

Transportation, Distribution & Logistics Cluster

Automotive Service Pathway –

Automotive Maintenance & Light Repair Technician – Students in this major will learn the basic skills needed to gain employment as a maintenance and light repair technician. This career major will expose the student to courses in automotive preventative maintenance and servicing and replacing brakes, and steering and suspension components. They will also learn how to do general electrical system diagnosis, learn electrical theory, perform basic tests and then determine necessary action. They will learn how to evacuate and recharge air-conditioning systems using the proper refrigerant. The hours completed in this major are aligned with ASE/NATEF standards and an excellent foundation for the entry-level technician.

Automotive Service Master Technician – Students in this major will complete all three levels of all eight ASE areas. The students learn the skills to service, diagnose all types of brakes, steering and suspension systems, engine performance issues, air conditioning systems, automatic transmissions and manual drivetrains and engine repair. They will also learn how to do general electrical system diagnosis, learn electrical theory, perform basic tests and advanced electrical diagnosis and then determine necessary action. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

Automotive Service Technician – Students in this major will cover the skills necessary to become an entry-level technician. Students will concentrate on courses in introduction, brakes, steering & suspension, electrical electronics and engine performance. They will learn how to diagnose and complete brake service, perform vehicle steering and suspension alignment, as well as electrical theory, electrical/ electronic diagnostics. Students will cover engine performance diagnostics and techniques for repair using a variety of diagnostic equipment. This career major includes course work on how to evacuate and recharge air-conditioning systems using the proper refrigerant, and basic diagnostics of the heat and A/C system. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

Automotive Alignment Technician – Students in this major will learn about the various types of steering and suspension systems, how to diagnose them and how to perform alignments. Students will also cover wheel service techniques such as, how to mount/dismount tires, wheel balancing, and tire repairs. They will also learn how to do general electrical system diagnosis, learn electrical theory, perform basic tests and then determine necessary action. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

Automotive Air Conditioning Technician – Automotive air-conditioning technicians specialize in the repair and installation of automotive air-conditioners. Students in this major will learn the various components of air-conditioning systems, including compressors, condensers, and controls. They will also learn how to diagnose air-conditioning system operation and climate control concerns. In addition, they will also learn how to do general electrical system diagnosis, learn electrical theory, perform basic tests and then determine necessary action. The hours

completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

Automotive Chassis Technician – In this major, students will learn how to maintain and repair of the automotive chassis. The automotive chassis provides the strength necessary to support the vehicles components and the payload placed upon it. Students will learn how to diagnose and repair drum and disc brake systems, as well as anti-lock brake systems. They will also learn how to diagnose and repair, front and rear suspension systems and how to perform wheel alignments. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

Automotive Heavy Line Technician – Students in this major will learn how to diagnose and service and repair the major mechanical components such as the engine, manual drive systems, and axle systems. Students will cover engine disassembly determine necessary action and reassembly. Students will learn to service and change brakes, and perform wheel alignments. In addition, they will also learn how to do general electrical system diagnosis, learn electrical theory, perform basic tests and then determine necessary action. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

Automotive Service Consultant – Students in this major will learn how to communicate with customers to determine their needs and how to communicate the customer's needs to the technician who will be working on the vehicle. A service consultant needs to have a basic understanding of all eight ASE areas and therefore as part of the major an introductory course in each area will be included in addition to two courses on communication, marketing and customer service. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

Automotive Parts Specialist – Students in this major will learn basic automotive skills needed to be an auto parts salesperson, including salesmanship. A parts specialist will need to have a basic understanding of all eight ASE areas and therefore as part of the major an introductory course in each area will be included in addition to one course on customer service, marketing and communication. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

Automotive Transmission Technician – In this major, students will learn how to diagnose and repair transmission issues in vehicles and to complete adjustments, replace components, and perform preventative maintenance that may be requested on the job. Students in this major will learn electrical theory, how to do general electrical diagnosis and repair in addition to learning how to diagnose and repair manual automatic transmissions and how to service the clutch system. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

Automotive Drivability Technician – In this major, students will learn how to diagnose and repair performance and electrical issues in the vehicle which affects its operation and drivability. It is important to know where to find the proper service information and how to get good

information from the customer to help in the diagnosis. Students will learn electrical theory, how to do general electrical system diagnosis and repair, including electrical accessory diagnosis and repair. They will also learn how to do engine performance diagnosis using a variety of equipment and how to perform tests on the engine computer, control sensors, sending units, and other electronic components to and determine necessary action. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

Automotive Service Workforce Transition – Students must complete an automotive service major prior to enrolling in this one. In this major the students will learn leadership, personal development and employability skills. Also included in the major is a Work-Site Experience (WSE) that is planned, organized, and conducted at the student's place of employment that will be used to broaden skills and increase effectiveness and productivity. In addition, a formalized mentor-ship will be included and based on the instructional process for the purpose of accelerating the student's skill development and individual transition into the workforce.

Automotive Preventive Maintenance Technician – Students in this major will prepare to work in fast lube centers. They will study their roles and responsibilities, shop safety, customer service/greeting, and products – such as oil, filters, and lubricants. They will learn how to be an under the hood and lube technician in addition to learning how to perform interior and exterior detailing. The students will also learn how to mount/dismount, balance and rotate tires and wheels. Tire repair techniques will also be covered.

Service Careers Auto Care Assistant – Students in this major will learn leadership, employability skills, occupational health and safety, and tool and equipment identification. In addition, they will learn how to be a lube technician, which means they will learn how to change the oil and check on other fluids. They will also learn how to mount/dismount, rotate, and balance tires and wheels. Students will also examine how this occupation fits into shops, dealerships, and quick lube facilities.

Service Careers Auto Detailing Assistant – Students in this major will learn leadership, personal development, and employability skills. The students will also learn interior and exterior detailing such as glass cleaning, vacuuming vehicle, washing vehicle, and other aspects found in customer vehicle delivery.