

## Program Learning Outcomes Mapping – Skilled and Technical Programs – Fall 2022

\*Note – these programs utilize a strict attendance policy and a robust one-on-one teacher to student experience yielding positive results

<b>Automotive/Diesel Service Technology</b>				
<b>Core Abilities</b>	<b>Program Learning Outcomes</b>	<b>Assessment Activity</b>	<b>Benchmark/Target</b>	<b>Results</b>
Technology Occupational Skills Live Skills Social Values	Gain a thorough knowledge of industry and OSHA safety standards for mechanical safety, hazardous waste material control, handling and disposal, and proper vehicle lift safety.	Watch OSHA safety video and take the safety test	Written/Hands-on performance 70% pass rate	100%
Technology Occupational Skills	Demonstrate knowledge and skills to inspect, diagnose, and repair to industry standards the major systems found in current auto and diesel vehicles.	Carefully inspect and align suspension parts of auto and diesels	Written/Hands-on performance 70% pass rate	90%
Communication Occupational Skills	Identify and explain the function of automotive and diesel parts and systems.	Parts ID Checklist	Written/Hands-on performance 70% pass rate	100%
Occupational Skills	Demonstrate proper technique while performing routine inspections and preventive maintenance on diesel technology.	Inspection Checklist	Written/Hands-on performance 70% pass rate	90%
Technology Occupational Skills Communication	Demonstrate proper techniques involved in completely removing, disassembling, cleaning, servicing, and re-assembling an automotive and diesel engine.	Hands on activity of disassembling an engine and putting it back together	Written/Hands-on performance 70% pass rate	90%
Technology Occupational Skills	Determine the proper use of hand tools and advanced diagnostic equipment commonly used in the service and repair of automotive and diesel technology.	Using the diagnostic scan tool to accurately diagnose an engine problem	Written/Hands-on performance 70% pass rate	100%
Life Skills Occupational Skills	Accurately calculate mathematical problems common to the automotive and diesel technology industry such as, but not limited to the following: gear ratios, conversion between metric and US measurements, electrical circuits (Ohm's Law), alignment angles, voltmeter, ammeter, ohmmeter readings, and cubic inch replacement.	Test	Written/Hands-on performance 70% pass rate	100%

## Cosmetology

Core Abilities	Program Learning Outcomes	Assessment Activity	Benchmark/Target	Results
Occupational Skills Social Values	Perform haircare services for all types of hair including hair analysis, haircutting, hairstyling, hair coloring and lightening, permanent waving, and chemical relaxing; perform natural nail services including manicuring and pedicuring; perform basic skincare services including skin analysis, facials, makeup application, and superfluous hair removal; obtain the necessary skills to pass the Arkansas State Licensure Exam (Principles of Cosmetology).	State Board practical and written exam	Practical Exam – 75%  Written Exam – 70%	89%
Communication Occupational Skills Technology Life Skills	Perform salon business, such as front desk operations, dispensary inventory and loss prevention, resume building and interviewing skills, self-marketing, and the basic knowledge of starting one’s own salon business (Professionalism and Business Skills).	Salon Business Project	Students will score 70% proficiency at the Adequate Level on each assignment	*The activity is not assessed in the fall.
Life Skills Occupational Skills	Have thorough knowledge of decontamination control, public hygiene, and special sanitation procedures used for the protection of the client and operator (Sanitation Practices).	Infectious Control	Students will score 70% proficiency at the Adequate Level on each assignment	80%

## Industrial Electricity

Core Abilities	Program Learning Outcomes	Assessment Activity	Benchmark/Target	Results
Occupational Skills	Identify the National Electrical Code standards and recommended practices	Symbols Identification Lab	Written/Hands-on performance 70% pass rate	100%
Occupational Skills Life Skills	Read and interpret basic blueprints, shop drawings, and electrical schematics.	Industrial Fundamentals Lab	Written/Hands-on performance 70% pass rate	100%
Occupational Skills Communication	Perform electrical calculations to determine voltage, amperage, and resistance using Ohm’s and Kirchhoff’s Law.	Basic Electricity Lab	Written/Hands-on performance 70% pass rate	80%
Occupational Skills	Identify proper electrical controls used for industrial motors and equipment.	Motors and Controls Lab	Written/Hands-on performance 70% pass rate	100%

Occupational Skills	Install and wire electrical components and motors including conduit bending and installation.	Motors and Controls Labs	Written/Hands-on performance 70% pass rate	100%
Occupational Skills Technology	Troubleshoot problems associated with industrial equipment utilizing Programmable Logic Controllers (PLCs).	PLC Lab	Written/Hands-on performance 70% pass rate	100%
Occupational Skills Technology	Write and install programs to perform a variety of operations utilizing Allen Bradley PLCs and software.	PLC lab	Written/Hands-on performance 70% pass rate	100%
<b>Industrial Technology</b>				
<b>Core Abilities</b>	<b>Program Learning Outcomes</b>	<b>Assessment Activity</b>	<b>Benchmark/Target</b>	<b>Results</b>
Occupational Skills Technology	Repair and maintain hydraulic and pneumatic systems.	Assemble hydraulic motor and describe parts	Written/Hands-on performance 70% pass rate	94%
Occupational Skills Communication	Attain knowledge of basic electrical systems.	Unit 8 test – Basic Electricity Combination Circuits	Written/Hands-on performance 70% pass rate	87%
		Basic Electricity Lab		80%
Occupational Skills Technology Communication Life Skills	Perform basic welding repairs.	Cut and weld a bevel plate	Written/Hands-on performance 70% pass rate	100%
Occupational Skills Communication Life Skills	Read and interpret basic blueprints, shop drawings, and electrical schematics.	Module 5 in Core Curriculum book Intro to Construction Drawings test	Written/Hands-on performance 70% pass rate	90%
		Industrial Fundamentals Lab		
Occupational Skills Life Skills	Install belts, sheaves/pulleys, cylinders, motors, pumps, valves, couplings, chains, sprockets, gears, gearboxes, and	Install a 3 belt & pulleys system and	Written/Hands-on performance 70% pass rate	92%

	other components essential to industrial maintenance repair and installation.	align on Lad Volt Mechanical trainer		
Communication Occupational Skills Life Skills Social Values	Demonstrate NCCER curriculum standards.	Pass all NCCER written and performance tests to receive card	Written/Hands-on performance 70% pass rate	100%
<b>Pipe Welding</b>				
<b>Core Abilities</b>	<b>Program Learning Outcomes</b>	<b>Assessment Activity</b>	<b>Benchmark/Target</b>	<b>Results</b>
Communication Occupational Skills Technology	Pass guided bend test to AWS standards in the following: <ul style="list-style-type: none"> <li>• SMAW carbon steel pipe (uphill and downhill) <ul style="list-style-type: none"> <li>• SMAW stainless steel pipe</li> <li>• GMAW carbon steel pipe</li> <li>• FCAW carbon steel pipe</li> </ul> </li> <li>• GTAW carbon, stainless, and aluminum pipe</li> </ul>	National Center for Construction and Educational Research (NCCER) Written and Performance Exams	Written/Hands-on performance 70% pass rate	100%
<b>Welding</b>				
<b>Core Abilities</b>	<b>Program Learning Outcomes</b>	<b>Assessment Activity</b>	<b>Benchmark/Target</b>	<b>Results</b>
Occupational Skills Technology	Demonstrate welds in flat, horizontal, vertical, and overhead positions using the basic welding processes: SMAW, GMAW, FCAW, and GTAW.	Performance Accreditation Task	Written/Hands-on performance 70% pass rate	100%
Occupational Skills	Demonstrate metal layout and cut processes.	Welding #1 – Module 2	Written/Hands-on performance 70% pass rate	100%
Occupational Skills	Demonstrate the fundamentals of welding processes.	Welding #1 – Module 7	Written/Hands-on performance 70% pass rate	100%
Occupational Skills	Demonstrate the principles of metallurgy during the welding process.	Welding #2 – Module 3	Written/Hands-on performance 70% pass rate	90%
Technology Occupational Skills	Read and interpret basic blueprints and welding symbols to fabricate components.	Welding #2 – Module 1	Written/Hands-on performance 70% pass rate	90%

Technology Occupational Skills Life Skills	Apply basic math and measurement.	Welding #1 – Module 2	Written/Hands-on performance 70% pass rate	100%
Technology Occupational Skills Communication Social Values	Follow industry and NCCER standards and safety practices.	Welding #1 – Module 1	Written/Hands-on performance 70% pass rate	100%