriented Programming Fundamentals 9007230X

This course continues the study of computer programming concepts with a focus on the creation of software applications employing object-oriented programming techniques.

### PHP Programming 9007530

This course continues the study of computer programming concepts specific to PHP programming.

#### WELDING TECHNOLOGY FUNDAMENTALS\* 9204400

### Welding Technology Fundamentals 1 9204410

This course prepares students for entry into the welding industry. Content emphasizes beginning skills key to the success of working in the welding industry. Students study workplace safety and organization, basic manufacturing processes, metals identification, basic interpretation of welding symbols, and oxyfuel gas cutting practices. Students demonstrate learned skills by creating and producing a finished product.

### Welding Technology Fundamentals 2

This course is designed to build on the skills and knowledge students learned in Welding Technology Fundamentals 1 for entry into the welding industry. Content emphasizes beginning skills key to the success of working in the welding industry. Students study drawings and welding symbols, intermediate oxyfuel gas cutting practices, plasma arc cutting principles, and basic shielded metal arc welding (SMAW). Students demonstrate learned skills by creating and producing a finished product.

### Welding Technology Fundamentals 3 9204430

Students explore career opportunities and requirements of a professional welder.. Students study basic shielded metal arc welding (SMAW), Carbon Arc Gouging (GAC) principles, and visual examination skills. Students demonstrate learned skills by creating and producing a finished product.

