Foundational Courses

TEAU 1400 Suspension and Steering — 4 Credits / 120 Clock-Hours

The Suspension and Steering course teaches theory and hands-on instruction on automotive suspension and steering systems while following the program standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe suspension and steering maintenance and repairs.
• Identify and repair automotive steering and suspension systems.
• Identify the issues with and perform an automotive wheel alignment.
• Identify and repair automotive wheels and tires.

TEAU 1500 Brakes — 4 Credits / 120 Clock-Hours

The Brakes course provides theory and hands-on instruction on automotive braking systems while following the industry acceptable standards.

Objectives:
• Maintain vehicle safety through safe brake maintenance and repairs.
• Identify and repair hydraulic, disc, and drum brake systems.
• Identify and repair parking and anti-lock braking systems.
• Identify and repair traction and stability control systems.
• Repair brake assist systems.

TEAU 1600 Electrical I — 4 Credits / 120 Clock-Hours

The Electrical I course provides theory and hands-on instruction on automotive electrical systems while following the program standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe electrical maintenance and repairs.
• Identify and repair electrical/electronic series, parallel, and series-parallel circuits using principles of electricity (Ohm’s Law).
• Identify and repair the causes and effects from shorts, grounds, opens, and resistance problems in electrical/electronic circuits.
• Identify and demonstrate proper use of a digital multimeter (DMM) when measuring source voltage, voltage drop (including grounds), current flow and resistance.
• Identify and repair automotive electrical/electronic systems including battery systems, charging systems starting systems, and lighting systems.

TEAU 1800 Engine Performance I **4 Credits / 120 Clock-Hours**

The Engine Performance I course provides theory and hands-on instruction in automotive engine performance while following the program standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe engine performance maintenance and repairs.
• Identify and interpret engine performance concerns; determine needed action.
• Inspect and repair abnormal engine noises or vibration concerns; determine needed action.
• Inspect and repair automotive ignition systems; determine needed action.
• Inspect and repair automotive fuel systems; determine needed action.
• Inspect and repair automotive air induction systems as it relates to engine performance.
• Inspect and repair automotive exhaust systems as it relates to engine performance.

Supplemental Courses Varies by Institution

Bridgerland

TEAU 1020 General Automotive Service **2 Credits / 60 Clock-Hours**

This course provides an overview of automobile equipment and its operating systems. Emphasis will be placed on safety, precision tools in the auto shop, basic external engine repair, tire pressure monitoring systems (TPMS), brake refinishing, an introduction to electrical diagnostic equipment, basic engine performance, heating ventilation and air conditioning (HVAC), and electrical systems. Students have the opportunity to complete minor repairs and preventative maintenance procedures on their personal vehicles, customer vehicles, and donated vehicles. This course is individualized and includes extensive hands□on experiences.

Objectives:
• Work safely in an automotive shop.
• Demonstrate proper use of precision measuring tools.
• Perform external engine repair.
• Service the TPMS system.
• Refinish disc and drum brakes.

TEAU 1110 Engine Repair **3 Credits / 90 Clock-Hours**

This course covers the diagnosis and repair of the automotive gas engine mechanical systems and components. Students will learn how to diagnose and repair short block and cylinder heads, valve trains, and timing mechanisms. Students will also learn how to perform a complete engine replacement.

Objectives:
• Demonstrate safe working habits and handling of hazardous materials.
• Perform general engine diagnosis.
• Perform engine removal and reinstallation.
• Perform cylinder head and valve train diagnosis and repair.
• Demonstrate engine short block diagnosis and repair.
• Demonstrate lubrication and cooling system diagnosis and repair.

TEAU 1201 Automatic Transmissions **2 Credits / 60 Clock-Hours**

This course covers the automatic transmission and transaxles used in today's cars and light trucks. Students will learn to diagnose and repair mechanical and hydraulic systems along with computer controls.

Objectives:
• Demonstrate safe working habits and handling of hazardous materials.
• Perform general transmission and transaxle diagnosis.
• Perform transmission and transaxle maintenance and adjustment.
• Perform transmission and transaxle on□vehicle repair.
• Demonstrate proper off□vehicle transmission and transaxle repair.

TEAU 1210 Transmissions **2 Credits / 60 Clock-Hours**

This course covers operation and maintenance of automatic/manual transmissions and transaxles. Students will receive training on the diagnosis and repair of various types of clutches, drive axles, u□joints, and CV axles.

Objectives:
• Demonstrate safe working habits and handling of hazardous materials.
• Inspect and adjust fluids in manual and automatic transmissions.
• Properly service automatic and manual transmissions.
• Perform clutch diagnosis.
• Properly service differentials.

TEAU 1310 Manual Drive Train and Axle **3 Credits / 90 Clock-Hours**

This course covers operation and repair of manual shift transmissions and transaxles. Clutches, drive axles, u□joints, and CV axles are also covered.

Objectives:
• Demonstrate safe working habits and handling of hazardous materials.
• Perform clutch diagnosis and repair.
• Diagnose and repair hydraulic system operation.
• Perform transmission/transaxle diagnosis and repair.
• Perform drive shaft, universal and Constant Velocity (CV) joint diagnosis and repair.
• Perform drive axle and differential diagnosis and repair.
• Diagnose and repair four-wheel drive/All-wheel drive component.

TEAU 1710 HVAC **2 Credits / 60 Clock-Hours**

This course covers the theory, operation, and diagnosis of the modern climate control system. Topics covered include compressors, system controls, and recycling of refrigerant gases.

Objectives:
• Demonstrate safe working habits and handling and recovery of refrigerant gases.
• Diagnose and repair A/C system.
• Demonstrate refrigeration system component diagnosis and repair.
• Perform heating, ventilation, and engine cooling systems diagnosis and repair.
• Diagnose and repair operating systems and related controls.
• Demonstrate proper refrigerant recovery, recycling, and handling.

TEAU 2400 Suspension and Steering II **2 Credits / 60 Clock-Hours**

This course covers the suspension and steering systems which include shock absorbers, tie rods, ball joints, tires, McPherson struts, along with conventional steering boxes and rack and pinion steering systems.

Objectives:
• Demonstrate safe working habits and handling of hazardous materials.
• Perform steering system diagnosis and repair.
• Perform suspension system diagnosis and repair.
• Explain wheel alignment theory and perform adjustment and repair.
• Perform wheel and tire diagnosis and repair.

TEAU 2500 Brakes II **2 Credits / 60 Clock-Hours**

This course covers the theory of brake operation and repair of mechanical and hydraulic portions of the brake system. Also covered is the diagnosis and repair of the electronic controls used in anti□lock brake systems.

Objectives:
• Demonstrate safe working habits and handling of hazardous materials.
• Perform hydraulic system diagnosis and repair.
• Perform drum and disc brake diagnosis and repair.
• Diagnose and repair power assist units.
• Demonstrate wheel bearing service.
• Diagnose and repair anti□lock brake systems.

TEAU 2610 Electrical II **4 Credits / 120 Clock-Hours**

This course covers the electrical system used in the modern automobile. The training covers electrical theory including ohm's law and hands on application of that theory. Students will receive detailed training on onboard electronic control computers and their associated systems, lighting, starting/charging systems, and general electrical systems and accessories. Students will learn the use of specialized test equipment such as digital multimeter and a lab scope.

Objectives:
• Demonstrate safe working habits and handling of hazardous materials.
• Diagnose and repair general electrical problems.
• Diagnose and repair onboard computer controls.
• Diagnose battery, starting, and charging systems.
• Utilize wiring diagrams.
• Diagnose and repair lighting systems.
• Demonstrate electrical accessory and warning systems repair.

TEAU 2810 Engine Performance II **4 Credits / 120 Clock-Hours**

This course covers general engine diagnosis along with tune□up and drivability repair. The ignition system, fuel system, and emission systems will be covered in detail. Use of scan tools and lab scopes for diagnosis of engine control computers and related systems will also be covered.

Objectives:
• Demonstrate safe working habits and handling of hazardous materials.
• Perform general engine evaluation.
• Diagnose computerized engine controls on OBDII systems.
• Perform ignition system diagnosis and repair.
• Perform fuel, air induction, and exhaust systems diagnosis and repair.
• Diagnose emission control devices and system repair.
• Perform engine tune□up along with necessary mechanical adjustments.

Davis

TEAU 1005 Introduction and Safety **1 Credit / 30 Clock-Hours**

Introduction and Safety introduces the basic uses and functions of the automotive shop. Throughout this course, you will study shop safety, including handling hazardous materials and disposal. In addition, you will demonstrate the proper use of the torque wrench, correct and accurate use of all automotive measuring tools, and safe operation of equipment, including jacks, jack stands, and vehicle hoists.

Objectives:
• Explain the importance of container labeling and material safety data sheets (MSDS) and to properly handle common, automotive industry materials.
• Describe the automotive shop layout.
• Identify:
o Classes of fires and the appropriate fire extinguishers to have present.
o Hazardous material located in the automotive shop.
o Common hand and power tools.
o Various threaded fasteners and perform thread repair.
o Major pieces of shop equipment.
• Demonstrate:
o Proper safety procedures using hoists, jacks, and jack stands.
o Ability to retrieve and use the various vehicle information sources.
o Ability to perform basic Maintenance Procedures.
o Safety requirements necessary to work in the automotive shop and on vehicles.
o Ability to use measuring tools.

TEAU 1040 Maintenance and Light Repair I **3 Credits / 90 Clock-Hours**

Students in this course are introduced to the basic theory and function of modern engine technology, automatic and manual transmission/transaxles, and basic electrical fundamentals. Students will maintain and service engines and drivetrain systems, and practice electrical testing procedures.

Objectives:
• Engine Systems Inspection, Service and Repair:
o Describe engine system fundamentals, including 4-stroke cycle, engine sizes and performance.
o Demonstrate basic engine testing, service and maintenance procedures of engine systems.
o Retrieve and record diagnostic OBDII generic power train Diagnostic Trouble Codes (DTCS).
• Automatic and Manual Transmission/Transaxle Inspection, Service, and Repair:
o Describe the Fundamentals of Automatic Transmission operation.
o Perform Maintenance, Diagnosis and Service Procedures.
o Describe Transmission/Transaxle Fundamentals, including clutch operation.
o Perform Inspection, Maintenance, Diagnosis and Service Procedures.
• Electrical:
o Explain basic electrical theory, types of circuits in the automobile.
o Demonstrate proper testing procedures using Digital Volt Ohmmeter (DVOM) as well as test lights.
o Perform battery tests and service procedures.
o Perform starter tests and service procedures.
o Describe lighting, gauges, horns, and wiper systems service and repair.

TEAU 1130 Engine Repair I **1 Credit / 30 Clock-Hours**

ASE Engine Repair I explores all aspects of diagnosis and repair and replacement of automotive engines, cylinder heads and valve trains, blocks, lubrication and cooling systems. This is the first part of a two-part series focusing on diagnosis and repair of lubrication and cooling systems. This course conforms to ASE/NATEF standards.

Objectives:
• Diagnose and repair lubrication systems.
• Diagnose and repair cooling systems.

TEAU 1230 Automatic Transmissions and Transaxles I **2 Credits / 60 Clock-Hours**

This is the first course in a two-course series. Students in this course will learn diagnosis and repair of automatic transmissions and transaxles inside and outside of a vehicle including proper maintenance techniques of automatic transmissions/transaxles. Students will also learn how to retrieve diagnostic code using a scan tool. This course conforms to Automotive Service Excellence (ASE) and National Automotive Technicians Education Foundation (NATEF) standards.

Objectives:
• Diagnose noise, vibration, harshness, and shift quality problems.
• Inspect, adjust, and replace transmission cables, linkage, and range sensors.
• Replace transmission fluid, flush, replace filter(s) and refill.
• Using scan tool retrieve transmission codes and look up diagnostic procedures related to these codes.

TEAU 1330 ASE Manual Drive Trains and Axles I **3 Credits / 90 Clock-Hours**

ASE Manual Drive Train and Axles I is the first course in a two-course series. During your time in this course, you will diagnosis and repair manual drive trains and axles including manual transmissions and transaxles, clutches, drive shafts, U-joints, CV joints, drive axles, four-wheel and all-wheel drive components. This course conforms to Automotive Service Excellence (ASE) and National Automotive Technicians Education Foundation (NATEF) standards.

Objectives:
• Diagnose and repair of drive trains.
• Diagnose and repair of drive shaft and half shaft, universal and constant-velocity (CV) joints.
• Diagnose and repair of clutches.

TEAU 1730 ASE Heating, Ventilation, and Air Conditioning I **1 Credit / 30 Clock-Hours**

ASE Heating, ventilation, and Air Conditioning I is the first course in a two-course series. In this course, you will practice diagnosing, operating, and repairing automotive heating and air conditioning systems, as well as safe handling, recovering, and recycling refrigerants. This course conforms to Automotive Service Excellence (ASE) and National Automotive Technicians Education Foundation (NATEF) standards.

Objectives:
• Explain the refrigeration cycle.
• Identify basic components of the Air Conditioning system.
• Diagnose and troubleshoot heater functions.
• Diagnose and troubleshoot heater and air conditioner ventilation ducting system.
• Diagnose the engine cooling system function.
• Remove and replace blower motors, ventilation ducts, linkages and control assemblies.
• Properly handle, recover, test, recycle, and disposal of all types of refrigerants.

TEAU 1900 ASE Light Duty Diesel **2 Credits / 60 Clock-Hours**

Students in this course will study the current fuels used in the automotive industry and the environmental concerns associated with fuels. Students will be introduced to fuel systems of light duty diesel vehicles. Students will have an opportunity to apply new skills in basic fuel systems, types, engines, engine aspiration systems, emission controls, and general vehicle emissions inspection, as well as an introduction to light duty diesels used in automotive applications.

Objectives:
• Describe properties of gasoline and diesel fuel.
• Explain octane and cetane ratings.
• Describe normal and abnormal combustion of gasoline and diesel fuel.
• Describe how vehicle emission gasses are formed and identify the emission control parts.
• Summarize the differences between gasoline and diesel engines.
• Explain operation principles of a diesel injections system.
• Properly replace fuel filter and bleed fuel system on diesel injection system.
• Describe the type of engine aspiration systems and how to safely work around them.
• Maintain a safe and clean working environment, clean shop as directed by instructor.

TEAU 2040 Maintenance and Light Repair II **3 Credits / 90 Clock-Hours**

ASE Automotive Maintenance and Light Repair II is a continuation of ASE Automotive Maintenance and Light Repair I and carries you forward in basic theory and function of suspension and steering systems, braking systems and heating ventilation and air conditioning fundamentals. During this course, you will continue to explore maintenance and servicing of engines and drivetrain systems.

Objectives:
• Engine Systems Inspection, Service and Repair:
o Describe engine system fundamentals, including 4-stroke cycle, engine sizes and performance.
o Demonstrate basic engine testing, service and maintenance procedures of engine systems.
o Retrieve and record diagnostic OBDII generic power train Diagnostic Trouble Codes (DTCS).
• Automatic and Manual Transmission/Transaxle Inspection, Service, and Repair:
o Describe the Fundamentals of Automatic Transmission operation.
o Perform Maintenance, Diagnosis and Service Procedures.
o Describe Transmission/Transaxle Fundamentals, including clutch operation.
o Perform Inspection, Maintenance, Diagnosis and Service Procedures.
• Electrical:
o Explain basic electrical theory, types of circuits in the automobile.
o Demonstrate proper testing procedures using Digital Volt Ohmmeter (DVOM) as well as test lights.
o Perform battery tests and service procedures.
o Perform starter tests and service procedures.
o Describe lighting, gauges, horns, and wiper systems service and repair.

TEAU 2130 Engine Repair II **6 Credits / 180 Clock-Hours**

ASE Engine Repair II continues training from ASE Engine Repair I including: diagnosis, repair, and replacement of automotive engines, cylinder heads and valve trains, blocks, and lubrication and cooling system repairs. Throughout your time in this course, you will also explore general engine diagnosis and all aspects of engine repair, including engine repair, cylinder head, valve train, and engine block assembles. You will also practice the safe and proper techniques for removal and reinstallation of engines. This course conforms to ASE/NATEF standards.

Objectives:
• Demonstrate proper removal, reinstallation and general diagnosis of an engine.
• Diagnose and repair of cylinder head and valve train.
• Diagnose and repair of engine block assemblies.
• List alternative fuel and advanced technology vehicles.

TEAU 2230 Automatic Transmissions and Transaxles II **5 Credits / 150 Clock-Hours**

This is the second course in a two-course series. Students in this course will learn diagnosis, removal, replacing and repair of automatic transmissions and transaxles inside and outside of a vehicle. This course conforms to Automotive Service Excellence (ASE) and National Automotive Technicians Education Foundation (NATEF) standards.

Objectives:
• Properly perform all adjustment that can be made on an automatic transmission while still in the vehicle in flat rate.
• Properly diagnose and service torque converter and front pumps.
• Properly perform stall speed test and stator clutch operation.
• Diagnose and inspect planetary gears, clutch packs, bands, and input and output shafts in automatic transmissions.
• Diagnose, inspect, remove, clean, repair, and install transmission valve bodies and other hydraulic parts.
• Properly remove, inspect, clean, rebuild, and reinstall of automatic transmission and automatic transaxles in flat rate.

TEAU 2330 ASE Manual Drive Trains and Axles II **3 Credits / 90 Clock-Hours**

ASE Manual Drive Train and Axles II is the second course in a two-course series. Throughout this course, you will diagnose and repair manual drive trains and axles including manual transmissions and transaxles, clutches, drive shafts, U-joints, CV joints, drive axles, four-wheel and all-wheel drive components. This course conforms to Automotive Service Excellence (ASE) and National Automotive Technicians Education Foundation (NATEF) standards.

Objectives:
• Diagnose and repair of drive trains.
• Diagnose and repair of drive shaft and half shaft, universal and constant-velocity (CV) joints.
• Diagnose and repair of clutches.

TEAU 2410 Suspension and Steering II **4 Credits / 120 Clock-Hours**

In this course, students will receive training in all aspects of diagnosis and repair of automotive suspension and steering systems. Instruction will be given in alignments, diagnosing and replacement of steering components, diagnosis of tire wear, and alignment related problems. This course conforms to ASE/NATEF standards.

Objectives:
• Inspect, diagnose, and repair wheel bearings.
• Inspect, diagnose, and repair steering systems.
• Inspect and replace or repair power steering assist system components.
• Inspect, diagnose, adjust, and repair wheel alignment.

TEAU 2510 ASE Brake Systems II **3 Credits / 90 Clock-Hours**

This course conforms to ASE/NATEF standards. ASE Brake Systems II explores all aspects of diagnosis and repair of automotive brake systems. Throughout this course, you will be introduced to brake functions, anti-lock brake functions, diagnosing of all aspects of brakes, and proper service of brake and their related components. This is the second part of the two-course series. This part focuses on inspection, adjustment, and repair of drum and disc brakes.

Objectives:
• Inspect, diagnose and repair drum brakes.
• Inspect, diagnose and repair disk brakes.
• Inspect, adjust and repair parking brakes.
• Inspect and diagnose power assist brake units.
• Inspect, diagnose and repair anti-lock brake systems.

TEAU 2630 ASE Electrical/Electronic Systems II **2 Credits / 60 Clock-Hours**

This course conforms to ASE/NATEF standards. In this course, students will receive detailed training in all aspects of Automotive Electricity and Electronics. Instruction is given in electrical theory, Ohms law, troubleshooting, diagnosis, and functions of all Automotive Electrical/Electronic systems. This is the second of a two-course series. This course focuses on Ohms law, series and parallel circuits, use of wiring diagrams to inspect, test and diagnose electrical circuits.

Objectives:
• Use a Digital Volt Ohm Meter (DVOM) to diagnose lighting systems.
• Diagnose, repair, and replace all vehicle lighting systems.

TEAU 2730 ASE Heating, Ventilation, and Air Conditioning II **2 Credits / 60 Clock-Hours**

ASE Heating, Ventilation, and Air Conditioning II is the second course in a two-course series. In this course, you will study diagnosis, operation, and repair of automotive heating and air conditioning systems including operation and repair of air conditioning systems and related controls. You will explore safe handling, recovery and recycling of refrigerants. This course conforms to Automotive Service Excellence (ASE) and National Automotive Technicians Education Foundation (NATEF) standards. In order to successfully complete the course, you must pass the Section 609 Certification.

Objectives:
• Recognize appropriate pressure and temperatures of properly working automotive air conditioning systems.
• Properly recover, recycle, and recharge air conditioning systems.
• Properly evacuate, leak test and determine the “state of charge” of an air conditioning system.
• Remove and replace air conditioning components such as hoses, fittings, metering devices, receiver dryers, accumulators, condensers evaporators and pressure switches.
• Remove and replace air conditioning compressors and clutch assemblies.
• Diagnose air conditioning and heating system control modules and related systems.

TEAU 2830 Engine Performance II **5 Credits / 150 Clock-Hours**

This course conforms to ASE/NATEF standards. During this course, you will receive detailed training in all aspects of diagnosis and repair of automotive engine performance systems. You will explore all aspects of engine performance including but not limited to fuel injection systems, ignition systems, computer controls, emissions systems, and exhaust systems. This is the second of a two-course series. This course focuses on all aspects of air induction and exhaust systems, fuel systems, emission system, and onboard computer powertrain controls.

Objectives:
• Inspect, diagnose, and repair general fuel supply and delivery systems.
• Diagnose and Repair Intake and Exhaust Systems.
• Inspect, diagnose, and repair general emission control systems.
• Operate a 5-gas exhaust analyzer, and interpret and analyze exhaust 5 gas emission.
• Inspect, diagnose with and without the use of a scan tool, and repair engine computer control systems (On Board Diagnostics I).
• Operate a lab scope and analyze electronic components and devices oscilloscope waveforms.
• Inspect, diagnose, and repair electronic fuel injection systems.
• Inspect, diagnose, and repair On Board Diagnostic II systems.

TEAU 2901 Automotive Technology Special Projects I **1 Credit / 30 Clock-Hours**

Automotive Technology Special Project I provides the opportunity to practice previously learned skills. You will complete approved and supervised in-class work experiences as you prepare for work in the automotive technology industry.

Objectives:
• Perform maintenance repairs and service on special projects as determined by the instructor to meet course requirements.

TEAU 2902 Automotive Technology Special Projects II **2 Credits / 60 Clock-Hours**

Automotive Technology Special Project II provides the opportunity to practice previously learned skills. You will complete approved and supervised in-class work experiences as you prepare for work in the automotive technology industry.

Objectives:
• Perform maintenance repairs and service on special projects as determined by the instructor to meet course requirements.

TEAU 2903 Automotive Technology Special Projects III **3 Credits / 90 Clock-Hours**

Automotive Technology Special Project III provides the opportunity to practice previously learned skills. You will complete approved and supervised in-class work experiences as you prepare for work in the automotive technology industry.

Objectives:
• Perform maintenance repairs and service on special projects as determined by the instructor to meet course requirements.

TEAU 2990 Automotive Technology Externship Guide **2 Credits / 90 Clock-Hours**

The Automotive Technology externship experience helps you transition from a student into a professional role by allowing you to demonstrate the knowledge, skills and professional attributes learned in the program while working in a professional setting. This experience takes place under the supervision of a qualified site supervisor and includes skill practice and evaluation. Program faculty periodically visit the externship site to evaluate your progress and performance. All program course work must be completed prior to enrolling in this course.

Objectives:
• Demonstrate basic diagnostic testing, service, and maintenance procedures on a variety of automotive systems.
• Demonstrate professional and appropriate customer service.

Dixie

TEAU 1070 Introduction to Automotive Technology **2 Credits / 60 Clock-Hours**

No description available.

TEAU 1171 Automotive Engine Repair **4 Credits / 120 Clock-Hours**

Provides theory and hands-on instruction in automotive and light duty diesel engine repair, following ASE Education Foundation Master-Level standards.

Objectives:
• Maintain vehicle safety during engine repairs.
• Identify components and configurations of automotive and light duty diesel engines.
• Maintain automotive and light duty diesel engines and systems.
• Maintain automotive and light duty diesel cooling and lubrication systems.

TEAU 1201 Automatic Transmissions **2 Credits / 60 Clock-Hours**

This course covers the automatic transmission and transaxles used in today’s cars and light trucks. Students will learn to diagnose and repair mechanical and hydraulic systems along with computer controls.

Objectives:
• Demonstrate safe working habits and handling of hazardous materials.
• Perform general transmission and transaxle diagnosis.
• Perform transmission and transaxle maintenance and adjustment.
• Perform transmission and transaxle on□vehicle repair.
• Demonstrate proper off□vehicle transmission and transaxle repair.

TEAU 1370 Manual Transmissions and Drivetrains **2 Credits / 60 Clock-Hours**

No description available.

TEAU 1710 HVAC **2 Credits / 60 Clock-Hours**

This course covers the theory, operation, and diagnosis of the modern climate control system. Topics covered include compressors, system controls, and recycling of refrigerant gases.

Objectives:
• Demonstrate safe working habits and handling and recovery of refrigerant gases.
• Diagnose and repair A/C system.
• Demonstrate refrigeration system component diagnosis and repair.
• Perform heating, ventilation, and engine cooling systems diagnosis and repair.
• Diagnose and repair operating systems and related controls.
• Demonstrate proper refrigerant recovery, recycling, and handling.

TEAU 2005 Hybrid and Electric Vehicles **2 Credits / 60 Clock-Hours**

No description available.

TEAU 2630 ASE Electrical/Electronic Systems II **2 Credits / 60 Clock-Hours**

This course conforms to ASE/NATEF standards. In this course, students will receive detailed training in all aspects of Automotive Electricity and Electronics. Instruction is given in electrical theory, Ohms law, troubleshooting, diagnosis, and functions of all Automotive Electrical/Electronic systems. This is the second of a two-course series. This course focuses on Ohms law, series and parallel circuits, use of wiring diagrams to inspect, test and diagnose electrical circuits.

Objectives:
• Use a Digital Volt Ohm Meter (DVOM) to diagnose lighting systems.
• Diagnose, repair, and replace all vehicle lighting systems.

TEAU 2921 OEM Training I (Introduction to Automotive) **2 Credits / 60 Clock-Hours**

No description available.

TEAU 2922 OEM Training II (Under Car) **2 Credits / 60 Clock-Hours**

No description available.

TEAU 2923 OEM Training III (Under Hood) **2 Credits / 60 Clock-Hours**

No description available.

TEAU 2924 OEM Training IV (Drivetrains) **2 Credits / 60 Clock-Hours**

No description available.

Mountainland

TEAU 1030 G1 Maintenance and Light Repair **9 Credits / 270 Clock-Hours**

This course provides knowledge of proper practices in working safely in a professional shop environment.

Objectives:
• Demonstrate a safety-oriented mindset and always ensure a safe working environment.
• Demonstrate the proper use of the tools and equipment needed to work in the automotive industry.
• Inspect engine assembly for fuel, oil, coolant and other leaks.
• Install engine covers using gaskets, seals and sealers.
• Identify service precautions for servicing engines of hybrid electrical vehicles.
• Identify cylinder head and valve train components and configurations.
• Identify engine block assembly components and configurations.
• Perform engine oil and filter change, cooling system leak pressure and dye tests, and identify causes of engines overheating.
• Drain and recover coolant. Remove and replace thermostat and gasket/seal.

TEAU 1120 A1 Engine Repair **5 Credits / 150 Clock-Hours**

In this course, students learn general automotive repair techniques, such as researching vehicle information, monitoring automobile status, clearing codes, and inspecting the engine for fluid levels and leaks. Students will diagnose and repair issues with the cylinder head and valve train. They will also perform tests and diagnose lubrication and cooling system problems and make necessary repairs.

Objectives:
• Research vehicle service information online, such as fluid types, part numbers, etc.
• Inspect engines for fluid leaks and determine needed action, including replacement of gaskets and seals.
• Check mechanical timing and inspect/replace engine mounts.
• Remove and install engine, cylinder head, and camshaft. Adjust valves.
• Disassemble, inspect and reassemble engine block.
• Inspect and maintain and repair lubrication and cooling systems.

TEAU 1220 A2 Automatic Transmission/Transaxle **5 Credits / 150 Clock-Hours**

This course teaches the student to identify transmission and transaxle parts, and to inspect, maintain and repair transmission and transaxle systems. Students will distinguish between continuously variable transmissions and will learn the characteristics of hybrid vehicle drive trains. They will learn to inspect, measure, and replace the valve body and assemble transmissions and transaxles.

Objectives:
• Identify automatic transmission and transaxle components and configurations.
• Analyze transmission/transaxle concerns, differentiating between engine performance and transmission/transaxle concerns.
• Diagnose fluid condition and loss and inspect for leaks.
• Diagnose pressure concerns in a transmission, using hydraulic principles.
• Drain and replace fluid and filters, and inspect, replace or align powertrain mounts.
• Assemble transmission/transaxle.
• Inspect and troubleshoot oil delivery circuits, bushings, planetary gear assembly, case bores, clutch drum, piston, etc.

TEAU 1320 A3 Manual DriveTrain and Axles **4 Credits / 120 Clock-Hours**

This course provides the student with knowledge and practice in inspecting, diagnosing and repairing manual drivetrain and axle systems in automobiles and four-wheel/all-wheel drive vehicles.

Objectives:
• Identify drivetrain and axle components and identify drive train concerns and action.
• Check and adjust clutch master cylinder fluid level, check for leaks, and use proper fluids.
• Diagnose clutch noise, binding, slippage, pulsation and chatter to determine needed action; bleed clutch hydraulic system.
• Inspect flywheel and ring gear for wear and determine needed action.
• Disassemble, inspect, clean and reassemble internal transmission/transaxle components.
• Inspect and service/replace bearings, hubs and seals, and shafts, yokes boots, and universal/CV joints.
• Inspect and repair differential housings, pinion and ring gear, drive axles.
• Diagnose, test, adjust and/or replace electrical components of four-wheel or all-wheel drive systems.
• Disassemble, service and reassemble transfer case components.

TEAU 1720 A7 Heating, Ventilation, and Air Conditioning (HVAC) **3 Credits / 90 Clock-Hours**

The A7 Automotive HVAC course covers the HVAC (heating ventilation and air conditioning) systems for automotive cars and light trucks. Hands on and theory training includes, shop safety, electrical fundamentals, all components and systems both mechanical and electronic that are related to a vehicle's heating and air conditioning system. Manufacturer web-based training, ASE practice testing, and a final exam. Students will also study and take the online EPA section 609 Certification exam in class, as part of the course, and the ASE A7 certification exam will be taken at an independent testing facility at the conclusion of the course.

Objectives:
• Identify and discuss the function of the heating, ventilation, and air conditioning systems.
• Identify HVAC components and configurations.
• Perform A/C system performance tests, and determine needed actions.
• Inspect, remove and replace A/C systems.
• Inspect engine cooling and heating systems, hoses, pipes, control valves and heater core. Repair or replace, as needed.
• Inspect HVAC ducts, doors, hoses, cabin filters, and outlets to determine needed action.
• Use and maintain refrigerant handling equipment.
• Identify A/C system refrigerants. Test, recover, evacuate, and charge the A/C system.
• Recycle, label and store refrigerant using proper processes.

TEAU 2620 A6 Electrical II **1 Credit / 30 Clock-Hours**

This course covers the principles and laws of basic electrical theory and lab practices.

Objectives:
• Identify electrical systems associated with automobiles and trucks.
• Explain basic electrical circuits and how they work.
• Discuss battery, starting circuits, and charging systems and their proper function.
• Demonstrate proper use of digital multimeter for measuring voltage.
• Use wiring diagrams during diagnosis of electrical/electronic circuit problems.
• Test, measure, repair and replace components, connectors, terminals and wiring. Solder repairs.
• Inspect, clean, and replace the battery. Reinitialize or enter codes for peripheral equipment as needed.
• Identify, inspect, troubleshoot, repair and replace starters in vehicles.
• Inspect, diagnose, and replace interior and exterior lights.
• Inspect, diagnose and repair issues with instrument panel gauges and warning lights. Reset if needed.
• Diagnose vehicle comfort, convenience safety, security, restraint, wiper, entertainment, and related systems operation. Update software, as needed.

TEAU 2820 A8 Engine Performance II **1 Credit / 30 Clock-Hours**

Students will identify and interpret various engine performance concerns and will determine needed action. They will learn to correct camshaft timing, perform engine manifold pressure tests, and perform tests on cylinders to determine needed adjustments and repairs. Students will also analyze computerized controls to determine needed adjustments. Students will learn to repair and replace the ignition system, fuel filter, exhaust systems, and turbocharger systems, as well as emission control systems.

Objectives:
• Verify proper engine cooling system operation. Determine any needed actions.
• Verify correct Camshaft timing and adjust as necessary.
• Interpret engine performance concerns, including engine noises or vibration concerns.
• Perform engine manifold pressure test, cylinder power balance test, cylinder cranking and running compression tests, and cylinder leaking tests. Determine needed action.
• Diagnose engine mechanical, electrical, electronic, fuel, and ignition concerns. Determine needed action.
• Inspect, test, and adjust engine computerized controls.
• Reprogram or recalibrate the powertrain/engine control module.
• Inspect, test, and/or replace ignition components. Reprogram as necessary.
• Identify, test and repair components of the Ignition, Fuel, Air Induction and exhaust systems.
• Inspect and service the Emissions Control Systems.

Ogden-Weber

TEAU 1105 Engine Repair **4 Credits / 120 Clock-Hours**

The Engine Repair course covers theory and hands-on instruction in automotive engines while following the standards as established by Automotive Service Excellence Education Foundation.

Objectives:
• Practice safe servicing procedures as related to engine repair.
• Identify engine configurations.
• Determine procedures to maintain engine lubrication and cooling systems.
• Identify and service internal engine components.
• Explore techniques to measure clearances of engine components.
• Determine safe procedures to engine assembly removal and installation.
• Identify ASE testing strategies related to the topic of engine repair.

TEAU 1205 Transmissions **4 Credits / 120 Clock-Hours**

The Transmission course covers theory and hands-on instruction in transmissions while following the standards as established Automotive Service Excellence Education Foundation.

Objectives:
• Practice safe servicing procedures as related to transmissions.
• Identify transmission types.
• Determine procedures to maintain automatic and manual transmissions.
• Diagnose and repair automatic and manual transmission components.
• Identify and service drive shafts and axles.
• Identify and service manual transmission clutch components.
• Explore final drive assemblies.
• Explore four-wheel and all-wheel drive systems.
• Identify ASE testing strategies related to the topic of automatic and manual transmissions.

TEAU 1705 Automotive HVAC and Critical Workplace Skills **4 Credits / 120 Clock-Hours**

This course covers theory and hands-on instruction on automotive HVAC systems while following the standards as established by Automotive Service Excellence Education Foundation. In addition, this course will cover workplace skills needed to maintain gainful and satisfying employment.

Objectives:
• Practice safe servicing procedures as related to automotive HVAC.
• Identify air conditioning system faults based on gauge readings and vent temperatures.
• Demonstrate the process of refrigerant recovery, recycling, and recharging using approved equipment.
• Diagnose and repair faulty HVAC components.
• Pass the EPA 609 technician certification test.
• Identify ASE testing strategies related to the topic of heating, ventilation, and air conditioning.
• Identify workplace interpersonal and human relations skills.

Salt Lake

TEAU 1060 Safety and Introduction to Automotive Service **4 Credits / 120 Clock-Hours**

The Safety and Intro to Auto Service course provides proper knowledge of practices in safety to help establish safe working habits that would reflect industry standards, introduces the student to careers in the automotive field, ASE certifications, and service of the following systems: engines, electrical, brakes, steering and suspension, HVAC, transmissions, drivetrain, and engine performance.

Objectives:
• Maintain personal safety and proper lifting procedures.
• Identify occupational rules and regulations.
• Identify and use personal protective equipment.
• Identify and use hand and power tools.
• Identify and properly dispose of hazardous waste.
• Identify and use metric and standard measuring systems.
• Identify and inspect engine systems.
• Identify and inspect starting and charging systems.
• Identify and inspect brake systems.
• Identify and inspect the steering and suspension systems.
• Identify and inspect the HVAC system.
• Identify and inspect transmission and drivetrain systems.

TEAU 1155 Engine Repair **4 Credits / 120 Clock-Hours**

The Engine Repair course teaches theory and hands-on instruction in automotive engines while following the program standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe engine maintenance and repairs.
• Identify engine components and configurations.
• Identify and maintain the automotive engine and its systems.
• Identify and maintain the cooling system.
• Identify and maintain the lubrication system.
• Identify and repair an engine, including overhaul.

Snow

TEAU 1000 Safety and Basics **1 Credit / 30 Clock-Hours**

The Safety and Basics course provides proper knowledge of practices in safety to help establish working habits that would reflect industry standards in a safe working environment.

Objectives:
• Maintain personal safety and proper lifting procedures.
• Identify occupational rules and regulations.
• Identify and use personal protective equipment.
• Identify and use hand and power tools.
• Identify and properly dispose of hazardous waste.
• Identify and use metric and standard measuring systems.

TEAU 1010 Intro to Automotive Technology I **2 Credits / 60 Clock-Hours**

The Intro to Automotive Technology I course introduces the student to careers in the automotive field, ASE certifications and engine design and operation.

Objectives:
• Identify and study engine theory, design and operation.
• Identify and repair the lubrication system and its components.
• Identify and repair the cooling system and its components.
• Identify and repair the fuel system and its components.

TEAU 1015 Intro to Automotive Technology II **2 Credits / 60 Clock-Hours**

The Intro to Automotive Technology II course introduces the student to automotive electrical, ignition, brake, suspension, and steering systems.

Objectives:
• Identify and study electrical theory, starting and charging systems.
• Identify and repair the ignition system and its components.
• Identify and repair the brake system and its components.
• Identify and repair the steering and suspension systems and their components.

TEAU 1100 Engine Repair **3 Credits / 90 Clock-Hours**

The Engine Repair course teaches theory and hands-on instruction in automotive engines while following the program standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe engine maintenance and repairs.
• Identify engine components and configurations.
• Identify and maintain the automotive engine and its systems.
• Identify and maintain the cooling system.
• Identify and maintain the lubrication system.

TEAU 1200 Automatic Transmissions **4 Credits / 120 Clock-Hours**

The Automatic Transmission course teaches theory and hands-on instruction in automatic transmissions and transaxles while following the program standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe automatic transmission maintenance and repairs.
• Identify automatic transmission components and configurations.
• Identify and maintain the automatic transmission and its systems.
• Identify and repair automatic transmissions, including overhaul.
• Identify and repair the electronic components of automatic transmissions.

TEAU 1300 Manual Drivetrain and Axles **4 Credits / 120 Clock-Hours**

The Manual Drivetrain and Axles course teaches theory and hands-on instruction on automotive manual drivetrain and axles while following the program standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe manual drivetrain and axles maintenance and repairs.
• Identify manual drive train and axles components and configurations.
• Identify and maintain the manual drivetrain, axles, clutch systems, and manual transmissions.
• Identify and maintain the drive shaft, half shaft, and all types of CV joints.
• Identify and maintain ring and pinion gears, differentials, and drive axles.
• Identify and maintain four-wheel and all-wheel drive systems.

TEAU 1700 Heating, Ventilation, and Air Conditioning (HVAC) **3 Credits / 90 Clock-Hours**

The Heating, Ventilation, and Air Conditioning course teaches theory and hands-on instruction on automotive HVAC while following the program standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe automotive HVAC and repairs.
• Identify and repair the refrigeration systems and components.
• Identify and repair the heating, ventilation, and engine cooling system.
• Identify and repair operating systems and controls relating to automotive HVAC.
• Identify and demonstrate use of refrigerant recovery, recycling, and handling equipment and procedures.

TEAU 2000 Hybrid and Electric Vehicles **1 Credit / 30 Clock-Hours**

The Hybrid and Electric Vehicle course teaches theory and hands-on instruction in the basics of hybrid and electrical vehicles.

Objectives:
• Maintain vehicle safety through safe hybrid and electric vehicle repairs.
• Identify and use proper personal protective equipment.
• Identify common components of hybrid and electric vehicles.
• Identify and repair operating systems and controls on hybrid and electric vehicles.
• Identify and demonstrate proper precautions around high voltage.

TEAU 2600 Electrical II **4 Credits / 120 Clock-Hours**

The Electrical II course delves deeper into advanced topics and tools such as electronic control systems and digital communication networks. Students will master complex diagnostic procedures and emerge ready to tackle the intricate electrical challenges posed by modern vehicles.

Objectives:
• Maintain vehicle safety through safe electrical maintenance and repairs.
• Retrieve and record DTCs, OBD monitor status, and freeze frame data; clear codes and data when directed.
• Diagnose the cause(s) of excessive key-off battery drain (parasitic draw); determine needed action.
• Test and measure circuit using an oscilloscope and/or graphing multimeter (GMM); interpret results; determine needed action.
• Identify and repair instrument cluster and driver information systems.
• Identify and repair body electrical systems.
• Test and repair electrical related systems using electronic testing industry specific equipment.

TEAU 2800 Engine Performance II **4 Credits / 120 Clock-Hours**

The Engine Performance II course provides theory and hands-on instruction in automotive engine performance while following standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe engine performance maintenance and repairs.
• Identify and repair computerized controls related to engine performance.
• Identify and repair emission control systems related to engine performance.
• Test and repair engine performance systems using industry specific electronic testing equipment.

Southwest

TEAU 1050 Workshop Practices and Safety **1 Credit / 30 Clock-Hours**

In Workshop Practices and Safety, students will be introduced to the various tools and equipment to be used in the Automotive Industry. Additionally, students will complete an in-depth automotive specific safety training program. This course meets the required tasks in preparation for successful certification in ASE (Automotive Service Excellence).

Objectives:
• Practice shop safety.
• Use and understand a digital multimeter and how to test basic electrical circuits.
• Demonstrate working knowledge of automobile information systems.
• Use and understand automotive computer diagnostic tools and equipment.
• Use and read precision measurement tools.

TEAU 1055 Math for Automotive Technicians **2 Credits / 60 Clock-Hours**

Mathematical skills form the foundation of automotive design and operation. Math for Automotive Technicians, is designed to provide realistic problems technicians will face including: whole numbers, decimals, fractions, geometry, angle measurement, metric system, integers, ratios, business statistic, repair orders, automotive engine systems, automotive electrical systems, automotive drivetrain, automotive chassis, and automotive HVAC systems.

Objectives:
• Calculate differential gear ratios, engine bore and stroke, electrical current flow, voltage, resistance and many other components and systems found in the modern automobile.
• Determine weights of gasses needed in the air conditioning systems and fuel systems.
• Determine fuel composition, and diagnose and repair vehicles.

TEAU 1140 Engine Repair **5 Credits / 150 Clock-Hours**

The Engine repair course conforms to ASE/NATEF standards. In this course, you will work with both classroom instruction and hands-on lab training. You will evaluate the design and operation of internal combustion engines, diagnosis of engine operation, failure analysis of engine components, and complete engine machining and rebuilding procedures. When you have completed this course, you will be eligible to take the exam for ASE certification.

Objectives:
• Diagnose internal engine failures.
• Remove, repair/rebuild, and reinstall modern automobile engines.
• Demonstrate a working knowledge of modern hybrid drive systems.

TEAU 1240 Automatic Transmissions and Transaxles **4 Credits / 120 Clock-Hours**

Automotive Automatic Transmission and Transaxles is an-in depth clinical based course. Throughout the course, you will practice safety concerns when working on transmissions and drivetrain components, power flow through a planetary gear set, clutch pack diagnosis and operation, hydraulic circuits, removal and rebuilding procedures for automatic transmissions and transaxles, and torque converter operation. When you have completed this course, you will be eligible to take the certification exam in ASE (Automotive Service Excellence) Automotive Automatic Transmissions and Transaxles.

Objectives:
• Diagnose automatic transmissions and transmission control systems.
• Remove, repair/rebuild and replace automatic transmissions and related systems.
• Diagnose and repair automatic hybrid drive systems.

TEAU 1340 Manual Drive Train and Axles **3 Credits / 90 Clock-Hours**

Manual Drive Trains is an-in depth clinical based course that conforms to the ASE/NATEF standards. Throughout the course, you will concentrate on topics such as safety concerns when working on drive train components, power flow through a gear set, clutch diagnosis and operation, manual gearbox diagnosis, removal and rebuilding procedures for manual transmissions, 4-wheel drive systems. When you have completed this course, you will be prepared to take the certification exam in ASE (Automotive Service Excellence) Automotive Manual Drive Train Systems.

Objectives:
• "Demonstrate a working knowledge of manual drivetrains and axle systems.
• Diagnose, remove, repair, and replace manual transmission and components.
• Remove driveshafts, replace universal joints and repair four-wheel drive systems.
• Diagnose and repair electronically controlled transmission systems.

TEAU 1740 Heating and Air Conditioning **3 Credits / 90 Clock-Hours**

Automotive Heating and Air Conditioning is an-in depth industry-based course that meets ASE/NATEF standards. In this course you will examine safety concerns when working with refrigerants and superheated liquids, construction and operation systems, testing and diagnosis of automotive passenger comfort systems. When you have completed this course, you will be prepared to take the certification exam in ASE (Automotive Service Excellence) Automotive Heating and Air Conditioning systems.

Objectives:
• Demonstrate a working knowledge of temperature vs. pressure in HVAC systems.
• Diagnose and repair engine cooling and passenger comfort systems.
• Describe the operating principles found in mobile HVAC systems.
• Demonstrate a working knowledge of mobile HVAC system components.
• Diagnose and repair mobile refrigerant systems.
• Diagnose and repair compressors and components.
• Use on-board diagnostic systems to control and test mobile HVAC systems.

TEAU 2640 Electrical II **4 Credits / 120 Clock-Hours**

Automotive Electrical Systems II is an-in depth industry-based course including these units of study: safety concerns when working on electrical systems, advanced wiring and schematics, testing and diagnosis of digital automotive systems, testing and diagnosis of automobile safety systems. This course meets the required tasks in preparation for successful certification in ASE (Automotive Service Excellence) Automotive Electrical Systems.

Objectives:
• Diagnose and repair electronic systems through electric theory and practice.
• Diagnose on-board computers and networked systems.
• Diagnose, repair and program vehicle communication systems.
• Diagnose, repair, and determine preparation of airbag and restraint systems.
• Safely operate and diagnose hybrid drive systems.

TEAU 2840 Engine Performance II **4 Credits / 120 Clock-Hours**

Engine Performance II is an in-depth practical course dealing with advanced automotive systems. In this course, you will be introduced to ECU operations and controls, programming and reprogramming ECU systems, networking systems, and other systems and components necessary to maintain proper operation of new vehicles. When you have completed this course, you will be eligible to take the certification exam in ASE (Automotive Service Excellence) Engine Performance.

Objectives:
• Safely and appropriately use the tools and theories designed to repair high tech vehicles.
• Use vehicle on-board diagnostics, and emission testing to repair vehicles to manufacture operating specifications.
• Diagnose, and repair on-board computers, sensors, ignition, and fuel systems.
• Correctly find, and repair emission and evaporative system failures.

TEAU 2910 Manufacturer Automotive Service Training – General Motors **4 Credits / 120 Clock-Hours**

GM STEP provides graduating students an opportunity to be hired as entry-level Maintenance Light Repair (MLR) technicians or other roles within the dealer they partnered with.

Objectives:
• Demonstrate competency in all eight ASE areas of emphasis will be covered: engine repair, electrical systems, heating and air conditioning, brake systems, steering and suspension, manual drive trains, automatic transmission, and engine performance.

TEAU 2911 Manufacturer Automotive Service Training – Toyota **2 Credits / 60 Clock-Hours**

Toyota TECS Elite is supplemental training to STECH's automotive training curriculum and provides students the ability to become Toyota/Lexus Certified Maintenance Level Technicians.

Objectives:
• Demonstrate competency in all eight ASE areas of emphasis will be covered: engine repair, electrical systems, heating and air conditioning, brake systems, steering and suspension, manual drive trains, automatic transmission, and engine performance.

TEAU 2912 Manufacturer Automotive Service Training – Mopar CAP **2 Credits / 60 Clock-Hours**

The Mopar CAP course provides students with more than a general automotive education. Mopar CAP students gain the training and fundamental knowledge they need to work on some of the hottest vehicles in the industry from legendary Chrysler, Dodge, Jeep®, Ram, FIAT® and Alfa Romeo brands. Mopar CAP certification gives students a competitive edge and shows our dealers they have the fundamental qualifications to be a successful automotive Technician at an FCA dealership.

Objectives:
• Demonstrate competency in all eight ASE areas of emphasis will be covered: engine repair, electrical systems, heating and air conditioning, brake systems, steering and suspension, manual drive trains, automatic transmission, and engine performance.

TEAU 2913 Manufacturer Automotive Service Training – Audi **2 Credits / 60 Clock-Hours**

After completing the Audi AEP program training, student technicians will be Expert Level Audi-Certified Technicians.

Objectives:
• Demonstrate competency in all eight ASE areas of emphasis will be covered: engine repair, electrical systems, heating and air conditioning, brake systems, steering and suspension, manual drive trains, automatic transmission, and engine performance.

TEAU 2914 Manufacturer Automotive Service Training – Hyundai **2 Credits / 60 Clock-Hours**

Hyundai tech training provides student technicians the path to become Hyundai Maintenance Certified.

Objectives:
• Demonstrate competency in all eight ASE areas of emphasis will be covered: engine repair, electrical systems, heating and air conditioning, brake systems, steering and suspension, manual drive trains, automatic transmission, and engine performance.

TEAU 2915 Manufacturer Automotive Service Training – Mercedes-Benz **2 Credits / 60 Clock-Hours**

MB Campus provides next-level vehicle technology, service, and repair. This program provides exposure to MB technologies and products, provides a skill set for MB success, and improves earning potential as an MB intern.

Objectives:
• Demonstrate competency in all eight ASE areas of emphasis will be covered: engine repair, electrical systems, heating and air conditioning, brake systems, steering and suspension, manual drive trains, automatic transmission, and engine performance.

Uintah Basin

TEAU 1080 Introduction to Automotive **2 Credits / 60 Clock-Hours**

Learn the introduction and basic uses of our automotive shops. Train in shop safety and hazardous materials handling and disposal.

Objectives:
• Explain general shop safety.
• Identify basic hand tools, fasteners, and shop equipment.
• Demonstrate proper techniques in removal and installation of tires and wheels.
• Identify and perform basic services on a vehicle.
• Solve basic mathematical equations related to automotive.
• Explain and demonstrate the importance of employability work habits and career readiness skills.

TEAU 1115 Engine Repair **2 Credits / 60 Clock-Hours**

Learn all aspects of diagnosis, repair, and replacement of automotive engines, cylinder heads and valve trains, blocks, and lubrication and cooling system repair. Focus on diagnosis and repair of lubrication and cooling systems.

Objectives:
• Perform engine repair related general services and inspections.
• Inspect, diagnose, and service the cylinder head and valve train system.
• Inspect, diagnose, and service the engine block assembly.
• Inspect, diagnose, and service the lubrication and cooling systems.

TEAU 1215 Transmissions and Manual Drivetrain **3 Credits / 90 Clock-Hours**

Learn aspects of diagnosis and repair of transmissions and manual drivetrains. Train in general diagnosis and repair of transmissions and transaxles, clutches, drive shaft s, u-joints, cv joints, drive axles, and four-wheel drive and all-wheel drive components. Focus on diagnosis and repair of transmissions, drivetrains, drive shafts, and clutches.

Objectives:
• Perform in vehicle transmission/transaxle maintenance and repair.
• Perform off vehicle transmission/transaxle maintenance and repair.
• Inspect, diagnose, and service drivetrain systems.
• Inspect, diagnose, and service clutch systems.
• Inspect, diagnose, and service transmission and transaxle.
• Inspect, diagnose, and service drives shafts and joints.
• Inspect, diagnose, and service drive axles.
• Inspect, diagnose, and service four-wheel drive and all-wheel drive systems.

TEAU 1715 Heating, Ventilation, and Air Conditioning **2 Credits / 60 Clock-Hours**

Learn all aspects of diagnosis and repair of heating and air conditioning systems. Train in repair and diagnosis of A/C systems, heating/ventilation, with the legal ways to recover, recycle, and handle refrigerants. Focus on operation diagnosis and repair of heating, ventilation, and engine cooling systems.

Objectives:
• Perform general heating and air conditioning systems services.
• Inspect, diagnose, and service refrigeration system components.
• Inspect, diagnose, and service heating, ventilation, and air conditioning systems.
• Inspect, diagnose, and service operating systems and related controls.
• Perform refrigerant recovery, recycling, and handling.

TEAU 2650 Electrical/Electronic Systems II **2 Credits / 60 Clock-Hours**

Train in advanced aspects of automotive electricity and electronics. Apply electrical theory, Ohms law, troubleshooting, diagnosis, and functions of all automotive electrical/electronic systems and circuits.

Objectives:
• Inspect, diagnose, and service advanced electrical/electronic circuits.
• Inspect and identify safety practices working around high voltage batteries and wiring.
• Inspect, diagnose, and service advanced starting and charging systems.
• Inspect, diagnose, and service CAN bus and LAN Systems.
• Inspect, diagnose, and service advanced body electrical systems.

TEAU 2995 Automotive Technology Externship **1 Credit / 45 Clock-Hours**

Experience live work in the automotive industry.

Objectives:
• Perform an internship in automotive industry.

USU-Eastern

TEAU 1060 Safety and Introduction to Automotive Service **4 Credits / 120 Clock-Hours**

The Safety and Intro to Auto Service course provides proper knowledge of practices in safety to help establish safe working habits that would reflect industry standards, introduces the student to careers in the automotive field, ASE certifications, and service of the following systems: engines, electrical, brakes, steering and suspension, HVAC, transmissions, drivetrain, and engine performance.

Objectives:
• Maintain personal safety and proper lifting procedures.
• Identify occupational rules and regulations.
• Identify and use personal protective equipment.
• Identify and use hand and power tools.
• Identify and properly dispose of hazardous waste.
• Identify and use metric and standard measuring systems.
• Identify and inspect engine systems.
• Identify and inspect starting and charging systems.
• Identify and inspect brake systems.
• Identify and inspect the steering and suspension systems.
• Identify and inspect the HVAC system.
• Identify and inspect transmission and drivetrain systems.

TEAU 1100 Engine Repair **3 Credits / 90 Clock-Hours**

The Engine Repair course teaches theory and hands-on instruction in automotive engines while following the program standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe engine maintenance and repairs.
• Identify engine components and configurations.
• Identify and maintain the automotive engine and its systems.
• Identify and maintain the cooling system.
• Identify and maintain the lubrication system.

TEAU 1200 Automatic Transmissions **4 Credits / 120 Clock-Hours**

The Automatic Transmission course teaches theory and hands-on instruction in automatic transmissions and transaxles while following the program standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe automatic transmission maintenance and repairs.
• Identify automatic transmission components and configurations.
• Identify and maintain the automatic transmission and its systems.
• Identify and repair automatic transmissions, including overhaul.
• Identify and repair the electronic components of automatic transmissions.

TEAU 1300 Manual Drivetrain and Axles **4 Credits / 120 Clock-Hours**

The Manual Drivetrain and Axles course teaches theory and hands-on instruction on automotive manual drivetrain and axles while following the program standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe manual drivetrain and axles maintenance and repairs.
• Identify manual drive train and axles components and configurations.
• Identify and maintain the manual drivetrain, axles, clutch systems, and manual transmissions.
• Identify and maintain the drive shaft, half shaft, and all types of CV joints.
• Identify and maintain ring and pinion gears, differentials, and drive axles.
• Identify and maintain four-wheel and all-wheel drive systems.

TEAU 1700 Heating, Ventilation, and Air Conditioning (HVAC) **3 Credits / 90 Clock-Hours**

The Heating, Ventilation, and Air Conditioning course teaches theory and hands-on instruction on automotive HVAC while following the program standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe automotive HVAC and repairs.
• Identify and repair the refrigeration systems and components.
• Identify and repair the heating, ventilation, and engine cooling system.
• Identify and repair operating systems and controls relating to automotive HVAC.
• Identify and demonstrate use of refrigerant recovery, recycling, and handling equipment and procedures.

TEAU 2600 Electrical II **4 Credits / 120 Clock-Hours**

The Electrical II course delves deeper into advanced topics and tools such as electronic control systems and digital communication networks. Students will master complex diagnostic procedures and emerge ready to tackle the intricate electrical challenges posed by modern vehicles.

Objectives:
• Maintain vehicle safety through safe electrical maintenance and repairs.
• Retrieve and record DTCs, OBD monitor status, and freeze frame data; clear codes and data when directed.
• Diagnose the cause(s) of excessive key-off battery drain (parasitic draw); determine needed action.
• Test and measure circuit using an oscilloscope and/or graphing multimeter (GMM); interpret results; determine needed action.
• Identify and repair instrument cluster and driver information systems.
• Identify and repair body electrical systems.
• Test and repair electrical related systems using electronic testing industry specific equipment.

TEAU 2800 Engine Performance II **4 Credits / 120 Clock-Hours**

The Engine Performance II course provides theory and hands-on instruction in automotive engine performance while following standards set forth by Automotive Service Excellence Education Foundation at the master level.

Objectives:
• Maintain vehicle safety through safe engine performance maintenance and repairs.
• Identify and repair computerized controls related to engine performance.
• Identify and repair emission control systems related to engine performance.
• Test and repair engine performance systems using industry specific electronic testing equipment.