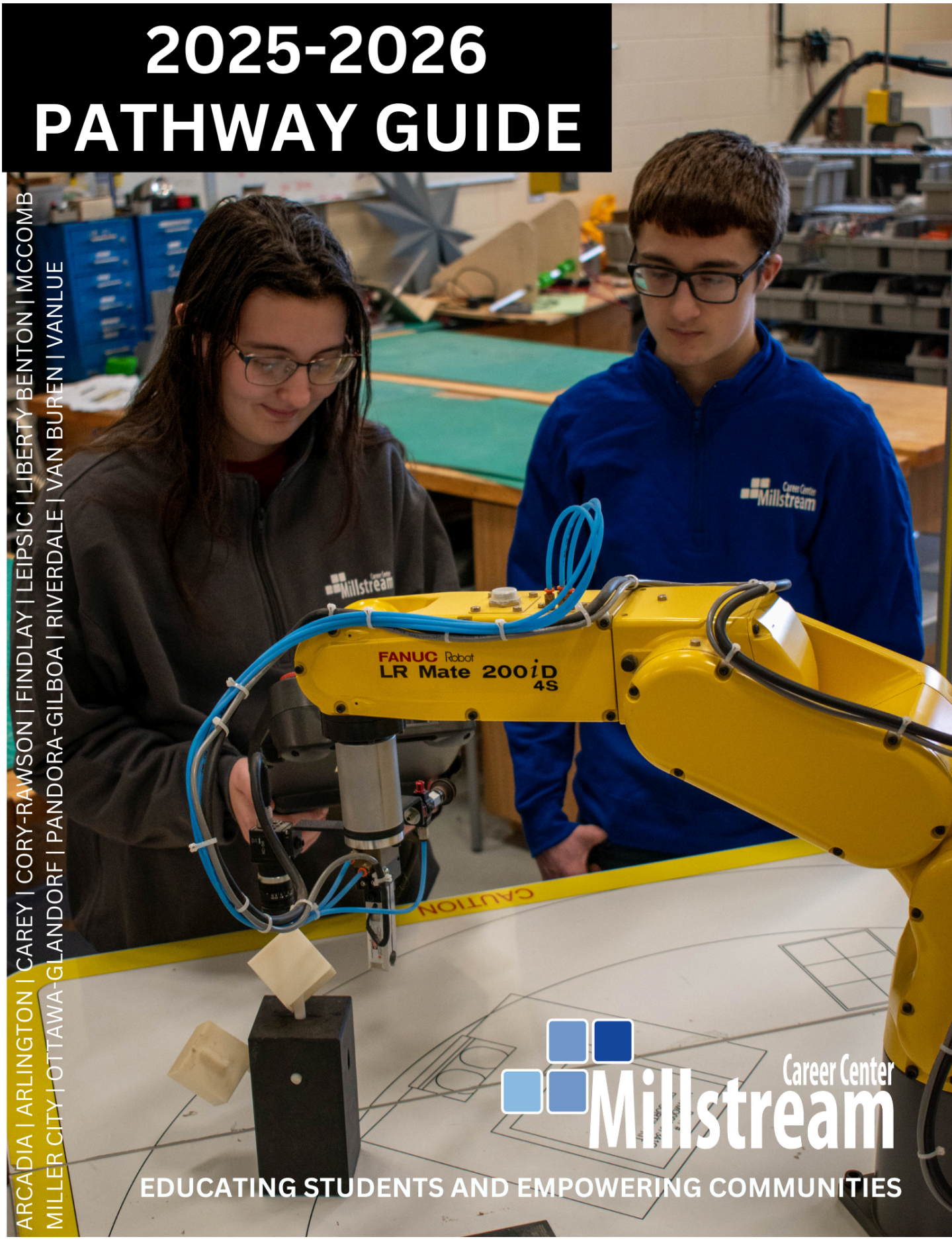
2025-2026 PATHWAY GUIDE



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Career Center Millstream

EDUCATING STUDENTS AND EMPOWERING COMMUNITIES

Millstream Career Center

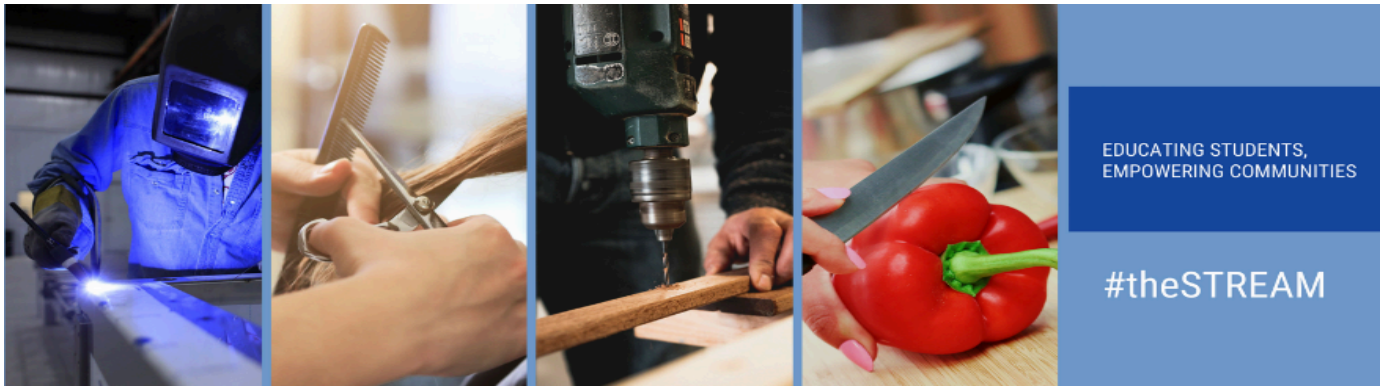
Pathway Guide
2025-2026

Millstream Career Center is committed to training junior & senior students in their program of study and prepares them for a career, further training, or collegiate studies upon graduation from high school. Course work consists of related classroom instruction and practical hands-on projects and experiences aimed at developing the knowledge and skills required for career success.

Development of leadership skills that are critical in today's workplace are accomplished in part through membership and participation in the following co-curricular organizations: DECA – An Association of Marketing Students, HOSA-Future Health Professionals, SkillsUSA, EdRising, and FFA – Future Farmers of America.

This course pathway guide will provide you with valuable information when choosing a program of study. Our classes will give you a jump start into your career. If you have questions, please contact our office at 419-425-8293 to speak with us. We want to ensure that your high school experience allows for opportunities beyond the traditional pathway. Take advantage of all the opportunities that are available to you and allow Millstream Career Center to be a step toward your career pathway.

Director
Millstream Career Center
1150 Broad Ave.
Findlay, Ohio 45840
419-425-8293



JUNIOR/SENIOR PROGRAM OFFERINGS

Automotive Technology
Auto Shop Safety & Foundational Maintenance, Braking Systems, Electrical & Electronics, Steering & Suspension

Business Essentials
Foundations of Business,Entrepreneurship, Customer Relationships, Market Research

Construction Skills
Site Preparation, Demolition & Renovation, Framing, Masonry, Electrical, Green Technology, Roofing

Cosmetology
Hair Styling, Coloring; Spa Techniques: Nails, Pedicure, Nail Enhancements, Nail Art, Massage, Skin Core, Make-Up Techniques

Creative Arts Design & Entrepreneurship
Visual Design Primer, Visual Creation, Digital Print Design, Business of Arts and Communication

Culinary Arts
Food Safety & Sanitation, Menu Planning, Cooking Techniques, Plate Presentation, Customer Service, Creativity, Critical Thinking, Entrepreneurship and Life Skills

Engineering & Robotics
3-D Design using CAD, Hydraulic & Pneumatics, Electricity & Electronics, Automation & Robotics, Mechanical Systems, 2D Laser-3D Printing, Engineering Fundamentals

Health Professions
Infection control and safety practices, Certified Clinical Medical Assistant NHCACertified, Phlebotomy Technician, and ODH quality of core requirements, Medical Terminology, Diversified Health Occupations, Mental Health

Hospitality & Restaurant Services
Food Safety & Preparation, Customer Service,catering & banquet, front desk operations, dining room operations

Information Technology Professions
IT Engineering & Management; Software Development Technology; Network: Design, Installation; Maintenance & Security; Program Development with AI and Machine Learning Techniques

JTC (Job Training)
Career preparation, financial literacy, business readiness, health literacy, safety, communication, customer service, problem solving, critical thinking

Media Production & Visual Design
Audio / Video Production, Broadcasting Techniques, Photography, Cinematography, Digital Editing

Manufacturing & Industrial Robotics
Pre-Engineering Technologies, Machining Tools, Computer Numerical Control Technology with Industrial Mill & Lathes

Teaching Professions
Child Development, Instructional Activities, Learning Center Design, Supervision, Bulletin Board Design, Training in Child Abuse Prevention, First Aid, and CPR

Welding
Welding Safety, Fabrication, Welding Engineering & Design, Sculptures, Work Based Learning (WBL)

Interested Millstream students have the opportunity to become **DUAL-ENROLLED**. Junior and Senior students in selected Tech Prep programs may register for college credit in their program area. Millstream instructors are adjunct faculty at Owens Community College and Rhodes State College will deliver curriculum content consistent with college requirements. Students will receive an official college transcript for the courses completed. This is offered at no cost to the student or home school.

Applying to the College/University
The following documents are tools to assist you in your CCP application process. Each college/university has their own steps and procedures for application as a CCP student. Each college/university also has their own deadline for steps to be completed. Please review the application steps for each college/university that you intend to apply to as a CCP student.

Owens Community College	University of Findlay	Rhodes State College
Automotive Technology **Business Essentials** **Culinary Arts** **Engineering and Robotics**	**Health Professions**	**Information Technology Professions** **Media Production & Visual Design** **Teaching Professions**
Owens Community College Application Steps	University of Findlay Application Steps	Rhodes State College Application Steps

Intent forms are due by April 1st to your school counselor.

AUTOMOTIVE TECHNOLOGY -T9

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Ground Transportation Maintenance	394 or 394CCP	177000	1.5 HS & 2 CCP
11	Automotive Braking Systems	395	177030	1.5 HS credits
12	Automotive Steering & Suspension Systems	494	177031	1.5 HS credits
12	Ground Transportation Electronics	495	177002	1.5 HS credits

Auto Technology I: Ground Transportation Maintenance		**394 or 394CCP**
Semester: 3 periods per day	**Dues:** $30.00 SkillsUSA	**Grade**: 11
Co-requisite: Automotive Braking Systems (395)		
In this first course, students will apply the skills needed to inspect and perform general service on vehicles. Students will research applicable service information and technical service bulletins, and perform maintenance on vehicles. Students will inspect and service engine, drivetrain, suspension, steering, electrical and braking systems. Students will perform ignition maintenance including spark plug/glow plug and ignition wire and coil pack replacement. Additionally, students change fluids, filters and inspect vehicles for leaks and fluid conditions.		

Auto Technology I: Automotive Braking Systems		**395**
Semester: 3 periods per day	**Dues:** See above	**Grade**: 11
Co-requisite: Ground Transportation Maintenance (394 or 394CCP)		
Students will perform inspections, troubleshoot malfunctions and service automotive brake systems. Students will identify poor performing hydraulic brake systems and replace malfunctioning components. Additionally, students will disable and enable supplemental restraint systems (SRS) and replace anti lock brake systems components.		

Auto Technology II: Automotive Steering & Suspension Systems		**494**
Semester: 3 periods per day	**Dues:** $30.00 SkillsUSA	**Grade**: 12
Prerequisite: Ground Transportation Maintenance (394 or 394CCP) and Automotive Braking Systems (395)		
Co-requisite: Ground Transportation Electronics (495)		
Students will perform inspections, troubleshoot malfunctions and service automotive undercarriage systems. Students will install coil and leaf springs, shock absorbers and struts, and replace wheel bearings. Students will inspect and replace automotive steering components and perform wheel alignments.		

Auto Technology II: Ground Transportation Electronics		**495**
Semester: 3 periods per day	**Dues:** See above	**Grade**: 12
Prerequisite: Ground Transportation Maintenance (394 or 394CCP) and Automotive Braking Systems (395)		
Co-requisite: Automotive Steering & Suspension Systems (494)		
Students will diagnose and repair vehicle electrical systems, including chassis electrical, charging, starting and lighting systems. Students will learn the fundamentals of direct current (DC) electronics including series, parallel, and series-parallel circuits. Students will use electronic diagnostic tools, read schematics, and utilize printed and electronic repair manuals to troubleshoot electrical circuits, test components and replace defective modules.		

BUSINESS ESSENTIALS -S5

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Marketing Principles	458	144000	1 HS credit
11	Business Foundations	358	141000	1 HS credit
12	Digital Marketing & Management	459 or 459CCP	144015	1 HS & 3 CCP
12	Strategic Entrepreneurship	460 or 460CCP	141030	1 HS & 3 CCP

Business Essentials: Principles		**458**
Full year: 1 period per day	**Dues:** $30.00 DECA **Fees:** $20.00	**Grade**: 11
Co-requisite: Business Foundations (358)		
This is the first course in the Marketing career field. It introduces students to the specializations offered in Marketing. Students will obtain fundamental knowledge and skills in marketing communications, marketing management, marketing research, merchandising and professional selling. They will acquire knowledge of marketing strategies, market identification techniques, employability skills, business ethics and law, economic principles and international business. Technology, leadership and communications will be incorporated in classroom activities.		

Business Essentials: Business Foundations		**358**
Full year: 1 period per day	**Fees/Dues:** See above	**Grade**: 11
Co-requisite: Marketing Principles (458)		
Business Foundations is the recommended first course in the Business and Administrative Services, Finance, Logistics and Supply Chain Management and Marketing Career Field pathways. Learners will develop foundational professional skills, in addition to exploring fundamental business activities and concepts. This course also includes introductory learning outcomes from each of the four related pathways.		

Business Essentials: Digital Marketing & Management		**459 or 459CCP**
Semester: 2 periods per day	**Dues:** $30.00 DECA **Fees:** $20.00	**Grade**: 12
Prerequisite: Completion of Marketing Principles (458) and Finance Foundations (358)		
Co-requisite: Strategic Entrepreneurship (460 or 460CCP)		
Students will apply tools, strategies and processes to communicate digitally with targeted customers. They will create, implement, and critique online advertising, email marketing, websites, social media, mobile marketing, search-engine optimization, video or images and podcasts/webcasts. Students will apply project management techniques to guide and control digital communications efforts. They will also create and repurpose content for use in digital environments. Technology, employability skills, leadership and communications will be incorporated in classroom activities.		

Business Essentials: Strategic Entrepreneurship		**460 or 460CCP**
Semester: 2 periods per day	**Fees/Dues:** See above	**Grade**: 12
Prerequisite: Completion of Marketing Principles (458) and Finance Foundations (358)		
Co-requisite: Digital Marketing Management (459 or 459CCP)		
Students will use innovation skills to generate ideas for new products and services, evaluate the feasibility of ideas, and develop a strategy for commercialization. They will use technology to select target markets, profile target customers, define the venture's mission, and create business plans. Students will take initial steps to establish a business. Students will calculate and forecast costs, break-even, and sales. Establishing a brand, setting prices, promoting products, and managing customer relationships will be emphasized.		

CONSTRUCTION SKILLS -DD

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Construction Technology	301	178000	1.5 HS credits
11	Carpentry & Masonry	302	178001	1.5 HS credits
12	Structural Systems	401	178003	1.5 HS credits
12	Coverings & Finishes	402	178004	1.5 HS credits

Construction I: Construction Technology		**301**
Semester: 3 periods per day	**Dues:** $30.00 SkillsUSA **Fees:** $25.00	**Grade**: 11
Co-requisite: Carpentry & Masonry (302)		
Students will learn principles in basic safety (10-hr OSHA), construction math, hand and power tool care and operation, blueprint reading, material handling, communication and employability skills. An emphasis will be placed on safe and green construction practices.		

Construction I: Carpentry & Masonry		**302**
Semester: 3 periods per day	**Dues/ Fees:** See above	**Grade**: 11
Co-requisite: Construction Technology (301)		
This first course in the pathway will introduce to students the materials, methods, and equipment used in carpentry and masonry. Students will organize a project work sequence by interpreting plans and diagrams within a construction drawing set. They will lay out and install basic wall, floor and roof applications. Students will perform introductory concrete applications including formwork, reinforcement, mixing, and finishing. Current advancements in technology, safety, applicable code requirements and correct practices are learned.		

Construction II: Structural Systems		**401**
Semester: 3 periods per day	**Dues:** $30.00 SkillsUSA **Fees:** $25.00	**Grade**: 12
Prerequisite: Construction Technology (301) and Carpentry & Masonry (302)		
Co-requisite: Coverings & Finishes (402)		
Students will learn procedures and techniques required for layout and framing of walls and ceilings, including roughing-in door and window openings, constructing corners and partitions; bracing walls and ceilings; and applying sheathing. Students will learn methods of roof, cold formed steel, and wood stair framing. Students will learn site and personal safety, material properties, design procedures, and code requirements for structural systems.		

Construction II: Coverings & Finishes		**402**
Semester: 3 periods per day	**Dues/Fees:** See above	**Grade**: 12
Prerequisite: Construction Technology (301) and Carpentry & Masonry (302)		
Co-requisite: Structural Systems (401)		
This course will address applications of interior and exterior finish work. Students will identify material properties and select appropriate applications. Students will install thermal and moisture protection including roofing, siding, fascia and soffits, gutters, and louvers. Students will install drywall; trim-joinery and molding and apply wall, floor and ceiling coverings and finishes. Throughout the course, the safe handling of materials, personal safety, prevention of accidents and the mitigation of hazards are emphasized.		

COSMETOLOGY -M1

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Microbiology and Infection Control	367	174115	1.5 HS credits
11	Trichology	369	174120	1.5 HS credits
12	Advanced Hair Cutting & Styling	467	174130	1.5 HS credits
12	Advanced Chemical Services	469	174140	1.5 HS credits

Cosmetology I: Microbiology and Infection Control		**367**
Semester: 3 periods per day	**Dues:** $30.00 SkillsUSA **Fees:** $160 (Includes shear kit, mannequin, apron)	**Grade**: 11
Co-requisite: Trichology (369), Biology or Chemistry or Anatomy, and English 11, and a Math		
Students will learn basic bacteriology, infection control, and salon safety practices. Students will be able to recognize infectious disorders and contagious diseases, learn the dispensary requirements, product storage, and requirements of the laws and rules, which regulate the cosmetology industry in Ohio.		

Cosmetology I: Trichology		**369**
Semester: 3 periods per day	**Dues/Fees::** See above	**Grade**: 11
Co-requisite: Microbiology and Infection Control (367), Biology or Chemistry or Anatomy, and English 11, and a Math		
Students will learn the anatomy of the head and scalp, structure of the hair and various techniques and procedures for analyzing hair, scalp disorders and diseases. Students will be able to determine hair porosity, elasticity, density, texture and growth patterns as well as conduct chemical tests for treated hair and ability to recommend corrective scalp treatment.		

Cosmetology II: Advanced Hair Cutting and Styling		**467**
Semester: 3 periods per day	**Dues:** $30.00 SkillsUSA **Fees:** $90 (includes mannequin, State Board Kit)	**Grade**: 12
Prerequisite: Completion of Microbiology and Infection Control (367), Trichology (369), Biology or Chemistry or Anatomy		
Co-requisite: Advanced Chemical Services (469)		
Students will learn advanced cutting and formal styling using specialized equipment and techniques. This course offers enhanced training in current trends and razor techniques.		

Cosmetology II: Advanced Chemical Services		**469**
Semester: 3 periods per day	**Dues/Fees:** See above	**Grade**: 12
Prerequisite: Completion of Microbiology and Infection Control (367), Trichology (369), Science (Biology Chemistry or Anatomy)		
Co-requisite: Advanced Hair Cutting and Styling(467)		
Students will learn advanced chemical services using specialized products and techniques. Students will do advanced coloring, dimensional coloring, corrective techniques, texturizing, and advanced chemical wave wrapping techniques.		

CREATIVE ARTS, DESIGN AND ENTREPRENEURSHIP -B2

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Introduction To Visual Design	365	340310	1 HS
11	Visual Creation	366	340315	1 HS
12	Business of Arts and Communication	465	340006	1 HS
12	Digital Media Art	466	340325	1 HS

Creative Arts I: Introduction To Visual Design — 365

Semester: 2 periods per day | **Dues**: $30.00 SkillsUSA | **Fees:** $50 | **Grade**: 11

Co-requisite: Visual Creation

For students embarking on this class, be prepared to delve into the exciting world of visual design! We'll explore the foundational Elements and Principles of Design, along with the fascinating world of color theory. Throughout this course, students will develop a keen understanding of symbols, typography, and the intricate art of product output. We'll lay the groundwork for your visual design journey, providing you with essential knowledge about the contemporary role of graphics in communication industries. We'll delve into the practical aspects of visual design, exploring how safety, deadlines, teamwork, and ethics play crucial roles in the professional world. By the end of this course, you'll not only be equipped with the skills to create visually stunning designs but also possess a holistic understanding of the industry's key pillars.

Creative Arts I: Visual Creation — 366

Semester: 2 periods per day | **Dues:** See above | **Fees:** See above | **Grade**: 11

Co-requisite: Intro. to Visual Design

In the realm of visual communications, a meticulous attention to detail, comprehension of art elements, design principles, and various artistic styles is imperative. Students are equipped with the skills to master proper composition, incorporating essential principles like color theory, typography, designing, and drawing.. They develop designs tailored for online platforms and both two- or three-dimensional products, all while ensuring compliance with copyright laws and meeting deadlines.

Creative Arts II: Business of Arts and Communication — 465

Semester: 2 periods per day | **Dues:** $30 Skills USA | **Grade**: 12

Prerequisite: Both Level I courses | **Co-requisite:** Digital Media Art

An increasing number of entrepreneurs derive their livelihood from industries associated with arts and communications. The curriculum covers a wide array of topics, such as marketing, branding, production, promotion, booking, budgeting, and merchandising. Additionally, students gain knowledge and practical skills in intellectual property rights, licensing, copyright regulations, royalties, liabilities, and contractual agreements. This comprehensive education enables students to understand the operations of both profit-oriented and non-profit organizations within these industries.

Creative Arts II: Digital Media Art — 466

Semester: | **Dues:** See above | **Grade**: 12

Prerequisite: Both Level I courses | **Co-requisite:** Business of Arts and Communication (465)

In the realm of visual communications, a meticulous attention to detail, comprehension of art elements, design principles, and various artistic styles is imperative. Students are equipped with the skills to master proper composition, incorporating essential principles like color theory, typography, designing, and drawing.. They develop designs tailored for online platforms and both two- or three-dimensional products, all while ensuring compliance with copyright laws and meeting deadlines.

CULINARY ARTS -L0

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Fundamentals of Foods Production	388 or 388CCP	330100	1.5 HS & 2 CCP
11	Baking & Pastry Arts	389	330125	1.5 HS credits
12	Contemporary Cuisine	488	330105	1.5 HS credits
12	Dining Room Service and Operations	489	330110	1.5 HS credits

Culinary Arts I: Fundamentals of Food Production		**388 or 388CCP**
Semester: 3 periods per day	**Dues:**$30 SkillsUSA **Fees:**$60 (additional costs include black non-skid shoes)	**Grade**: 11
Co-requisite: Baking & Pastry Arts (389)		
Students will prepare food products and beverages according to standardized recipes. They will apply plating and presentation principles to deliver attractive menu items, establish food specifications and prep lists, and develop ingredient and portion control guides. Safety and sanitation, standard knife skills, and culinary math will be emphasized. Employability skills, leadership and communications will also be incorporated.		

Culinary Arts I: Baking & Pastry Arts		**389**
Semester: 3 periods per day	**Dues/ Fees:** See above	**Grade**: 11
Co-requisite: Fundamentals of Food Production (388 or 388CCP)		
Students will apply food-science principles to prepare and bake breads, desserts and pastries. They will also use specialized decorating and presentation techniques to decorate cakes, cookies, pastries, and other baked goods. Students will select quality ingredients, determine food costs, and research and develop marketable new recipes and food concepts. Personal safety, food safety, and equipment safety will be emphasized.		

Culinary Arts II: Contemporary Cuisine		**488**
Semester: 3 periods per day	**Dues:**$30 SkillsUSA **Fees:**$60 (additional costs include black non-skid shoes)	**Grade**: 12
Prerequisite: Completion of Fundamentals of Food Production (388 or 388CCP) and Baking & Pastry Arts (389)		
Co-requisite: Dining Room Service and Operations (489)		
Students will prepare regional and international food products and beverages according to standardized recipes. They will research and develop marketable new recipes, plan and design menus, and calculate food requirements and costs. Selection, use, maintenance and storage of commercial equipment, machines, tools and tableware will be emphasized. Food science, inventory management, food presentation, and safety and sanitation will also be addressed.		

Culinary Arts II: Dining Room Service and Operations		**489**
Semester: 3 periods per day	**Dues/Fees:** See above	**Grade**: 12
Prerequisite: Completion of Fundamentals of Food Production (388 or 388CCP) and Baking & Pastry Arts (389)		
Co-requisite: Contemporary Cuisine (488)		
Students will apply strategies and techniques to identify and meet dining guest needs. They will provide table and beverage service; maintain eating areas, meeting spaces and serving stations; manage online reservations and orders; and monitor table turns, wait lines and table assignments. Nutritional analysis, types of table service, safety and sanitation, cultural intelligence, employability skills and communications will also be addressed.		

ENGINEERING & ROBOTICS -F6

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Engineering Design	826 or 826CCP	175001	1 HS credit & 3 CCP
11	Machine Tools	827 or 827CCP	176004	1 HS Credit & 3 CCP
12	DC Electronic Circuits	829 or 829CCP	175105	1 HS Credit & 3 CCP
12	Robotics	830 or 830CCP	175004	1 HS credit & 3 CCP

Engineering I: Engineering Design — 826 or 826CCP

Semester: 2 periods	**Dues**:$30 SkillsUSA **Fees:** $120	**Grade**: 11

Co-requisite: Machine Tools (827 or 827CCP)

Students will learn the application of the engineering design process. Topics include work-processes, optimization methods, design optimization and risk management tools. Students will use 2D and 3D modeling software to help them design solutions to proposed problems, document their work and communicate solutions. Additionally, students will interpret industry prints and create working drawings from functional models. Emphasis is given to experimental problem solving in real systems

Engineering I: Machine Tools — 827 or 827CCP

Semester: 2 periods per day	**Dues/ Fees:** See above	**Grade**: 11

Co-requisite: Engineering Design (826 or 826CCP)

This course introduces students to all aspects of machining applications in manufacturing. They will be able to perform routine calculations, interpret basic drawings, begin the process of performing accurate measurements and be able to plan simple machining processes. Students will learn the fundamental principles and practices of cutting, drilling and grinding using modern machine tools, hand tools and precision measuring instruments.

Engineering II: DC Electronic Circuits — 829 or 829CCP

Semester: 2 periods per day	**Dues:** $30 SkillsUSA **Fees:** $120	**Grade**: 12

Prerequisite: Engineering Design (826 or 826CCP) & Engineering Principles (827 or 827CCP)

Co-requisite: Robotics (830 or 830CCP)

Students will learn the fundamental principles of electricity with emphasis on DC (direct current) circuits. They will use concepts of Ohm's Law, the Power Formula and Kirchhoff's Law with series, parallel and series-parallel circuit applications. The student will master electrical safety, breadboard wiring, basic circuit troubleshooting, operation of DC power supply and digital multimeter (DMM). We will also begin working with automation principles.

Engineering II: Robotics — 830 or 830CCP

Semester: 2 periods per day	**Dues/Fees:** See above	**Grade**: 12

Prerequisite: Engineering Design (826 or 826CCP) & Engineering Principles (827 or 827CCP)

Co-requisite: DC Electronic Circuits (829 or 829CCP)

Students will apply the knowledge and skills necessary to program and operate Robots, using the teach pendant as the main interface point. The Students will learn robotic operations and system configurations. Coding, compiling and loading, and debug programs as well as some basic automation and networking round out the mix.

HEALTH PROFESSIONS -JM

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Health Science and Technology	396 or 396CCP	072001	1 HS & 3 CCP
11	Mental Health	397	072065	1 HS credit
12	Patient Centered Care	496	072050	1 HS credit
12	Medical Terminology	497	072150	1 HS credit & 3 CCP/CTAG

Health Professions I: Health Science and Technology — 396 or 396CCP

Semester: 2 periods per day	**Dues:** $30 HOSA **Fees:** $60	**Grade**: 11

Co-requisite: Mental Health (397)

This course in the career field provides students an overview of the opportunities available in the healthcare industry. Students will learn fundamental skills in effective and safe patient care that can be applied across a person's lifespan. They will also be introduced to exercise science and sports medicine, the field of biomedical research and the importance of managing health information.

Health Professions: Mental Health — 397

Semester: 2 periods per day	**Dues/Fees:** see above	**Grade**: 11

Co-requisite: Health Science and Technology (396 or 396CCP)

In this course, students will learn contemporary mental health theories related to psychiatric disorders and mental diseases. Students will differentiate between stress, anxiety, and crisis, and identify methods to maintain mental health, including problem-solving techniques, treatment and intervention strategies. Students will assess, plan, implement and evaluate the mental health needs of the client. Additionally, students will use therapeutic communication techniques and be able to discuss documentation guidelines and the plan of care with the patient.

Health Professions II: Patient Centered Care — 496

Semester: 2 periods per day	**Dues**: $30 HOSA **Fees:** $40	**Grade**: 12

Prerequisite: Health Science and Technology (396) & Mental Health (397)

Co-requisite: Medical Terminology

In this course, we will apply healthcare skills needed to assist individuals in meeting basic human needs. Students will implement interventions following a medical assistant plan of care. Students will collect the patient's vital signs including temperature, pulse rate, respiration rate, and blood pressure. Students will perform phlebotomy procedures with an emphasis on infection prevention, universal precautions, proper patient identification, specimen acquisition, handling, and processing. Additionally, students observe patients' physical, mental, and emotional conditions and document change.

Health Professions: Medical Terminology — 397

Semester: 2 periods per day	**Dues/ Fees**: See above	**Grade**: 12

Co-requisite: Patient Centered Care (496)

This course focuses on the applications of the rules for constructing and defining medical terms with an emphasis on building a working medical vocabulary. Topics include using the appropriate abbreviations and symbols for anatomical, physiological and pathological classifications and the associated medical specialties and procedures. Students will decipher medical terms by identifying and using word elements with an emphasis on derivation, meaning, and pronunciation. Further, students will interpret and translate medical records and documents.

HOSPITALITY & RESTAURANT SERVICES -L1

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Hospitality Fundamentals	220	330000	1.5 HS credits
11	Catering and Banquet Services	221	330025	1.5 HS credits
12	Dining Room Service and Operations	320	330110	1.5 HS credits
12	Front Office Management & Operations	321	330030	1.5 HS credits

Hospitality I: Hospitality Fundamentals		**220**
Semester: 3 periods per day	**Dues:** $30 SkillsUSA	**Grade**: 11
Co-requisite: Catering and Banquet Services (221)		
This course will introduce students to culinary arts, foodservice operations, lodging, travel and tourism. Students will obtain knowledge of customer service principles and examine the impact of cultural, historical, social and technological developments on key segments of the industry. They will also apply safety and sanitation techniques to prevent and control injuries, illnesses and diseases in the workplace. Business law, employability skills, leadership and communications will be addressed.		

Hospitality I: Catering and Banquet Services		**221**
Semester: 3 periods per day	**Dues:** See above	**Grade**: 11
Co-requisite: Hospitality Fundamentals (220)		
Students will learn and train for working in banquet operations in set up and break down of function rooms. They will understand and learn how to recommend various types of food and beverage services to clients for various types of events. Customer service: food, equipment and site safety, high-volume food production will be emphasized.		

Hospitality II: Dining Room Service and Operations		**320**
Semester: 3 periods per day	**Dues:** $30 SKillsUSA	**Grade**: 12
Co-requisite: Front Office Management and Operations (321)		
Prerequisite: Hospitality Fundamentals (220) and Catering and Banquet Services (221)		
Students will apply strategies and techniques to identify and meet dining guest needs. They will provide table and beverage service; maintain eating areas, meeting spaces and serving stations; manage online reservations and orders; and monitor table turns, wait lines and table assignments. Nutritional analysis, types of table service, safety and sanitation, cultural intelligence, employability skills and communications will also be addressed.		

Hospitality II: Front Office Management and Operations		**321**
Semester: 3 periods per day	**Dues:** See above	**Grade**: 12
Co-requisite: Dining Room Service and Operations (320)		
Prerequisite: Hospitality Fundamentals (220) and Catering and Banquet Services (221)		
Students will develop knowledge and skills needed in the lodging industry to perform front office procedures such as checking guests in and out, orienting guests to the lodging property and reservations. They will also learn how to maintain guest rooms and public areas and develop housekeeping plan and schedules. There will be an emphasis on site safety and sanitation, customer service, people management, employability skills, leadership and communications.		

INFORMATION TECHNOLOGY PROFESSIONS -N4

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Introduction to Information Technology	TBA	145005	1.5
11	Personal Computers	TBA	145160	1.5
12	Programming	TBA	145060	1.5
12	Cybersecurity	TBA	146005	1.5

IT Professions I: Introduction to Information Technology

Semester: 3 periods per day	**Dues:** $30.00 SkillsUSA **Fees:** $10.00 for supplies	**Grade**: 11
Co-requisite:m Personal Computers		
This first course in the IT career field is designed to provide students with a working knowledge of computer concepts and essential skills necessary for work and communication in today's society. Students will learn safety, security, and ethical issues in computing and social networking. Students will also learn about input/output systems, computer hardware and operating systems, and office applications		

IT Professions I: Personal Computers

Semester: 3 periods per day	**Dues/Fees:** See above	**Grade**: 11
Co-requisite: Introduction to Information Technology		
Students will gain foundational knowledge of computer hardware and software, including mobile devices, operating systems, basic networking concepts, security, and troubleshooting skills, designed to prepare individuals for entry-level IT roles with practical hands-on experience; essentially, it teaches the fundamentals of how a computer works and how to manage basic IT tasks		

IT Professions II: Programming

Semester: 3 periods per day	**Dues:** $30.00 SkillsUSA **Fees:** $10.00 for supplies	**Grade**: 12
Prerequisite: Introduction to Information Technology & Personal Computers		
Co-requisite: Cybersecurity		
In this course, students will learn the basics of building simple interactive applications. Students will learn the basic units of logic: sequence, selection, and loop. Students will apply algorithmic solutions to problem-domain scenarios. Students will gain experience in using commercial and open source languages, programs, and applications		

IT Professions II: Cybersecurity

Semester: 3 periods per day	**Dues/Fees:** See above	**Grade**: 12
Prerequisite: Introduction to Information Technology & Personal Computers		
Co-requisite: Programming		
Students will learn the components of cybersecurity and the role each plays in preventing, detecting and mitigating vulnerabilities and attacks. Components include the security of the network infrastructure, security of the systems, and the prevention, detection, and mitigation of common vulnerabilities and attacks. Throughout this course, students will examine and implement security safeguards for desktop, network, and application security.		

JOB TRAINING COORDINATING (JTC) -M3

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	JTC I: Introduction to Job Training	101	990405	3 HS credits
12	JTC II: Fundamentals in Job Training	102	990410	3 HS credits

JTC I: Introduction to Job Training		**101**
Year: 3 periods per day	**Fees/Dues:** None	**Grade**: 11
The initial course in the Job Training Coordination pathway, a specialized community-based work experience program for students with significant disabilities that present challenges to participation in a traditional career-technical education program regardless of accommodations. This course must be taken in the first year of the program. The program utilizes a job training coordinator to match specific jobs in the community to the individual student's preferences, interests, needs and strengths. Students must be at least sixteen years old, and this program must be identified on the student's individualized education program (IEP).		

JTC II: Fundamentals in Job Training		**102**
Year: 3 periods per day	**Fees/Dues:** None	**Grade**: 12
The second course in the Job Training Coordination pathway, a specialized community-based work experience program for students with significant disabilities that present challenges to participation in a traditional career-technical education program regardless of accommodations. This course is taken in the second and subsequent years of the program, as applicable. The program utilizes a job training coordinator to match specific jobs in the community to the individual student's preferences, interests, needs and strengths. Students must be at least sixteen years old, and this program must be identified on the student's individualized education program (IEP).		

Manufacturing & Industrial Robotics -F6

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Engineering Design	726 or 726CCP	175001	1 HS credit
11	Machine Tools	727 or 727CCP	176004	1 HS credit
12	Computer Numerical Control (CNC) Technology with Industrial Mills & Lathes	729 or 729CCP	176007	1 HS credit
12	Industrial Robotics	730 or 730CCP	176025	1 HS credit

Manufacturing & Industrial Robotics I: Engineering Design		**726 or 726CCP**
Semester: 2 periods per day	**Dues:** SkillsUSA $30 **Fees:** $120	**Grade**: 11
Students will acquire knowledge and skills in problem solving, teamwork and innovation. Students explore STEM careers as they participate in a project-based learning process, designed to challenge and engage the natural curiosity and imagination of middle school students. Teams design and test their ideas using modeling, automation, robotics, mechanical and computer control systems, while exploring energy and the environment.		

Manufacturing & Industrial Robotics I: Machine Tools		**727 or 727CCP**
Semester: 2 periods per day	**Dues/ Fees:** See above	**Grade**: 11
Prerequisite: Engineering Design		
This course introduces students to all aspects of machining applications in manufacturing. They will be able to perform routine calculations, interpret basic drawings, begin the process of performing accurate measurements and be able to plan simple machining processes. Students will learn the fundamental principles and practices of cutting, drilling and grinding using modern machine tools, hand tools and precision measuring instruments		

Manufacturing & Industrial Robotics II: Computer Numerical Control (CNC) Technology with Industrial Mills & Lathes		**729 or 729CCP**
Semester: 2 periods per day	**Dues:** Skills USA $30 **Fees:** $120	**Grade**: 12
Prerequisite: Both Level I courses		
In this course, students will use computer numerical control (CNC) programming to mill products comprised of various materials. Students will prepare numerical control programs in positioning systems using standard industrial G and M codes. They will program computerized numerical control mills and lathes.		

Manufacturing & Industrial Robotics II: Industrial Robotics		**730 or 730CCP**
Semester: 2 periods per day	**Dues/ Fees:** See above	**Grade**: 12
Prerequisite: Both Level 1 courses & Computer Numerical Control (CNC) with Industrial Mills & Lathes		
Students will apply the knowledge and skills necessary to program, safely operate, and troubleshoot industrial robots. Students will learn industrial robotic operations and system configurations. Students will code, compile and debug programs using industrial robotic programming language.		

MEDIA PRODUCTIONS AND VISUAL DESIGN -N1

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Creating and Editing Digital Graphics	452 or 452CCP	145100	1 HS & 3 CCP
11	Design Techniques	453 or 453CCP	145095	1 HS & 3 CCP
12	Animation	454 or 454CCP	145115	1 HS & 3 CCP
12	Video & Sound	455 or 455CCP	145110	1 HS & 3 CCP

Media Productions I: Creating and Editing Digital Graphics — 452 or 452CCP

Semester: 2 periods per day | **Dues**: $30.00 SkillsUSA | **Grade**: 11

Co-requisite: Design Techniques (453 or 453CCP)

Introduction to creating and/or editing digital images. Students will learn to create images using a variety of software tools, and will capture digital images using a digital camera and a scanner, and transfer those images to a computer for editing. They will learn both the design and productions perspective, including creating and managing layer masks, creating color effects and improving images with adjustments layers, working with text and combining text and imagery, and using filters and layer styles to create eye-popping special effects. This is a hands-on course. Classwork will contribute to a student portfolio. Photoshop is the primary software used. Students will have access to Go-Pro's and DSLR cameras.

Media Productions I: Design Techniques — 453 or 453CCP

Semester: 2 periods per day | **Dues:** See above | **Grade**: 11

Co-requisite: Creating and Editing Digital Graphics (452 or 452CCP)

Using Adobe InDesign, students will learn techniques for transforming photographic images, through use of digital cameras, computers, and mobile devices. To accomplish this, they will learn software photo editing techniques including layering, color correction, masking, and special effects using current commercial and open source programs and applications.

Media Productions II: Animation — 454 or 454CCP

Semester: 2 periods per day | **Dues:** $30.00 SkillsUSA | **Grade**: 12

Prerequisite: Creating and Editing Digital Graphics (452 or 452CCP) & Design Techniques (453 or 453CCP)

Co-requisite: Video & Sound (455 or 455CCP)

Students will use animation and storyboarding techniques to plan the production of an animation project, design from script and storyboard actions in the pre-production planning process, use commercial and open source digital animation software to create finished animations, cartoons, and other short movies. They will accomplish this using animated text, character movements, voice, background sound, sound effects, camera movements, and multiple scenes.

Media Productions II: Video & Sound — 455 or 455CCP

Semester: 2 periods per day | **Dues:** See above | **Grade**: 12

Prerequisite: Creating and Editing Digital Graphics (452 or 452CCP) & Design Techniques (453 or 453CCP)

Co-requisite: Animation (454 or 454CCP)

Creation of professional videos and audio productions for distribution in traditional and new media channels. Using Adobe Premiere, students will plan, produce, edit, and launch media products. Students will develop scripts and storyboards, compose shots and operate different camera types such as phones, DSLR's, Go-Pro's and Drones. Capturing sounds using microphone hardware, applying special effect techniques, editing to achieve the final product., and using animation and graphic design for video.

TEACHING PROFESSIONS -E1

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Child and Adolescent Development	261 or 261CCP	350035	1.5 HS & 3 CCP
11	Communities, Schools, Stakeholders	262 or 262CCP	350225	1.5 HS & 3 CCP
12	Classroom Management	333 or 333CCP	350030	1.5 HS & 3 CCP
12	Education Principles	357	350010	1.5 HS & CTAG

Teaching Professions I: Child and Adolescent Development — 261 or 261CCP

Semester: 3 periods per day | **Dues:** $30 Educators Rising **Fees**: $20 | **Grade**: 11

Co-requisite: Communities, Schools, Stakeholders (262 or 262CCP)

Students will examine and apply the theoretical foundations of human growth and development to children and adolescents. Additionally, learners will determine children's learning styles; stages of social, emotional, cognitive and physical development; and needed accommodations in educational settings. Throughout the course, family and community engagement, cultural influences on learners and language growth and development will be emphasized.

Teaching Professions I: Communities, Schools, Stakeholders — 262 or 262CCP

Semester: 3 periods per day | **Dues/Fees:** See above | **Grade**: 11

Co-requisite: Child and Adolescent Development (261 or 261CP)

Students will examine the relationship of families, communities and schools in the growth and development of learners. They will implement strategies to actively involve families and communities in child development and learning, determine community resources and services available to families and schools, and act as advocates for students and learning. Throughout the course, working with socially, culturally, linguistically diverse families will be emphasized.

Teaching Professions II: Classroom Management — 333 or 333CCP

Semester: 3 periods per day | **Dues:** $30 Educators Rising **Fees**: $20 | **Grade**: 12

Prerequisite:
Child and Adolescent Development (261 or 261CCP) and Communities, Schools, Stakeholders (262 or 262CP)

Co-requisite: Education Principles (357)

Students will apply developmentally appropriate techniques to advance learners' social and emotional growth. They will create classroom environments to maximize the learning potential of each learner. Additionally, learners will create and enforce classroom rules, establish classroom routines, and model self-discipline for learners. Conflict resolution, positive discipline and behavioral-modification techniques will be emphasized throughout the course.

Teaching Professions II: Education Principles — 357

Semester: 3 periods per day | **Dues/Fees:** See above | **Grade**: 12

Prerequisite:
Child and Adolescent Development (261 or 261CCP) and Communities, Schools, Stakeholders (262 or 262CP)

Co-requisite: Classroom Management (333 or 333CCP)

Students will research the historical perspectives and theories of education used in the forming of their own personal educational philosophy. Students will assess legal, ethical and organizational issues. Additionally, students will assess developmental appropriate practices and identify challenging issues associated with teaching children with diverse needs. Career planning, professional guidelines and ethical practices will also be emphasized.

WELDING -R7

Mandatory Classes				
Grade	**Course Name**	**MCC Course #**	**EMIS Course #**	**Credits**
11	Shielded Metal Arc Welding	473	176001	1.5 HS credits
11	Gas Metal Arc Welding	474	176000	1.5 HS credits
12	Gas Tungsten Arc Welding	475	176003	1.5 HS credits
12	Flux Cored Arc Welding	476	176002	1.5 HS credits

Welding I: Shielded Metal Arc Welding		**473**
Semester: 3 periods per day	**Dues:** $30 SkillsUSA **Fees:** $20 for materials **Additional costs:** Welding equipment, work clothes, boots	**Grade**: 11
Co-requisite: Gas Metal Arc Welding (474)		
Students will be able to use the Shielded Metal Arc Welding process (SMAW) to join various types of metal. They will perform multiple types of welds and joints in all positions up to and including overhead. They will select the appropriate type of electrode and adjust welding equipment based on the physical characteristics and properties of the metal. Students will apply their quality control factors to evaluate the quality of welds.		

Welding I: Gas Metal Arc Welding		**474**
Semester: 3 periods per day	**Dues/ Fees:** See above	**Grade**: 11
Co-requisite: Shielded Metal Arc Welding (473)		
Students will use the Gas Metal Arc Welding process (GMAW) to join various types of metal. They will cut metals using oxy-fuel processes and perform multiple types of welds and joints in all positions up to and including overhead. They will select the appropriate type of electrode wire, shielding gas and adjust welding equipment based on the physical characteristics and metal properties. Students will apply quality control factors to evaluate weld quality.		

Welding II: Gas Tungsten Arc Welding		**475**
Semester: 3 periods per day	**Dues:** $30 SkillsUSA **Fees:** $20 for materials **Additional costs:** Welding equipment, work clothes, boots	**Grade**: 12
Prerequisite: Shielded Metal Arc Welding (473) and Gas Metal Arc Welding (474)		
Co-requisite: Fabrication (476)		
Students will use the Gas Tungsten Arc Welding process (GTAW) to join various types of metal. They will perform multiple types of welds and joints in all positions up to and including overhead. They will select the appropriate type of electrode, filler metal and shielding gas and be able to adjust welding equipment based on the physical characteristics and properties of the metal. Students will apply quality control factors to evaluate weld quality.		

Welding II: Flux Cored Arc Welding		**476**
Semester: 3 periods per day	**Dues/ Fees:** See above	**Grade**: 12
Prerequisite: Shielded Metal Arc Welding (473) and Gas Metal Arc Welding (474)		
Co-requisite: Gas Tungsten Arc Welding (475)		
Students will apply the knowledge and skills to safely fabricate parts by cutting, drilling, bending, shaping, forming, edging and assembling stock to drawing dimensions. They will identify weld types, fasteners, adhesives to join materials. In addition, students will learn and apply standard practices of additive manufacturing.		