

## 2022-2023 CTE Pathways Program Course Schedule

*Course offerings subject to change based on enrollment and availability*

### Fall 2022: September 26<sup>th</sup> – December 10<sup>th</sup>

Class	Days Offered	Time Offered	Tuition/Fees Cost Per Student*	Materials/Supplies Cost Per Student*
AB-113: Collision Repair I	M/T/W/TH/F	12:30-2:50pm	\$1,117.00	TBD
AM-101: Intro to Auto. Services Technology	M/W	7:30-8:40am	\$291.00	TBD
AM-101: Intro to Auto. Services Technology	M/W	1:15-2:25pm	\$291.00	TBD
AM-101: Intro to Auto. Services Technology	T/TH	7:30-8:40am	\$291.00	TBD
AM-101: Intro to Auto. Services Technology	T/TH	1:15-2:25pm	\$291.00	TBD
AM-118: Small Engine Repair	M/T/W/TH	7:30-9:10am	\$524.00	TBD
AM-118: Small Engine Repair	M/T/W/TH	3:30-5:10pm	\$524.00	TBD
AM-129: Electrical Systems I	M/T/W/TH/F	3:30-5:30pm	\$862.00	TBD
MFG-102: Makerspace	M/W	3:30-5:00pm	\$204.00	TBD
MTT-121A: CNC I: Set-Up & Operation	T/TH	3:30-5:30pm	\$381.00	TBD
MUS-107: Intro to Audio Recording I	M	6:30-9:20pm	\$513.00	TBD
MUS-247: Sound for Media	W	3:00-5:50pm	\$513.00	TBD
WLD-111A/B: Shielded Metal Arc Welding	M/T/W/TH	7:30-9:30am	\$810.00	Up to \$75
WLD-111A/B: Shielded Metal Arc Welding	M/T/W/TH	1:15-3:15pm	\$810.00	Up to \$75
WLD-111A/B: Shielded Metal Arc Welding	M/T/W/TH	3:30-5:30pm	\$810.00	Up to \$75

### Winter 2023: January 9<sup>th</sup> – March 25<sup>th</sup>

Class	Days Offered	Time Offered	Tuition/Fees Cost Per Student*	Materials/Supplies Cost Per Student*
AB-113: Collision Repair I	M/T/W/TH/F	12:30-2:50pm	\$1,117.00	TBD
ABR-125: Collision Repair/Refinishing I	M/T/W/TH/F	12:30-2:50pm	\$1,117.00	TBD
AM-101: Intro to Auto. Services Technology	M/W	7:30-8:40am	\$291.00	TBD
AM-101: Intro to Auto. Services Technology	M/W	1:15-2:25pm	\$291.00	TBD
AM-101: Intro to Auto. Services Technology	T/TH	7:30-8:40am	\$291.00	TBD
AM-101: Intro to Auto. Services Technology	T/TH	1:15-2:25pm	\$291.00	TBD
AM-118: Small Engine Repair	M/T/W/TH	7:30-9:10am	\$524.00	TBD
AM-118: Small Engine Repair	M/T/W/TH	3:30-5:10pm	\$524.00	TBD
AM-130: Brake Systems	M/T/W/TH/F	3:30-5:30pm	\$862.00	TBD
MFG-102: Makerspace	M/W	3:30-5:00pm	\$204.00	TBD
MTT-121B: CNC I: Set-Up & Operation	T/TH	3:30-5:30pm	\$381.00	TBD
MUS-108: Intro to Audio Recording II	T	6:30-9:20pm	\$513.00	TBD
WLD-113A/B: Gas Metal/Flux Core Arc Welding	M/T/W/TH	7:30-9:30am	\$810.00	Up to \$75
WLD-113A/B: Gas Metal/Flux Core Arc Welding	M/T/W/TH	1:15-3:15pm	\$810.00	Up to \$75
WLD-113A/B: Gas Metal/Flux Core Arc Welding	M/T/W/TH	3:30-5:30pm	\$810.00	Up to \$75

**Spring 2023: April 3<sup>rd</sup> – June 17<sup>th</sup>**

<b>Class</b>	<b>Days Offered</b>	<b>Time Offered</b>	<b>Tuition/Fees Cost Per Student*</b>	<b>Materials/Supplies Cost Per Student*</b>
AB-113: Collision Repair I	M/T/W/TH/F	12:30-2:50pm	\$1,117.00	TBD
ABR-125: Collision Repair/Refinishing I	M/T/W/TH/F	12:30-2:50pm	\$1,117.00	TBD
AM-101: Intro to Auto. Services Technology	M/W	7:30-8:40am	\$291.00	TBD
AM-101: Intro to Auto. Services Technology	M/W	1:15-2:25pm	\$291.00	TBD
AM-101: Intro to Auto. Services Technology	T/TH	7:30-8:40am	\$291.00	TBD
AM-101: Intro to Auto. Services Technology	T/TH	1:15-2:25pm	\$291.00	TBD
AM-118: Small Engine Repair	M/T/W/TH	7:30-9:10am	\$524.00	TBD
AM-118: Small Engine Repair	M/T/W/TH	3:30-5:10pm	\$524.00	TBD
AM-131: Suspension Systems	M/T/W/TH/F	3:30-5:30pm	\$862.00	TBD
MFG-102: Makerspace	M/W	3:30-5:00pm	\$204.00	TBD
MUS-109: Intro to Audio Recording III	T	6:30-9:20pm	\$513.00	TBD
MUS-148: Live Sound Engineering	W	6:30-9:20pm	\$513.00	TBD
WLD-115A/B: Gas Tungsten Arc Welding	M/T/W/TH	7:30-9:30am	\$810.00	Up to \$75
WLD-115A/B: Gas Tungsten Arc Welding	M/T/W/TH	1:15-3:15pm	\$810.00	Up to \$75
WLD-115A/B: Gas Tungsten Arc Welding	M/T/W/TH	3:30-5:30pm	\$810.00	Up to \$75

*\*additional per student costs may apply for textbooks and supplies*

## 2022-23 CTEP Course Descriptions

### Auto Body / Collision Repair

#### **AB-113: Collision Repair I (6 credits)**

Basic instruction in collision repair, including shop and chemical hazard safety; proper and safe use of tools; basic metal work/refinishing; use of filler; door removal, replacement and alignment; and bolt on front end sheet metal parts.

#### **ABR-125: Collision Repair/Refinishing I (6 credits)**

Shop safety, fire prevention, selection and use of paint products, abrasives, fillers, application of primers, sealers and top coats. Prerequisite: Pass AB-113 Collision Repair I.

### Automotive

#### **AM-101: Intro to Automotive Service Technology (2 credits)**

This course will prepare students for success in the Automotive Service Technology Program. Shop orientation and automotive industry safety training will be provided. Students can earn industry-recognized certificates. Students will be exposed to industry-recognized online service information. Students will also be introduced to tasks that align with the Auto Service Excellence Education Foundation (ASEEF) Master Automotive Service Technician (MAST) program accreditation.

#### **AM-118: Small Engine Repair (3 credits)**

This course is designed to provide an overview of basic small engine maintenance, operation and repair. It covers safety, small engine theory, electrical systems and troubleshooting. Classroom instruction covering theory of operation, 2 cycle and 4 cycle designs and applications combined with hands-on live projects provides the student the opportunity to learn basic principles of small engine operation, including outdoor equipment, motorcycles and ATVs.

#### **AM-129: Electrical Systems I (5 credits)**

This course is designed to provide students with the entry-level skills necessary to repair automobile electrical systems. Students will learn about general electrical systems diagnosis; servicing and repair of batteries, starting systems, and charging systems. Prerequisite: Pass AM-101.

#### **AM-130: Brake Systems (5 credits)**

In this theory and lab course students will learn about the construction and operation of basic hydraulics, brake fluids, friction materials, seals, disc and drum brakes, hydraulic and vacuum brake booster systems. Students will also learn to service and repair automotive brake systems.

Prerequisite: Pass AM-101 and AM-129.

#### **AM-131: Suspension Systems (5 credits)**

In this theory and lab course, students will learn the design, construction, service, and repair of front and rear suspension systems, wheels and tires, steering systems, and alignments. Students will service and repair these systems in the hands-on lab.

Prerequisite: Pass AM-101 and AM-130.

## **Manufacturing**

### **MFG-102: Makerspace: An Introduction to Digital Manufacturing (1 credit)**

Introduces students to aspects of digital design and manufacturing through use of sophisticated modeling software; 3-D printing, laser cutting and scanning; and CNC machining. Students complete a series of hands-on projects that require imagination and determination while learning solid workmanship principles.

## **Machine Tool Technology**

### **MTT-121A/B: CNC Set-Up and Operation (4 credits)**

This two-term course spanning Fall and Winter terms is the first course in the CNC sequence. Students will learn basic skills including how to properly set-up and operate both CNC milling and turning centers. Students will also learn G & M codes related to basic machine set-up and operation. Designed for students with little or no previous CNC experience.

## **Music Technology**

### **MUS-107: Introduction to Audio Recording I (3 credits)**

Introduction to the basic techniques and tools used in audio recording. Areas of study include signal path, microphone applications, software, hardware, outboard gear, tracking, mixing, and editing.

### **MUS-108: Introduction to Audio Recording II (3 credits)**

Exploration of techniques and tools used in audio recording. Analog, digital, and hard drive recording will be explored. Areas of study include multi-tracking, signal path, microphone applications, software, hardware, outboard gear, soldering techniques, tracking, mixing, and editing. Software/hardware includes ProTools, ADAT, Mackie, etc.

Prerequisite: MUS-107

### **MUS-109: Introduction to Audio Recording III (3 credits)**

Exploration of digital recording/editing software and production of CD project. Advanced exploration of techniques and tools used in audio recording. Areas of study include, signal path, microphone applications, software, hardware, outboard gear, tracking, mixing, and editing. Analog, digital, and hard drive recording will be explored. Software/hardware includes ProTools, ADAT, Mackie, etc.

Prerequisite: MUS-108

### **MUS-148: Live Sound Engineering (3 credits)**

Introduction to the basic techniques and tools used in live sound engineering and mixing. Areas of study include set up, signal path, microphone applications, hardware, and outboard gear.

### **MUS-247: Sound for Media (3 credits)**

Introduction to sound as related to film making, animation, and video games. Students will have the opportunity to create and assemble sound for media into a finished product. Explores the basic components of commercial film/video, animation, and game production as they relate to sound.

Recommended: Experience using a DAW (Digital Audio Workstation) or video editing software

## **Welding**

### **WLD-111A: Shielded Metal Arc Welding (Stick) A (4 credits)**

Part one of WLD-111 which provides opportunity acquire knowledge and skills to set up and operate equipment to perform fillet and groove welds in flat and horizontal positions with the SMAW process. Oxy-fuel cutting, air carbon arc cutting and gouging will be covered.

### **WLD-111B: Shielded Metal Arc Welding (Stick) B (4 credits)**

The second half of WLD-111 which provides the opportunity to acquire knowledge and skills to perform more advanced fillet and groove welds in vertical and overhead positions with the SMAW process. Welding codes, standards and specifications will be reviewed. Prerequisite: Pass WLD-111A.

### **WLD-113A: Gas Metal Arc Welding/Flux Core Arc Welding (Wirefeed) A (4 credits)**

First half of WLD-113 which provides the opportunity to acquire knowledge and skills to set up and operate equipment to perform fillet welds in flat and horizontal positions with the Gas Metal Arc and Flux Core Arc Welding processes. Oxy-fuel cutting, air carbon arc cutting and gouging will be covered.

### **WLD-113B: Gas Metal Arc Welding/Flux Core Arc Welding (Wirefeed) B (4 credits)**

The second half of WLD-113 which provides additional knowledge and skills needed to perform more advanced fillet and groove welds in vertical and overhead positions with the Gas Metal Arc and Flux Core Arc welding processes. Welding codes, standards and specifications will be reviewed. Prerequisite: Pass WLD-113A.

### **WLD-115A: Gas Tungsten Arc Welding (GTAW) A (4 credits)**

The first half of WLD-115 which provides the opportunity to acquire knowledge and skills to set up and operate equipment to perform fillet welds in flat and horizontal positions with the Gas Metal Arc Welding (GMAW) process. Plasma arc cutting will also be covered.

### **WLD-115B : Gas Tungsten Arc Welding (GTAW) B (4 credits)**

The second half of WLD-115 which provides the opportunity to acquire additional knowledge and skills needed to perform more advanced fillet and groove welds in vertical and overhead positions with the Gas Tungsten Arc welding process. Welding codes, standards and specifications will be reviewed. Prerequisite: Pass WLD-115A.