

AG & HEAVY EQUIPMENT TECHNICIAN

CAREER PATHWAY

Bus and Truck Mechanics and Diesel Engine Specialists • First-Line Supervisors of Mechanics, Installers, and Repairers • Industrial Machinery Mechanics • Mobile Heavy Equipment Mechanics

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	CAREER TECHNICAL COURSE NAME & SUBJECT CODE	ACADEMICS
7		
8		
9		
10		
11	Hydraulics & Pneumatics*	
	Power Trains	
	Electronic & Electrical Systems	
1	Tochnology	anctolia i
	2 Outdoor Power Fectimology Agricultural & Environmental Systems Co	ipscone;

INDUSTRY CREDENTIAL OPPORTUNITIES

Equipment & Engine Training Council Driveline-Hydraulics Certification - 2 Points Equipment & Engine Training Council Diesel Engine Certification - 2 Points Equipment & Engine Training Council 4-Stroke Engine Certification - 2 Points Equipment & Engine Training Council 2-Stroke Engine Certification - 2 Points Forklift Operation - 2 Points

Lean Six Sigma Yellow Belt - 3 Points

Lean Six Sigma Green Belt - 6 Points

Leadership Excellence - Student - 3 Points

OSHA - 10-Hour Training* - 1 Point

(College Credit - CTS001 - 1 Credit Hour)

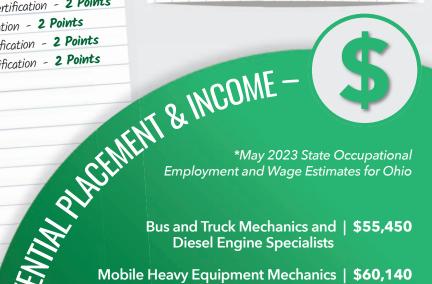
CPR / First Aid - 1 Point

Ohio Driver's License - 1 Point

POSTSECONDARY OPPORTUNITIES

descriptions for semester hours and agreement number on the postsecondary articulated credits. Additional college credit may be available through bi-lateral agreements. Please see a school counselor for details on available bi-lateral agreements.

BHCC ADULT EDUCATION	HOURS	0
CDL Class A Unrestricted	160	0
Heavy Equipment Operator	270	-0
		- 0



*May 2023 State Occupational Employment and Wage Estimates for Ohio

Bus and Truck Mechanics and | \$55,450 **Diesel Engine Specialists**

Mobile Heavy Equipment Mechanics | \$60,140

Industrial Machinery Mechanics | \$62,920

First-Line Supervisors of Mechanics, | \$73,700 **Installers**, and Repairers





11th GRADE

COLLEGE CREDIT

CTAG CTAIE001

2 CREDIT HOURS

HYDRAULICS & PNEUMATICS

Students will learn to diagnose, repair and rebuild hydraulic systems and their components. Students will learn the physical and mechanical principles of both hydraulic and hydrostatic operating units. Topics include testing system components and properly maintaining hydraulic and hydrostatic circuits. Students will demonstrate contamination control and system cleanliness in both hydraulic and hydrostatic operating systems. Throughout the course, site and personal safety procedures and business practices are reinforced.



11th GRADE

POWER TRAINS

Students will learn the physical principles of power trains, the components that transfer and control power, and how power trains are designed to function. Topics include hydraulic theory, bearings and seals along with belts, chains, and gear drives included in power trains. Students will learn how to adjust and maintain transmissions along with diagnosing power take-off devices and clutches. Throughout the course, site and personal safety procedures along with business principles are emphasized.

010215

11th GRADE

ELECTRONIC & ELECTRICAL SYSTEMS

Students will diagnose, test and repair the electronic and electrical components found in industrial power equipment. Students will learn the physical principles of electricity and apply this knowledge in the maintenance, diagnostics and repair of electrical and electronic systems. Students will learn the physical and mathematical principles of electronics, controllers and sensors and will learn the operation of onboard computers and programmable controllers. Site and personal safety along with business and employability skills are emphasized throughout the course.

010235

12th GRADE

OUTDOOR POWER TECHNOLOGY

Students will perform technical skills needed to maintain, diagnose and repair outdoor power equipment. Students will learn the theory of power and examine the aspects of repairing various engines, drive trains, and ancillary systems that make up modern small engine powered equipment. In addition, students will develop troubleshooting skills for 2- and 4-stroke engines, electrical and fuel systems. Throughout the course, site and personal safety procedures along with business principles will be emphasized.

010190 ggg

12th GRADE

AGRICULTURAL & ENVIRONMENTAL SYSTEMS CAPSTONE

Students apply Agricultural and Environmental Systems program knowledge and skills in a more comprehensive and authentic way. Capstones are project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through partnerships, students combine classroom learning with work experience to benefit themselves and others. These can take the form of mentorship employment, cooperative education, apprenticeships and internships.





AUTO COLLISION TECHNOLOGY

CAREER PATHWAY

Counter & Rental Clerks • Parts Salesperson • Metal Workers • Plastic Workers • Automotive Glass Installers & Repairers • Automotive Body & Related Repairers • Insurance Appraisers of Auto Damage • Cost Estimators

CAREER TECHNICAL COURSE NAME & SUBJECT CODE

RECOMMENDED **ACADEMICS**

7	
3	
9	
10	
	Collision Electrical & Mechanical Systems Collision Painting & Refinishing
12	Collision Functing Collision Structural Inspection & Repair Collision Nonstructural Inspection & Repair
12	Transportation Capstone

POSTSECONDARY OPPORTUNITIES

*Indicates statewide articulated credit. Please reference course descriptions for semester hours and agreement number on the postsecondary articulated credits. Additional college credit may be available through bi-lateral agreements. Please see a school counselor for details on available bi-lateral agreements.

BHCC ADULT EDUCATION	HOURS	
		0
		-0
		- 0

INDUSTRY CREDENTIAL OPPORTUNITIES

ICAR ProLevel | Refinishing Technician Certification - 12 Points ICAR ProLevel Non-Structural Technician Certification - 12 Points

Lean Six Sigma Yellow Belt - 3 Points

Lean Six Sigma Green Belt - 6 Points

Leadership Excellence - Student - 3 Points

OSHA - 10-Hour Training* - 1 Point

(College Credit - CTS001 - 1 Credit Hour)

CPR / First Aid - 1 Point

Ohio Driver's License - 1 Point

AND ACEMENT & INCOME -

*May 2023 State Occupational Employment and Wage Estimates for Ohio

Parts Salesperson | \$38,270

Counter & Rental Clerks | \$39,650

Metal Workers & Plastic Workers | \$44,160

Automotive Glass Installers & Repairers | \$48,980

Automotive Body & Related Repairers | \$57,360

Cost Estimators | \$74,810

Insurance Appraisers - Auto Damage | \$89,920



11th GRADE

COLLISION ELECTRICAL & MECHANICAL SYSTEMS

Students will perform inspections and repair electrical and mechanical damage due to collision. Topics include electrical and wiring harness, suspension, braking and cooling systems repairs. Students will service supplemental restraint systems (SRS) and ensure the integrity of the systems.

177012

11th GRADE

COLLISION PAINTING & REFINISHING

Students will restore and refinish vehicle exterior body and paint finish. Students will inspect and identify substrate, type of finish, surface condition, and film thickness; develop and execute a plan for refinishing using a total product system. Students will inspect, clean, and determine condition of spray guns and related equipment. Additionally, students will observe safety precautions when using hazardous materials.

177010

11th GRADE

COLLISION STRUCTURAL INSPECTION & REPAIR

Students will perform automotive collision repair of full and unibody frames and attach non-structural components. Students will apply the skills and knowledge needed to measure and diagnose structural damage, create a parts list, and determine labor costs. Students will remove and replace damaged structural components. Emphasis will be given to joining and cutting aluminum, steel and other metals. Students will maintain tools and facilities while complying with personal and environmental safety practices.

177011

12th GRADE

COLLISION NONSTRUCTURAL INSPECTION & REPAIR

Students will learn the skills and knowledge of automotive body panel repairs, replacements, and adjustments. Students will analyze, document and repair nonstructural collision damage. Students will remove corrosion protection, undercoating, sealer, and other protective coatings as necessary to perform repairs. Emphasis will be given to joining and cutting aluminum, steel and other metals. Students will maintain tools and facilities while complying with personal and environmental safety practices.

177023

12th GRADE

TRANSPORTATION CAPSTONE

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in Transportation program in a more comprehensive and authentic way. Capstones often include project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.





AUTOMOTIVE SERVICE

CAREER PATHWAY

Tire Repairers & Changers • Engine & Other Machine Assemblers • Parts Salesperson • Automotive Service Technicians & Mechanics • Training & Development Specialists • First-Line Supervisors of Mechanics • Installers & Repairers • Administrative Services Managers

CAREER TECHNICAL COURSE NAME **ACADEMICS** & SUBJECT CODE 7 8 10 Collision Electrical & Mechanical Systems Automotive Braking Systems Ground Transportation Electrical/Electronics 12 Automotive Steering & Suspension Systems Transportation Capstone

POSTSECONDARY OPPORTUNITIES

*Indicates statewide articulated credit. Please reference course descriptions for semester hours and agreement number on the postsecondary articulated credits. Additional college credit may be available through bi-lateral agreements. Please see a school counselor for details on available bi-lateral agreements.

BHCC ADULT EDUCATION	HOURS	0
		0
		-0
		-0

INDUSTRY CREDENTIAL OPPORTUNITIES

Automotive Service Excellence (ASE) Student Certifications

Automotive Maintenance & Light Repair - 4 Points

Automotive Brakes - 4 Points

Automotive Electrical/Electronics - 4 Points

Automotive Steering and Suspension - 4 Points

Lean Six Sigma Yellow Belt - 3 Points Lean Six Sigma Green Belt - 6 Points Leadership Excellence - Student - 3 Points OSHA - 10-Hour Training* - 1 Point (College Credit - CTS001 - 1 Credit Hour) CPR / First Aid - 1 Point Ohio Driver's License - 1 Point

AND LET BEND EMPLOYERS

*May 2023 State Occupational Employment and Wage Estimates for Ohio

Tire Repairers & Changers | \$37,950

Parts Salesperson | \$38,270

Automotive Service Technician & Mechanics | \$47,920

Engine & Other Machine Assemblers | \$58,440

Training & Development Specialists | \$64,620

First-Line Supervisors of Mechanics, | \$73,700

Installers & Repairers

Administrative Services Managers | \$101,170



11th GRADE

COLLISION ELECTRICAL & MECHANICAL SYSTEMS

Students will perform inspections and repair electrical and mechanical damage due to collision. Topics include electrical and wiring harness, suspension, braking and cooling system repairs. Students will service supplemental restraint systems (SRS) and ensure the integrity of the systems.

177030

11th GRADE

AUTOMOTIVE BRAKING SYSTEMS

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 antilock brake systems components.

177002

11th GRADE

GROUND TRANSPORTATION ELECTRICAL/ELECTRONICS

Student 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 seriesparallel circuits. Students will use electronic diagnostic tools, read schematics, and use printed and electronic resources to troubleshoot electrical circuits, test components and replace defective modules.

177031

12th GRADE

AUTOMOTIVE STEERING & SUSPENSION SYSTEMS

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.

177023

12th GRADE

TRANSPORTATION CAPSTONE

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in Transportation program in a more comprehensive and authentic way. Capstones often include project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.





COMMERCIAL CARPENTRY

CAREER PATHWAY

Carpenters Helper • Construction Laborers • Insulation Workers • Carpenters • Drywall Installers • Ceiling Tile Installers • Tapers • **Construction Equipment Operators**

CAREER TECHNICAL COURSE NAME & SUBJECT CODE

RECOMMENDED **ACADEMICS**

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i	*
	Construction Safety & Crew Leadership*
11	Construction sureig a
	a suctainable CONSTRUCTION
	Fundamentals of Architecture & Construction
	Fundamentals of Architecture a
12	Structural Coverings & Finishes
	Construction Capstone
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POSTSECONDARY OPPORTUNITIES

*Indicates statewide articulated credit. Please reference course descriptions for semester hours and agreement number on the postsecondary articulated credits. Additional college credit may be available through bi-lateral agreements. Please see a school counselor for details on available bi-lateral agreements.

BHCC ADULT EDUCATION	HOURS	0
		0
		-0
		- 0
		0

INDUSTRY CREDENTIAL OPPORTUNITIES

CITF Career Connections Level 1 - 4 Points

CITF Career Connections Level 2 - 4 Points

CITF Career Connections Level 3 - 4 Points

CPR / First Aid - 1 Point

OSHA - 10-Hour Training* - 1 Point

(College Credit - CTS001 - 1 Credit Hour)

Lean Six Sigma Yellow Belt - 3 Points

Lean Six Sigma Green Belt - 6 Points

Leadership Excellence - Student - 3 Points

Ohio Driver's License - 1 Point

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*May 2023 State Occupational **Employment and Wage Estimates for Ohio**

Carpenters Helpers | \$38,870

Construction Laborers | \$53,550

Carpenters | \$55,010

Insulation Workers | \$58,720

Drywall & Ceiling Tile Installers | \$58,480

Tapers | \$65,670

Construction Equipment Operators | \$65,990





11th GRADE

COLLEGE CREDIT

CTAG CTCON002

3 CREDIT HOURS

CONSTRUCTION SAFETY AND CREW LEADERSHIP

This course covers OSHA standards (30-hr OSHA) and requirements as they apply to the construction industry and crew/project management. Topics include safety and health hazards, safe practices, construction safety management, and crew management. Emphasis is on hazard identification, avoidance, control and prevention.

178000

11th GRADE

CORE & SUSTAINABLE CONSTRUCTION

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.

178040

11th GRADE

FUNDAMENTALS OF ARCHITECTURE AND CONSTRUCTION

In this first course in the career field, students will be introduced to the basic principles of architecture and construction. During this course, students will read and create construction drawings and use hand tools to create basic construction projects and models. Throughout the course, students will use hands-on skills and procedures in a laboratory setting. Additionally, students will investigate career opportunities in construction and architecture related fields.

178004

12th GRADE

STRUCTURAL COVERINGS AND FINISHES

This course will address applications of interior and exterior finish work. Students will identify material properties and select for appropriate application. 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.

178029

12th GRADE

CONSTRUCTION CAPSTONE

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in Construction programs in a more comprehensive and authentic way. Capstones often include project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.





COSMETOLOGY

CAREER PATHWAY

Shampooers • Cashiers • Manicurists & Pedicurists • Retail Salespersons • Hairdressers, Hairstylists & Cosmetologists • **Skincare Specialists**

(CAREER TECHNICAL COURSE NAME & SUBJECT CODE	ACADEMICS
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- 1	Hand & Foot Treatment Fundamentals & Enhancement	nts
1	Hand & Foot Treatment Turiour & Stuling	
	Fundamentals of Hair Cutting & Styling	
	Fundamentals of Chemical Services	1
12	Skin Care Fundamentals & Enhancements	
	Advanced Hair Cutting & Styling	
	Advanced Chemical Services	

POSTSECONDARY OPPORTUNITIES

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BHCC ADULT EDUCATION	HOURS

INDUSTRY CREDENTIAL OPPORTUNITIES

Ohio State Board of Cosmetology

License of Cosmetology - 12 Points

OSHA - 10-Hour Training* - 1 Point (College Credit - CTS001 - 1 Credit Hour)

CPR / First Aid - 1 Point

7

Ohio Driver's License - 1 Point

Lean Six Sigma Yellow Belt - 3 Points

Lean Six Sigma Green Belt - 6 Points Leadership Excellence - Student - 3 Points AR ACEMENT & INCOME -

*May 2023 State Occupational Employment and Wage Estimates for Ohio

Shampooers | **\$26,380**

Cashiers | \$27,880

Retail Salespersons | \$34,590

Hairdressers, Hairstylists & Cosmetologists | \$40,700

Skincare Specialists | \$51,610

Manicurists & Pedicurists | \$54,390





11th GRADE

HAND & FOOT TREATMENT FUNDAMENTALS & ENHANCEMENTS

Students will learn the knowledge and skills to perform both manicures and pedicures. They will learn how to maintain personal hygiene and infection control. Students will give plain/oil manicures, pedicures, and hand/arm & foot/leg massages. Enhanced hand and foot treatments using specialized products and techniques will be performed.

174125

11th GRADE

FUNDAMENTALS OF HAIR CUTTING & STYLING

Students will learn basic shampooing, conditioning and haircutting including trimming, wet styling and thermal styling techniques when working with natural and synthetic hair. Students will also learn infection control and safety along with the science of ergonomics.

174135

11th GRADE

FUNDAMENTALS OF CHEMICAL SERVICES

Students will apply basic skills, knowledge, and safety practices when giving permanent/chemical waves, curl re-forming, chemical relaxers and hair color techniques to include tinting, highlighting, bleaching, and foiling.

174150

12th GRADE

SKIN CARE FUNDAMENTALS AND ENHANCEMENTS

Students will apply the principles of anatomy, skin analysis, infection control and safety to safe hair removal, skincare treatments, and facial massage. Students will use electrical and manipulative facial treatments including masks, packs, make-up techniques. Students will also learn advanced skin care treatments, targeted massage, and enhancement applications using specialized products and techniques.

174130 Type 174130

12th GRADE

ADVANCED HAIR CUTTING & STYLING

Students will learn advanced cutting and formal styling using specialized equipment and techniques. This course offers enhanced training in current trends and razor techniques.

174140

12th GRADE

ADVANCED CHEMICAL SERVICES

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.





CRIMINAL JUSTICE

CAREER PATHWAY

Transportation Security Screeners • Bailiffs • Private Detectives & Investigators • Correctional Officers & Jailers • Police & Sheriff's Patrol Officers • Detectives & Criminal Investigators • First-Line Supervisors of Police & Detectives

CAREER TECHNICAL COURSE NAME INDIECT CODE

RECOMMENDED **ACADEMICS**

8	§ SORIEGI CODE
7	
8	
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10	
11	The American Criminal Justice System* Correctional System & Services*
12	Investigations & Forensics in Criminal investigations Police Work & Practice in Public Safety*
	Law & Public Safety Capstone

POSTSECONDARY OPPORTUNITIES

*Indicates statewide articulated credit. Please reference course descriptions for semester hours and agreement number on the postsecondary articulated credits. Additional college credit may be available through bi-lateral agreements. Please see a school counselor for details on available bi-lateral agreements.

BHCC ADULT EDUCATION	HOURS	
		- 6
		-
		- "
		7

INDUSTRY CREDENTIAL OPPORTUNITIES

National Incident Management 100 - 4 Points National Incident Management 200 - 1 Point National Incident Management 700 - 4 Points National Incident Management 800 - 1 Point Bleeding Control Basics 1.0 - 1 Point OSHA - 10-Hour Training* - 1 Point (College Credit - CTS001 - 1 Credit Hour) CPR / First Aid - 1 Point Lean Six Sigma Yellow Belt - 3 Points Lean Six Sigma Green Belt - 6 Points Leadership Excellence - Student - 3 Points

PARTIMENT & INCOME -

*May 2023 State Occupational Employment and Wage Estimates for Ohio

Transportation Security Screeners | \$50,910 Bailiffs | \$52,340

Private Detectives & Investigators | \$55,170

Correctional Officers & Jailers | \$55,540

Police & Sheriff's Patrol Officers | \$72,540

Detectives & Criminal Investigators | \$88,170

First-Line Supervisors of Police & Detectives | \$95,360



Ohio Driver's License - 1 Point

11th GRADE

COLLEGE CREDIT

CTAG CTCJ001

THE AMERICAN CRIMINAL JUSTICE SYSTEM

This first course in the Criminal Justice pathway traces the history, organization, and functions of local, state, and federal law enforcement. Students will study criminal behavior and apply constitutional and criminal law to crime and punishment. Students will learn law enforcement terminology, classifications and elements of crime, and how various court systems are used to judge and punish offenders.

170915

11th GRADE

COLLEGE CREDIT
CTAG CTCJ001

3 CREDIT HOURS

CORRECTIONAL SYSTEM & SERVICES

The correctional officer plays a critical role in the criminal justice system. In this course, students will learn institutional rehabilitation and community corrections strategies that prepare them for work in a correctional setting. The student will learn the role and responsibilities of a correctional officer including processing inmates, maintaining security in a correctional setting, and understanding inmate mental health needs.

170914

11th GRADE

INVESTIGATIONS & FORENSICS IN CRIMINAL INVESTIGATIONS

Forensic Science uses a structured and scientific approach to the investigation of crimes including assault, abuse and neglect, domestic violence, accidental death and homicide. Students will learn the psychology of criminal behavior and apply it to investigative procedures. Students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis.

170913

12th GRADE

COLLEGE CREDIT
CTAG CTCJ001

3 CREDIT HOURS

POLICE WORK & PRACTICE IN PUBLIC SAFETY

In this course, students will learn the skills necessary to prevent, detect and react to crime. Students will learn self-defense and subject control techniques, methods to conduct patrols, surveillance, and traffic procedures. Students will understand the ethical and legal responsibilities of police officers on patrol. Additionally, students will learn the operations of police and emergency telecommunication systems.

170346

12th GRADE

LAW AND PUBLIC SAFETY CAPSTONE

The course provides opportunities for students to apply knowledge, attitudes and skills that were learned in Law and Public Safety in a more comprehensive and authentic way. Capstones often include project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.





CULINARY PREPARATION

CAREER PATHWAY

Fast Food Cooks • Short Order Cooks • Restaurant Cooks • Institution & Cafeteria Cooks • All Other Cooks • First-Line Supervisors of Food Preparation & Serving Workers • Chefs & Head Cooks

CAREER TECHNICAL COURSE NAME & SUBJECT CODE

RECOMMENDED **ACADEMICS**

1	
8	
9	
10	
11	Hospitality Fundamentals*
	Eurodomentals of Food Production
	Catering & Banquet Service Operations
12	Restaurant Management
-	Hospitality & Tourism Capstone

POSTSECONDARY OPPORTUNITIES

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BHCC ADULT EDUCATION	HOURS	0
		0
		-0
		-0

INDUSTRY CREDENTIAL OPPORTUNITIES

ServSafe Workplace - 1 Point

ServSafe Food Handler - 1 Point

ServSafe Allergen - 1 Point

ServSafe Person in Charge - 2 Points

ServSafe Manager - 3 Points

CPR First Aid - 1 Point

OSHA - 10-Hour Training* - 1 Point

(College Credit - CTS001 - 1 Credit Hour)

Lean Six Sigma Yellow Belt - 3 Points

Lean Six Sigma Green Belt - 6 Points

Leadership Excellence - Student - 3 Points

Ohio Driver's License - 1 Point

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*May 2023 State Occupational

Employment and Wage Estimates for Ohio

Fast Food Cooks | \$26,500

Short Order Cooks | \$27,900

Restaurant Cooks | \$32,070

Institution & Cafeteria Cooks | \$34,790

All Other Cooks | \$37,060

First-Line Supervisors of Food Preparation | \$39,700 & Serving Workers

Chefs & Head Cooks | **\$53,800**



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11th GRADE

COLLEGE CREDIT

CTAG CTCF002

2 CREDIT HOURS

HOSPITALITY FUNDAMENTALS

This first course in the career field 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.

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11th GRADE

COLLEGE CREDIT

CTAG CTCF005

4 CREDIT HOURS

FUNDAMENTALS OF FOOD PRODUCTION

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.

330025

11th GRADE

CATERING AND BANQUET SERVICE OPERATIONS

Students will design and manage catering and banquet operations. They will recommend types of food functions and food-and-beverage services to clients, create menus for special occasions and events, and determine financial requirements. Students will hire, train, and supervise staff; manage event logistics, operations and service providers; and oversee dining room operations. Customer service; food, equipment and site safety; and high-volume food production will also be addressed.

330120

12th GRADE

COLLEGE CREDIT - 3 HOURS

CTAG CTCF009

CTAG CTCF001

*SERVSAFE MANAGER CERTIFICATE

REQUIRED TO EARN CTAG

RESTAURANT MANAGEMENT

Students will apply management principles to plan, organize and direct restaurant staff toward goal achievement. They will hire, train, and supervise employees; establish processes to facilitate restaurant operations; and plan and design menus. Students will also forecast and schedule food production, establish food specifications, select vendors, calculate costs, and purchase food and nonfood products. Other topics include food science, nutritional analysis, business law and ethics, economics and marketing.

330130

12th GRADE

HOSPITALITY AND TOURISM CAPSTONE

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in the program in a more comprehensive and authentic way. Capstones often include project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.





CYBER SECURITY

CAREER PATHWAY

Web & Digital Interface Designers • Computer Programmers • Web Developers • Computer Systems Analysts • Information Security Analysts • Software Developers • Computer & Information **Research Scientists**

CAREER TECHNICAL COURSE NAME & SUBJECT CODE		A	
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1			
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1	Networking* Fundamentals of Operating Systems		
	Cubersecurity		
12	Cyber Defense & Reinforcement* Application of Artificial Intelligence		
	Information Technology Capstone	į	

POSTSECONDARY OPPORTUNITIES

*Indicates statewide articulated credit. Please reference course descriptions for semester hours and agreement number on the postsecondary articulated credits. Additional college credit may be available through bi-lateral agreements. Please see a school counselor for details on available bi-lateral agreements.

BHCC ADULT EDUCATION	HOURS

INDUSTRY CREDENTIAL OPPORTUNITIES

Certiport Information Technology Specialist Computational Thinking - 1 Point

Certiport Information Technology Specialist Cybersecurity - 1 Point

CompTIA Fundamentals - 6 Points

EC-Council Ethical Hacking Essentials (EHE) - 3 Points

EC-Council Network Defense Essentials (NDE) - 3 Points

EC-Council Digital Forensics Essentials (DFE)- 3 Points

Google IT Support Professional Certificate - 4 Points

Google Analytics - 3 Points

Google Ads - 3 Points

OSHA - 10-Hour Training* - 1 Point (College Credit-CTS001-1 Credit Hour)

CPR / First Aid - 1 Point

Ohio Driver's License - 1 Point

Lean Six Sigma Yellow Belt - 3 Points

Lean Six Sigma Green Belt - 6 Points Leadership Excellence - Student - 3 Points



*May 2023 State Occupational Employment and Wage Estimates for Ohio

Computer Programmers | \$83,870

Web & Digital Interface Designers | \$87,330

Web Developers | \$90,530

Computer Systems Analysts | \$99,260

Computer Occupations | \$103,930

Software Developers | \$112,610

Information Security Analysts | \$113,610

Computer & Information Research Scientists | \$119,540





11th GRADE
COLLEGE CREDIT

CTAG CTIT002

3 CREDIT HOURS

NETWORKING

Students will install, operate, maintain, and troubleshoot a network. Students will learn to manage, configure, and troubleshoot network infrastructure and media. Students will discuss common network topologies and communication protocols.



11th GRADE

FUNDAMENTALS OF OPERATING SYSTEMS

Students will perform desktop client administrator duties by providing support for users in various work environments including professional offices, small businesses, work groups, departments, and/or corporate information services (IS). Students will learn to install, configure, and update commercial and open-source operating systems.

146005

11th GRADE

CYBERSECURITY

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.

146010

12th GRADE
COLLEGE CREDIT

CTAG CTCYBR001

3 CREDIT HOURS

CYBER DEFENSE & REINFORCEMENT

Students will learn the process of systematic defense for information technology systems. They will apply knowledge and skills required to secure network resources including infrastructure, operating systems, data, and applications. Students will apply the knowledge of disaster recovery and business continuity.

145130

12th GRADE

APPLICATION OF ARTIFICIAL INTELLIGENCE

This course will prepare students to apply artificial intelligence, machine learning, and neural networks to common workflows, processes, and problems in programming and design. Students will analyze the broader societal, technological, and ethical impacts and implications of its usage and development. Students will learn how to construct prompts and queries and how to critically analyze generated responses.

145015

12th GRADE

INFORMATION TECHNOLOGY CAPSTONE

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in their information technology program in a more comprehensive and authentic way. Capstones often include project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.





EARLY CHILDHOOD EDUCATION

CAREER PATHWAY

Teaching Assistant • Preschool Teacher • Kindergarten Teacher • Special Education Preschool, Kindergarten & Elementary • Middle School Teacher

CAREER TECHNICAL COURSE NAME CURIECT CODE

RECOMMENDED **ACADEMICS**

	% 20RIECI CODE
7	
8	
9	
10	
11	Health, Safety & Nutrition* Early Childhood Education Principles*
-	
1	Child & Adolescent Development Curriculum & Instruction for Early Childhood Education Education & Training Capstone

POSTSECONDARY OPPORTUNITIES

*Indicates statewide articulated credit. Please reference course descriptions for semester hours and agreement number on the postsecondary articulated credits. Additional college credit may be available through bi-lateral agreements. Please see a school counselor for details on available bi-lateral agreements.

BHCC ADULT EDUCATION	HOURS	0
		0
		-0
		-
		0

INDUSTRY CREDENTIAL OPPORTUNITIES

Child Abuse Awareness & Prevention - 1 Point Communicable Disease Training for Child Care Program - 1 Point

ParaPro - 6 Points

Child Development Associate Credential - 12 Points

CPR First Aid - 1 Point

OSHA - 10-Hour Training* - 1 Point

(College Credit - CTS001 - 1 Credit Hour)

Lean Six Sigma Yellow Belt - 3 Points

Lean Six Sigma Green Belt - 6 Points

Leadership Excellence - Student - 3 Points

Ohio Driver's License - 1 Point

Teaching Pres Kinder

*May 2023 State Occupational **Employment and Wage Estimates for Ohio**

Teaching Assistants (Except Postsecondary) | \$34,670 Preschool Teacher (Except Special Education) | \$36,170

Kindergarten Teacher (Except Special Education) | \$67,750

Special Education (Preschool) \$68,630

Elementary Teacher (Except Special Education) | \$71,970

Special Education (Kindergarten & Elementary) | \$71,970

Middle School Teacher | \$72,640



11th GRADE

COLLEGE CREDIT

CTAG CTECE002

2 CREDIT HOURS

HEALTH, SAFETY & NUTRITION

Students will establish and maintain a physically and emotionally safe and healthful environment for young children. They will learn skills in first aid and CPR, identify signs and symptoms of common health issues and diseases, and develop meal and snack menus appropriate for young children of different ages and stages of development. The effects of nutrients on children's growth and development will also be emphasized.

350205

11th GRADE

COLLEGE CREDIT

CTAG CTECE001

3 CREDIT HOURS

EARLY CHILDHOOD EDUCATION PRINCIPLES

Students will examine the history and philosophy of early childhood education, types of early childhood programs, and the roles, rights and responsibilities of learners and stakeholders in early childhood education. Students will assess developmental appropriate practices; legal, ethical and organizational issues; and the challenge of teaching and caring for young children with diverse needs. Career planning and professionalism will also be emphasized throughout the course.

350035

11th GRADE

CHILD & ADOLESCENT DEVELOPMENT

Students will examine and apply the theoretical foundations of human growth and development to child 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.

350235

12th GRADE

CURRICULUM & INSTRUCTION FOR EARLY CHILDHOOD EDUCATION

Students will develop age-appropriate learning experiences and curriculum to engage young children. They will determine curricular goals, create lesson plans, and employ observation and assessment strategies to evaluate children's growth and development. Application of foundational principles of reading, writing, speaking, and listening skills to enhance the learner's application of literacy will be emphasized.

350400

12th GRADE

EDUCATION & TRAINING CAPSTONE

Students apply Education and Training program knowledge and skills in a more comprehensive and authentic way. Capstones are project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through partnerships, students combine classroom learning with work experience to benefit themselves and others. These can take the form of mentorship employment, cooperative education, apprenticeships and internships.





ELECTRICAL, BROADBAND & TELECOMMUNICATIONS

Telecommunications Line Installers and Repairers • Telecommunications Equipment Installers & Repairers • Electrical & Electronics Repairers • Electrical Power-Line Installers & Repairers • Electrical Engineers

1	CAREER TECHNICAL COURSE NAME	ACADEMICS
	& SUBJECT CODE	
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0		
	2 Safatu	1
11	Intro to the Telecom-Power Industry & Safety	
	Construction Electrical Systems	
	Proodband and Fiber	
12	Telecommunications and Powerline	
	CDL / Heavy Equipment / Job Placement	

POSTSECONDARY OPPORTUNITIES

*Indicates statewide articulated credit. Please reference course descriptions for semester hours and agreement number on the postsecondary articulated credits. Additional college credit may be available through bi-lateral agreements. Please see a school counselor for details on available bi-lateral agreements.

BHCC ADULT EDUCATION	HOURS	0
Power Lineman w/CDL Class	700	0
A Unrestricted		
Telecommunications	600	
Industrial Maintenance	700	
Heavy Equipment	270	-
		- 0

INDUSTRY CREDENTIAL OPPORTUNITIES

The Fiber Optic Association - Certified Premises Cabling Technician - 12 Points The Fiber Optic Association - Certified Fiber Optics Technician - 12 Points

Ohio State Pre-Apprenticeship - 12 Points

CPR First Aid - 1 Point

7

OSHA - 10-Hour Training* - 1 Point

(College Credit - CTS001 - 1 Credit Hour)

Lean Six Sigma Yellow Belt - 3 Points

Lean Six Sigma Green Belt - 6 Points

Leadership Excellence - Student - 3 Points

Ohio Driver's License - 1 Point

Telecommunication Telecommunic

*May 2023 State Occupational **Employment and Wage Estimates for Ohio**

Telecommunications Line Installers | \$56,820 & Repairers

Electrical & Electronics Repairers | \$60,280 (Commercial & Industrial Equipment)

Telecommunications Equipment Installers | \$60,830 & Repairers

Electrical & Electronics Installers & Repairers | \$73,720 (Transportation Equipment)

> Electrical Power-Line Installers | \$82,500 & Repairers

Electrical & Electronics Repairers | \$90,410 (Powerhouse, Substation & Relay)

Electrical Engineers | \$102,620

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PRE-APPRENTICESHIP

11th GRADE

INTRO TO THE TELECOM-POWER INDUSTRY & SAFETY

This introductory electrical course will emphasize electrical theory, materials, and equipment. Students will explore the National Electrical Code and learn worksite safety. They will interpret schematics; construct basic circuits, use test equipment and electrical hand and power tools.

PRE-APPRENTICESHIP

11th GRADE

CONSTRUCTION ELECTRICAL SYSTEMS

This introductory electrical course will emphasize electrical theory, materials, equipment. Students will explore the National Electrical Code and learn worksite safety. They will interpret schematics; construct basic circuits, use test equipment and electrical hand and power tools.

PRE-APPRENTICESHIP

11th GRADE

BROADBAND & FIBER

This introductory course presents students with the basic skills, knowledge, and certification in preparation for a career in the broadband industry. This course will cover safe workplace practices and provide an opportunity to earn certificates in OSHA and First AID/CPR. Students will be introduced to the unique working conditions of the industry which include confined space, heights, and weather. Background skills in math, digital literacy, customer service, and computer usage will be reinforced throughout the course. Students will gain technical knowledge through hands-on activities preparing students to become a Certified Premises Cabling Technician and a Certified Fiber Optics Technician through the Fiber Optics Association.

PRE-APPRENTICESHIP

12th GRADE

TELECOMMUNICATIONS & POWERLINE

The Telecommunications and Powerline course equips students with essential skills in telecommunications and high-voltage power transmission systems. It includes hands-on training in installing, maintaining, and repairing telecommunications lines, such as fiber optic and copper cabling. Students will learn outside plant operations, fiber splicing, cable lashing, and servicing damaged lines. The course also covers high-voltage power transmission principles, focusing on building and maintaining electrical systems. Safety is emphasized, especially around high-voltage equipment. Practical skills taught include ladder safety, bucket truck operations, and pole climbing, ensuring students can effectively test and troubleshoot installed systems.





HEALTH ACADEMY

CAREER PATHWAY

Home Health Aide • Nursing Assistant • Phlebotomist • Medical Assistant • Medical Secretary & Administrative Assistant • Licensed Practical Nurse • Surgical Technologist • Health Information Technologist • Registered Nurse • Nurse Practitioners

CAREER TECHNICAL COURSE NAME & SUBJECT CODE

RECOMMENDED **ACADEMICS**

11	Medical Terminology*
	Principles of Allied Health Office Management* (Medical Office)

	الد ما	Diagnostic (Pre	-LPN)
12	Patient Centered Care with	Diagnostic (110	
	Country of Care		
	Patient Centered Som	(Phlahatamu &	EKG)
	Health Science Capstone	(PMEDOLOTTIS 5	

POSTSECONDARY OPPORTUNITIES

*Indicates statewide articulated credit. Please reference course descriptions for semester hours and agreement number on the postsecondary articulated credits. Additional college credit may be available through bi-lateral agreements. Please see a school counselor for details on available bi-lateral agreements.

BHCC ADULT EDUCATION	HOURS
Phlebotomy	150
Surgical Technology	1,342
Practical Nursing	1,382

INDUSTRY CREDENTIAL OPPORTUNITIES

CPR / First Aid - 1 Point

State Tested Nursing Assistant (STNA) - 12 Points

National Certified Phlebotomy Technician (NCPT) - 12 Points

Certified EKG Technician (CET) - 3 Points

National Certified Patient Care Technician - 12 Points

Ohio Driver's License - 1 Point

Lean Six Sigma Yellow Belt - 3 Points

Lean Six Sigma Green Belt - 6 Points

Leadership Excellence - Student - 3 Points

RICENT & INCOME -



*May 2023 State Occupational Employment and Wage Estimates for Ohio

Home Health Aides | \$30,320

Nursing Assistants | \$38,570

Phlebotomists | \$39,010

Medical Assistants | \$39,620

Medical Secretaries & | \$40,160

Administrative Assistants

Surgical Technologists | \$57,140

Licensed Practical Nurses | \$57,660

Health Information Technologists | \$69,360

Registered Nurses | \$84,430

Nurse Practitioners | \$122,870



v20251110

11th GRADE
COLLEGE CREDIT - 3 HOURS
CTAG CTMT001

MEDICAL TERMINOLOGY

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.

95 072035

11th GRADE

PRINCIPLES OF ALLIED HEALTH

In this, first course students will apply knowledge and clinical skills necessary to assess, plan, provide, and evaluate care to patients in varied healthcare settings. Students will apply first aid principles and techniques needed for response to choking, cardiopulmonary resuscitation, and other life-threatening emergencies. Emphasis will be placed on regulatory compliance, patient safety, pathophysiology, and medical interventions. Additionally, this course introduces psychomotor skills needed to assist individuals in meeting basic human needs.

142005

11th GRADE
COLLEGE CREDIT - 3 HOURS
CTAG CTAPSO01

OFFICE MANAGEMENT (MEDICAL OFFICE)

Students will apply techniques used to manage people and information in a business environment. Students will learn to build relationships with clients, employees, peers and stakeholders and to assist new employees. They will manage business records, gather and disseminate information, and preserve critical artifacts. They will also examine contracts, internal controls and compliance requirements. Business office tools and applications will be emphasized.

98 072055

12th GRADE

PATIENT CENTERED CARE WITH DIAGNOSTIC (PRE-LPN)

In this course, students establish and implement treatment plans while providing primary nursing care. Topics include pharmacology, phlebotomy, mental health nursing and acute care nursing. Students use diagnostic techniques to develop patient health assessments. Emphasis is placed on the synthesis of information gathered through health history, observation, and the detection of deviations and variations from normal physical characteristics. In addition, students learn the legal and ethical principles needed to function within the scope of practice.

§ 072050

12th GRADE

PATIENT CENTERED CARE

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

98 072105

12th GRADE

HEALTH SCIENCE CAPSTONE

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in Health Sciences or Business & Administrative services programs in a more comprehensive and authentic way. Capstones often include project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.





HEATING / VENTILATION / AIR CONDITIONING

HVAC CAREER PATHWAY

General Maintenance & Repair Workers • Installation, Maintenance & Repair Workers • Heating, Air Conditioning & Refrigeration Mechanics & Installers • Electricians • Plumbers, Pipefitters & Steamfitters • Electrical & Electronics Installers & Repairers, Transportation Equipment • Electrical Power-Line Installers & Repairers

CAREER TECHNICAL COURSE NAME & SUBJECT CODE

RECOMMENDED **ACADEMICS**

-	
+	
8	
9	
10	
11	Mechanical, Electrical & Plumbing Systems
	Residential Electrical Systems
- 1	Heating & Cooling Systems
12	HVAC Refrigeration
12	Construction Capstone

POSTSECONDARY OPPORTUNITIES

*Indicates statewide articulated credit. Please reference course descriptions for semester hours and agreement number on the postsecondary articulated credits. Additional college credit may be available through bi-lateral agreements. Please see a school counselor for details on available bi-lateral agreements.

BHCC ADULT EDUCATION	HOURS	
		0
		- 0

INDUSTRY CREDENTIAL OPPORTUNITIES

North American Technician Excellence - HVAC Support Technician -Environmental Protection Agency (EPA) Refrigerant Recovery Universal - 12 Points

CPR First Aid - 1 Point

OSHA - 10-Hour Training* - 1 Point

(College Credit - CTS001 - 1 Credit Hour)

Lean Six Sigma Yellow Belt - 3 Points

Lean Six Sigma Green Belt - 6 Points

Leadership Excellence - Student - 3 Points

Ohio Driver's License - 1 Point

ANCOME - Employr
In



*May 2023 State Occupational **Employment and Wage Estimates for Ohio**

Installation, Maintenance & | \$46,530 **Repair Workers**

General Maintenance & | \$49,870 **Repair Workers**

Heating, Air Conditioning & Refrigeration | \$58,390 Mechanics & Installers

Electricians | \$64,360

Plumbers, Pipefitters & Steamfitters | \$67,630

Electrical & Electronics Installers & Repairers | \$73,720 Transportation Equipment

Electrical Power-Line Installers & Repairers | \$82,500

v20250225



11th GRADE

MECHANICAL, ELECTRICAL & PLUMBING SYSTEMS

Students learn physical principles and fundamental skills across mechanical systems in construction. Students will select materials, assemble, and test basic electrical circuits. Students will select materials and assemble simple copper and plastic plumbing applications for both supply and drains. They will perform simple maintenance of electric motors, electric fixtures, and plumbing fixtures. Students will be able to select and install basic ductwork components and learn the operation and maintenance of heating and cooling equipment.

178008

11th GRADE

RESIDENTIAL ELECTRICAL SYSTEMS

This course will emphasize electrical theory, materials, equipment and general methods used in residential construction. Students will navigate the National Electrical Code, learn worksite safety and understand licensing and permitting requirements. They will interpret plans and job specifications and calculate loads and service requirements. Students will install, test and repair receptacle outlet, lighting and small appliance circuits. They will understand circuit protection concepts and install a subpanel. Specialty circuit installation will be addressed.

178012

11th GRADE

HEATING & COOLING SYSTEMS

Students will apply principles of heating and cooling to the installation, troubleshooting, and maintenance of residential and commercial Heating, Ventilation, and air conditioning/Refrigeration(HVAC/R) Systems.

178013

12th GRADE

HVAC REFRIGERATION

Students will install, troubleshoot, and service residential and commercial refrigeration systems. Students will learn the laws of thermodynamics, pressure and temperature relationships, the refrigeration cycle, and refrigerant management. Students will address hydronic systems, chilled water systems, package units, and cooling towers.

178029

12th GRADE

CONSTRUCTION CAPSTONE

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in Construction programs in a more comprehensive and authentic way. Capstones often include project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through community lpartnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.





WELDING TECHNOLOGIES

CAREER PATHWAY

Plating Machine Setters, Operators & Tenders • Metal Workers & Plastic Workers • Welding, Soldering, Blazing Machine Setters, Operators & Tenders • Heat Treating Equipment Setters, Operators & Tenders • Welders, Cutters, Solderers & Blazers • Tool Grinders, Filers & Sharpeners • Structural Metal Fabricators & Fitters • Sheet Metal Workers

C	CAREER TECHNICAL COURSE NAME	RECOMMENDED ACADEMICS
8	& SUBJECT CODE	
7		
8		
9		
10		
11	Welding Technologies	
	Shielded Metal Arc Welding	
	Gas Metal Arc Welding	
12	Gas Tungsten Arc Welding	
	Manufacturing Capstone	
-		1

POSTSECONDARY OPPORTUNITIES

*Indicates statewide articulated credit. Please reference course descriptions for semester hours and agreement number on the postsecondary articulated credits. Additional college credit may be available through bi-lateral agreements. Please see a school counselor for details on available bi-lateral agreements.

BHCC ADULT EDUCATION	HOURS	0
Welding	600	0
		-0
		-0

INDUSTRY CREDENTIAL OPPORTUNITIES

American Welding Society (AWS) Qualification GMAW Plate - 9 Points American Welding Society (AWS) Qualification SMAW Plate - 9 Points American Welding Society (AWS) Qualification GTAW Plate - 9 Points OSHA - 10-Hour Training* - 1 Point

(College Credit - CTS001 - 1 Credit Hour)

CPR First Aid - 1 Point

Ohio Driver's License - 1 Point

Lean Six Sigma Yellow Belt - 3 Points

Lean Six Sigma Green Belt - 6 Points

Leadership Excellence - Student - 3 Points



*May 2023 State Occupational Employment and Wage Estimates for Ohio

Plating Machine Setters, | Operators & Tenders (Metal & Plastic) \$42,030

Metal Workers & Plastic Workers | \$44,160

Structural Metal Fabricators & Fitters \$47,670

Welding, Soldering, Brazing Machine | Setters, Operators & Tenders \$48,100

Heat Treating Equipment Setters, | \$49,110 Operators & Tenders (Metal & Plastic)

Welders, Cutters, Solderers & Blazers | \$49,510

Tool Grinders, Filers & Sharpeners | \$54,830

Sheet Metal Workers | \$60,910

v20250225



11th GRADE

WELDING TECHNOLOGIES

Students will use fundamental welding principles involving shielded metal arc, oxyacetylene, gas tungsten and gas metal arc welding in the flat, horizontal and vertical positions. An emphasis is given to electrode selection, equipment setup, operating procedures, welding inspection and testing. Students will learn joint designs and layout and will be introduced to welding codes and standards. Additional topics include employability skills, and an emphasis will be given to personal safety.

176001

11th GRADE

SHIELDED METAL ARC WELDING

Students will be able to use the Shielded Metal Arc Welding process (SMAW) to safely 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 quality control factors to evaluate the quality of welds.

176000

11th GRADE

GAS METAL ARC WELDING

Students will use the Gas Metal Arc Welding process (GMAW) to safely 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 and shielding gas, and they will adjust welding equipment based on the physical characteristics and metal properties. Students will apply quality control factors to evaluate weld quality.

176003

12th GRADE

GAS TUNGSTEN ARC WELDING

Students will use the Gas Tungsten Arc Welding process (GTAW) to safely 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. They will 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.

176008

12th GRADE

MANUFACTURING CAPSTONE

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in their information technology program in a more comprehensive and authentic way. Capstones often include project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.

