Division of Science, Technology, Engineering, and Mathematics

Associate in Science in Automotive Technology

Each of the four concentrations in the Associate in Science in Automotive Technology provides students with in-depth, product-specific knowledge and skills (BMW, Chrysler, General Motors, Toyota/Lexus). Students will work in the automotive industry as part of their curriculum. Graduates of the program will be able to take and pass the Automotive Service of Excellence (ASE) certification tests series after successful completion of this program, and are then prepared for full-time employment. Students graduating from the Associate in Science in Automotive Technology will achieve and demonstrate all college-wide learning outcomes.

Successful graduates of the program will be able to:

1. Diagnose and repair common conditions of the following automotive systems: brakes, suspension/steering, electrical/electronics, engine repair, engine performance, driveline/axles including manual and automatic transmissions and transaxles, heating and air conditioning, utilizing the three “c” approaches: condition, cause, and correction.
2. Operate the latest generation of computerized test and diagnostic equipment.
3. Practice sound, basic, safe automotive shop skills, including personal and environmental protection along with handling of hazardous materials.
4. Practice good basic shop habits, including demonstrating a good attendance record, punctuality, a willingness to work, and an ability to work independently or with others as a team.
5. Apply basic laws of physics/scientific principles to automotive systems and components when performing in shop testing exercises and diagnosing problems.
6. Locate and interpret technical data represented in online and original equipment manufacturer (OEM) provided resources.
7. Demonstrate good automotive shop management practices, customer relations, shop procedures, and writing skills to work with a diverse population of customers.
8. Accept the challenge of continuous training in the automotive field, that is, “learning to learn”, which will be necessary to adapt to new technologies and to become a problem solver and a critical thinker.
9. Use a variety of mathematical tools and quantitative reasoning to solve problems and analyze complex challenges.