## AUTOMOTIVE TECHNOLOGY, ASSOCIATE IN SCIENCE

The Associate in Science in Automotive Technology prepares students as entry-level technicians for the automotive field. This program will provide students with the skills and knowledge necessary to successfully perform diagnosis and repair in the automotive shop environment, using a combination of classroom and hands-on shop experiences. Students will be prepared to pass National Institute for Automotive Service Excellence (ASE) Certification tests including A1 Engine Repair, A4 Suspension and Steering, A5 Brakes, A6 Electrical/Electronic Systems, A8 Engine Performance and G1 General Service Technician.

Course ID	Title	Units/ Hours		
Required Core Courses				
AT R110	Introduction to Automotive Technology	6		
AT R113	Automotive Engine Performance	6		
AT R115	Automotive Electrical Systems	6		
AT R116	Advanced Automotive Electrical and Electronics	3		
AT R140	Automotive Steering and Suspension	6		
AT R150	Automotive Braking Systems	6		
Total Required Units				
Oxnard College General Education Pattern				
Double-Counted Units				
Degree-Applicable Electives (needed to reach the 60 units)				
Total Units		62		
Additional Elective Courses Available:				
AT R120	Automotive Transmission and Drive Line	6		
AT R100	Introduction to Hybrid and Electric Vehicle Technology	3		
AT R102	Introduction to Alternative Fuel Systems	3		
AT R103	Light Duty Electric Vehicles	3		
AT R104	Light Duty Hybrid Vehicles	3		
AT R114	Advanced Engine Performance	6		
AT R121	ASE Technician Certification	3		
AT R126	Automotive Engine Repair	6		
AT R148	Smog Check Procedures	3		
AT R161	Automotive Business Management	6		
AT R170	Automotive Air Conditioning	3		

To complete the Associate Degree, students must meet requirements in the major, general education, competency, units, scholarship, and residency. Refer to Earn an Associate Degree and the A.A. or A.S. Degree in Specific Majors sections of this catalog.

Year 1		
Fall Semester		Units/Hours
AT R110	Introduction to Automotive Technology	6
AT R115	Automotive Electrical Systems	6
	Units/Hours	12
Spring Semester		
AT R116	Advanced Automotive Electrical and Electronics	3
AT R140	Automotive Steering and Suspension	6
	Units/Hours	0

## Fall Semester

	Total Units/Hours	33
	Units/Hours	12
AT R150	Automotive Braking Systems	6
AT R113	Automotive Engine Performance	6

Upon successful completion of this program, students will be able to:

- Practice environmental safety in accordance with applicable safety and environmental regulations governing the automotive industry.
- Interpret and analyze online service data, using industry standard written repair material and technical service bulletins to recommend repair and service vehicles.
- Identify specialized automotive service tools, electronic diagnostic equipment and basic hand tools.
- Organize and care of basic automotive tools and equipment and store safely.
- Examine and evaluate automotive brake systems and components.
- · Prepare vehicles for drivability systems evaluation and operation.
- Diagnose and repair steering and suspension systems and components.
- Interpret automotive electrical wiring diagrams to aid in the diagnosis and repair of automotive electrical problems.
- · Practice skills needed for industry and state certification test.