AUTOMOTIVE ANALYSIS AND REPAIR

Award: Associate of Applied Science Degree
Major: Automotive Analysis and Repair
Additional Program Information: https://www.brcc.edu/academics/programs/automotive/
Potential Additional Funding Information: https://www.brcc.edu/g3/

Possible occupation for graduates: automotive technician in a new car dealership or independent service facility.

The Associate of Applied Science Automotive Analysis and Repair is designed for people who seek employment in the Automotive Industry. The program is Master Certified in all eight automotive areas by the National Institute for Automotive Service Excellence and has received the Award for Excellence in Post-Secondary Vocational Education from the Motor Vehicle Manufacturers of the U.S. and the American Vocational Association.

Students are admitted to the program in the fall semester. When student demand for the program exceeds capacity, students will be added to the waiting list. Automotive Analysis and Repair students may be eligible to work at an approved site and receive credit toward graduation. Students must pass each AUT-prefix course in the curriculum with a C or higher in order to continue in the program. A minimum GPA of 2.0 is required for graduation. Automotive students must have a valid driver's license.

Required Courses
Curriculum

First Semester		**Credit Hours**
AUT 111	Automotive Engines I	4
AUT 136	Automotive Vehicle Inspection	2
AUT 197 or AUT 199	Cooperative Education in Automotive Analysis or Supervised Study in Automotive Analysis	1
AUT 141	Auto Power Trains I	4
AUT 275	Shop Management	2
Select one of the following:		3
ENG 111	College Composition I	
ENG 115	Technical Writing	
SDV 100	College Success Skills	1
	Credit Hours	**17**
Second Semester		
AUT 142	Auto Power Trains II	4
AUT 197 or AUT 199	Cooperative Education in Automotive Analysis or Supervised Study in Automotive Analysis	1
AUT 236	Automotive Climate Control	4
AUT 267	Automotive Suspension and Braking Systems	4
MTH 111	Basic Technical Mathematics	3
	Credit Hours	**16**
Third Semester		
AUT 121	Automotive Fuel Systems I	4
AUT 197 or AUT 199	Cooperative Education in Automotive Analysis or Supervised Study in Automotive Analysis	1
AUT 241	Automotive Electricity I	4
AUT 273	Automotive Driveability and Tune-Up I	3
Social and Behavioral Science Elective (https://catalog.brcc.edu/programs-study/general-education-aas/#social)		3
Literature/Humanities/Fine Arts Elective (https://catalog.brcc.edu/programs-study/general-education-aas/#literature)		3
	Credit Hours	**18**
Fourth Semester		
AUT 122	Automotive Fuel Systems II	4
AUT 197 or AUT 199	Cooperative Education in Automotive Analysis or Supervised Study in Automotive Analysis	1
AUT 217	Computerized Fuel Systems	3
AUT 245	Automotive Electronics	4

Select one of the following:		4
PHY 100	Elements of Physics	
CHM 101	Introductory Chemistry I	
	Credit Hours	**16**
	Total Credit Hours	**67**

Certificates

Automotive Undercar and HVAC Systems

Award: Career Studies Certificate
Potential Additional Funding Information: https://www.brcc.edu/g3/

Purpose: To provide students with the knowledge and skills to analyze and repair standard and automatic transmissions, braking, suspension, and Heating, Ventilation and Air Conditioning (HVAC) systems. The completed certificate is intended to provide entry level skills in undercar and HVAC systems for students wishing to pursue further training in all vehicle areas.

Code	Title	Credit Hours
AUT 141	Auto Power Trains I	4
AUT 142	Auto Power Trains II	4
AUT 197	Cooperative Education in Automotive Analysis	1
or AUT 199	Supervised Study in Automotive Analysis	
AUT 236	Automotive Climate Control	4
AUT 267	Automotive Suspension and Braking Systems	4
Total Credit Hours		**17**

Automotive Fuel and Electrical Systems

Award: Career Studies Certificate
Potential Additional Funding Information: https://www.brcc.edu/g3/

Purpose: To provide a foundation of understanding and skills in the areas of automotive fuel and electrical systems operation, diagnosis, and repair. The coursework includes fundamental skills in theory, operation, and troubleshooting of automotive electrical, fuel delivery, fuel injection, emission control, and computer networking systems throughout the vehicle. The completed certificate is intended to provide entry level skills in electrical and fuel systems for students wishing to pursue further training all vehicle areas.

Code	Title	Credit Hours
AUT 241	Automotive Electricity I	4
AUT 245	Automotive Electronics	4
AUT 121	Automotive Fuel Systems I	4
AUT 122	Automotive Fuel Systems II	4
AUT 217	Computerized Fuel Systems	3
Total Credit Hours		**19**

Automotive Mechanical Systems

Award: Career Studies Certificate
Additional Program Information: https://www.brcc.edu/academics/programs/automotive/

Purpose: To provide students with a foundation of knowledge and skills to analyze, diagnose, and repair automotive engines and manual transmissions/power trains. The completed certificate is intended to provide entry level skills in automotive mechanical systems for students pursuing further training in all vehicle areas.

Code	Title	Credit Hours
AUT 111	Automotive Engines I	4
AUT 136	Automotive Vehicle Inspection	2
AUT 141	Auto Power Trains I	4

AUT 197	Cooperative Education in Automotive Analysis	1
or AUT 199	Supervised Study in Automotive Analysis	
AUT 275	Shop Management	2
Total Credit Hours		**13**