Outcome Assessment Timeline

Academic Programs

Automotive Technology

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| **APR /SLO 4-Year Cycle** | **2022-2026** | | |
| **Course ID** | **Course-Level Student Learning Outcome (CSLO)** | **Measure/Collect Data** | **Discuss & Plan** |
| **AT 101** | Communicate effectively with customer to agree on customer vehicle concern(s)as well as service or repairs contracted. (AT 101; ISLO 5) | Spring 2024 | Fall 2025 |
| Student will identify and operate basic shop tools and equipment without injury to self, vehicles, or equipment. Students will perform oil changes, wheel balance and rotation, as well as fluid level inspection among other basic vehicle services. (AT 101; ISLO 5) | Spring 2024 | Fall 2025 |
| Conduct necessary testing on vehicle to determine cause of customer concern and recommend corrective actions. (AT 101; ISLO 5) | Spring 2024 | Fall 2025 |
| **AT 102** | Student can interpret and understand automotive terminology and measuring units to diagnose and solve problems. (AT 102; ISLO 5) | Fall 2023 | Fall 2025 |
| Student demonstrates the ability to work well with others while actively participating in discussions. (AT 102; ISLO 4) | Fall 2023 | Fall 2025 |
| Student will identify proper automotive information software database to research proper diagnosis and repairs steps. (AT 102; ISLO 8) | Fall 2023 | Fall 2025 |
| Students can effectively communicate information using proper volume and professional character. (AT 102; ISLO 2) | Fall 2023 | Fall 2025 |
| **AT 103** | Not offered anymore? | ~~Fall 2022~~ | ~~Spring 2023~~ |
|  | ~~Fall 2022~~ | ~~Spring 2023~~ |
| **AT 109** | Student will learn the purpose and directions for applying for and taking the Automotive Service Excellence (ASE) A5 exam, as well as the test question formats he will encounter on an ASE exam. (AT 109; ISLO 5) | Spring 2024 | Fall 2025 |
| Student will through skill demonstration in a laboratory setting, perform the following tasks as required by the National Automotive Technicians Education Foundation: Hydraulic System Diagnosis and Repair, Drum Brake Diagnosis and Repair, Disc Brake Diagnosis and Repair, Power Assists Units Diagnosis and Repair, Miscellaneous (Wheel Bearings, Park Brakes, Electrical, Etc.) Diagnosis and Repair, Anti-Lock Brake System. Student will through written examination, describe the purpose of laws concerning hazardous waste and material. (AT 109; ISLO 5) | Spring 2024 | Fall 2025 |
| **AT 110** | Upon successful completion of the course the student will be able to: learn about the theory and repair of automotive suspension and steering systems. Recognize the principles and operation of manual and power steering systems. Demonstrate systematic diagnostic procedures related to alignment and steering including suspension service, wheel alignment Identify. Inspect, and replace wheel, tire, steering components and assemblies. (AT 110; ISLO 5) | Fall 2023 | Fall 2025 |
| The student will learn theory and operation of automotive steering and suspension system. The student will practice settings using a computerized four-wheel alignment rack. (AT 110; ISLO 5) | Fall 2023 | Fall 2025 |
| **AT 120** | The student will learn the principles of operation of an internal combustion four-stroke engine. (AT 120; ISLO 7) | Spring 2024 | Fall 2025 |
| The student will learn operation and service procedures of all seven basic engine support systems. (AT 120; ISLO 5) | Spring 2024 | Fall 2025 |
| **AT 130** | The student will learn theory and operation of charging, starting, lighting and accessory system. Service and replacement of components using diagnostic tool and equipment. Emphasis on mechanical operated devices. Includes the preparation for the Automotive Service Excellence Exam Certification in Engine Performance (A6). (AT 130; ISLO 5) | Fall 2023 | Fall 2025 |
| **AT 131** | Student will learn the purpose and directions for applying for and taking the Automotive Service Excellence (ASE) A7 exam, as well as the test question formats he will encounter on an ASE exam. (AT 131; ISLO 5) | Spring 2024 | Fall 2025 |
| The student will learn how to service, diagnosis, and repair automotive heating, cooling, and air conditioning systems. Using state-of-the-art equipment. Includes preparation for the Automotive Service Excellence (ASE), Heating and Air Conditioning Exam (A7), and Refrigerant Handler Exam and Certification. (AT 131; ISLO 5) | Spring 2024 | Fall 2025 |
| **AT 140** | Student will understand and describe the basics of engine construction, troubleshooting and repair. (AT 140; ISLO 5) | Fall 2023 | Fall 2025 |
| The student will learn how to repair and diagnose automotive engines. (AT 140; ISLO 5) | Fall 2023 | Fall 2025 |
| **AT 145** | Not offered anymore? | ~~Spring 2023~~ | ~~Fall 2025~~ |
|  | ~~Spring 2023~~ | ~~Fall 2025~~ |
| **AT 146** | Not offered anymore? | ~~Fall 2022~~ | ~~Fall 2025~~ |
|  | ~~Fall 2022~~ | ~~Fall 2025~~ |
| **AT 147** | Not offered anymore? | ~~Spring 2022~~ | ~~Fall 2022~~ |
| **AT 148** | Not offered anymore? | ~~Spring 2023~~ | ~~Fall 2023~~ |
|  | ~~Spring 2023~~ | ~~Fall 2023~~ |
| **AT 149** | Not offered anymore? | ~~Spring 2023~~ | ~~Fall 2023~~ |
|  | ~~Spring 2023~~ | ~~Fall 2023~~ |
| **AT 150** | Not offered anymore? | ~~Fall 2022~~ | ~~Spring 2023~~ |
|  | ~~Fall 2022~~ | ~~Spring 2023~~ |
| **AT 151** | Not offered anymore? | ~~Fall 2022~~ | ~~Spring 2023~~ |
|  | ~~Fall 2022~~ | ~~Spring 2023~~ |
| **AT 152** | Not offered anymore? | ~~Spring 2023~~ | ~~Fall 2024~~ |
|  | ~~Spring 2023~~ | ~~Fall 2024~~ |
| **AT 153** | Not offered anymore? | ~~Fall 2022~~ | ~~Spring 2023~~ |
|  | ~~Fall 2022~~ | ~~Spring 2023~~ |
| **AT 220** | The student will learn how to identify the basic electrical circuits and diagnose automotive electrical systems. Apply the basic principles of physics as they work in the automotive industry. Interpret and analyze automotive fuel, and ignition systems. Utilize appropriate diagnostic equipment, documentation, and troubleshooting principles on various automotive systems. (AT 220, ISLO 5) | Spring 2024 | Fall 2025 |
| The student will learn how to perform tune-up on vehicles with electronic ignition and fuel injection systems. Use of computerized diagnostic equipment and four-gas analyzers. Completes preparation for ASE Performance Certification. ( A8) (AT 220; ISLO 5) | Spring 2024 | Fall 2025 |
| **AT 230** | The student will learn theory and operation of advanced automotive electrical and electronic systems. The student will Emphasis on the charging system, body electrical, electronic instrumentation, and supplemental air bag systems. (AT 230; ISLO 5) | Fall 2023 | Fall 2025 |
| **AT 234** | The student will be prepared for the, Automotive Service Excellence, Exam (A2). (AT 234; ISLO 5) | Spring 2024 | Fall 2025 |
| The student will learn how to troubleshoot repair and rebuild automatic transmissions and transaxles. Explain the operation of different types of torque converters lock up and non-lock up. Create and use a systematic approach for diagnosing and repairing transmissions and transaxles. Service a transmission, perform visual inspection, and replace fluid and filters. Includes preparation for the, Automotive Service Excellence, Exam (A2). (AT 234; ISLO 5) | Spring 2024 | Fall 2025 |
| **AT 236** | Upon successful completion of the course the student will be able to: Diagram and explain the power flow through a transmission/transaxle, and final drive. Develop a systematic method of diagnostic analysis and repair for various transmission. Remove, disassemble, clean, inspect, reassemble, and reinstall clutch, linkages, transmission/transaxle, constant velocity and universal joint, differential, and transfer cases. Includes preparation for the Automotive Service Excellence Exam (A3). (AT 236; ISLO 5) | Fall 2023 | Fall 2025 |
| The student will learn theory, operation, and repair of automotive drive systems. Covers clutches, transmissions, drive shafts, final drives, and transaxles. Includes preparation for the Automotive Service Excellence Exam (A3). (AT 236; ISLO 5) | Fall 2023 | Fall 2025 |
| **AT 237** | Not offered anymore | Spring 2024 | Fall 2025 |
| **AT 242** | Provides 120-hour minimum instruction required by the State of California and entry-level, upgrading, or advanced training techniques for the automotive field. Uses Bureau of Automotive Repair's curriculum, which prepares students to take the California State Motor Vehicle Pollution Control License Test (I/M Test). Students can take this course without the recommended preparation but will not be certified as eligible to take the licensing examination. (AT 242; ISLO 5) | Fall 2023 | Fall 2025 |
| **AT 247** | Prepares students for advanced emission systems diagnosis. Incorporates the BAR-97 Transition and Up-date (20 hours) training courses. Focuses on training in five-gas analysis, ASM dynamometer operations, laboratory scope usage, and waveform interpretation, advanced scan tool usage, and On-Board Diagnostics Two (OBD II). (AT 247; ISLO 5) | Spring 2024 | Fall 2025 |
| **AT 290** | Work experience in Automotive Technology. Application of theory and evaluation of field performance. (AT 290; ISLO 5) | Fall 2023 | Fall 2025 |
| **AT 291** | Work experience in Automotive Technology. Application of theory and evaluation of field performance. (AT 291; ISLO 5) | Fall 2023 | Fall 2025 |
| **AT 292** | Work experience in Automotive Technology. Application of theory and evaluation of field performance. (AT 292; ISLO 5) | Fall 2023 | Fall 2025 |
| **AT 293** | Work experience in Automotive Technology. Application of theory and evaluation of field performance. (AT 293; ISLO 5) | Fall 2023 | Fall 2025 |
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|  | | | |  | **Measure/Collect Data** | **Discuss & Plan** |
| **Program** | **Program-Level Student Learning Outcome (PSLO)** |  |  |
| Automotive Technology 02870  Associate in Science | The students will inspect, diagnose and repair automotive components. | 2022-2026 | Fall 2025 |
| Automotive HVAC Specialist 02652  Certificate of Proficiency | Student will learn to gather and asses information during troubleshooting and repair procedures. | 2022-2026 | Fall 2025 |
| Automotive Brake and Suspension Systems (ABS And Four-Wheel Alignment) 02750  Certificate of Proficiency | The students will inspect diagnose and repair brake and suspension system. | 2022-2026 | Fall 2025 |
| Automotive Performance Systems 02765  Certificate of Achievement | The students will inspect, diagnose and repair performance systems. | 2022-2026 | Fall 2025 |
| Automotive Technology 02871  Certificate of Achievement | The students will inspect diagnose and repair automotive components. | 2022-2026 | Fall 2025 |