

Automotive Technology

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CAREER OPPORTUNITIES

Recognizing that a successful career in automotive technology involves much more than mechanical ability to replace parts, Utah Valley State College has designed this curriculum for the individual who has ability and aptitude to become a skilled automotive technician. Opportunities are available for specialists in: general automotive repair, front end, tune-up, cooling system and air conditioning, brakes, laser wheel alignment, engine rebuilding, automatic and standard transmissions, computerized electronic ignition and fuel injection, and emission controls.

PROGRAMS

Four options are available: One-Year Certificate, Diploma, Associate in Applied Science Degree, Associate in Science, and the Bachelor of Science in Technology Management degree.

Reminder: an overall grade point average of 2.0 "C" or above is required for graduation.

Certificate in Automotive Technology

31 CREDITS

Discipline Core Requirements: 31 Credits

• AUT 1110	Brake Systems	2.0
• AUT 111L	Brake Systems Lab	1.0
• AUT 1120	Manual Power Trains	2.0
• AUT 112L	Manual Power Trains Lab	1.0
• AUT 1130	Engine Repair	2.0
• AUT 113L	Engine Repair Lab	1.0
• AUT 1160	Automotive Electrical Systems	2.0
• AUT 116L	Automotive Electrical Systems Lab	1.0
• AUT 1170	Engine Electrical Systems	2.0
• AUT 117L	Engine Electrical Systems Lab	1.0
• AUT 1210	Suspension and Steering Systems	2.0
• AUT 121L	Suspension and Steering Systems Lab	1.0
• AUT 1220	Automatic Transmissions and Transaxles	2.0
• AUT 122L	Automatic Transmissions and Transaxles Lab	1.0
• AUT 1230	Engine Performance	2.0
• AUT 123L	Engine Performance Lab	1.0
• AUT 1260	Tech Math for Mechanics	3.0
• CLSS 1000	Student Success (3.0)	
or ENGL 106A	Career Writing for Technology--A	2.0
• Any approved Behavioral Science, Social, or Political Science Distribution course		2.0

Graduation Requirements:

- 1 Completion of a minimum of 31 semester credits
- 2 Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
- 3 Completion of specified departmental requirements

Diploma in Automotive Technology

55 CREDITS

Discipline Core Requirements: 55 Credits

• AUT 1110	Brake Systems	2.0
• AUT 111L	Brake Systems Lab	1.0
• AUT 1120	Manual Power Trains	2.0
• AUT 112L	Manual Power Trains Lab	1.0
• AUT 1130	Engine Repair	2.0
• AUT 113L	Engine Repair Lab	1.0
• AUT 1160	Automotive Electrical Systems	2.0
• AUT 116L	Automotive Electrical Systems Lab	1.0
• AUT 1170	Engine Electrical Systems	2.0
• AUT 117L	Engine Electrical Systems Lab	1.0
• AUT 1210	Suspension and Steering Systems	2.0
• AUT 121L	Suspension and Steering Systems Lab	1.0
• AUT 1220	Automatic Transmissions and Transaxles	2.0
• AUT 122L	Automatic Transmissions and Transaxles Lab	1.0
• AUT 1230	Engine Performance	2.0
• AUT 123L	Engine Performance Lab	1.0
• AUT 2110	Advanced Steering Suspension and Alignment	2.0
• AUT 2120	Advanced Engine Performance	2.0
• AUT 201R	Automotive Service Practicum	8.0
or AUT 281R	Cooperative Work Experience (1.0)	8.0
• AUT 2130	Advanced Emission Control Systems	2.0
• AUT 2140	Chassis Electrical and Electronics Systems	2.0
• AUT 2210	Advanced Braking and Control Systems	2.0
• AUT 2220	Automatic Transmissions and Electronic Controls	2.0
• AUT 2250	Electronic Fuel Management Systems	2.0
• AUT 2240	Automotive HVACR	2.0
• CLSS 1000	Student Success (3.0)	
or ENGL 106A	Career Writing for Technology--A	2.0
• Any approved Behavioral Science, Social, or Political Science Distribution Course		2.0
• AUT 1260	Tech Math for Mechanics	3.0

Graduation Requirements:

Automotive Technology

- 1 Completion of a minimum of 55 semester hours.
- 2 Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
- 3 Completion of specified departmental requirements.

AAS in Automotive Technology

64 CREDITS

General Education Requirements: 16 Credits

ENGLISH		2.0
• ENGL 1010	Introduction to Writing (3.0)	
• ENGL 1060	Career Writing for Technology (3.0)	
• ENGL 106A	Career Writing for Technology--A (2.0)	
MATHEMATICS		3.0
• AUT 1260	Tech Math for Mechanics (3.0)	
• Any higher Mathematics Course		
HUMANITIES/FINE ARTS/FOREIGN LANGUAGE		2.0
• Any approved Humanities, Fine Arts, or Foreign Language Distribution Course		
SOCIAL AND BEHAVIORAL SCIENCE		2.0
• Any approved Behavioral Science, Social, or Political Science Distribution Course		
BIOLOGY OR PHYSICAL SCIENCE		2.0
• Any approved Biology or Physical Science Distribution Course		
PHYSICAL EDUCATION/HEALTH/SAFETY OR ENVIRONMENT		1.0
• Any approved Physical Education, Health, Safety, or Environment Course		
ADDITIONAL CREDITS FROM ANY OF THE ABOVE		4.0

Discipline Core Requirements: 48 Credits

• AUT 1110	Brake Systems	2.0
• AUT 111L	Brake Systems Lab	1.0
• AUT 1120	Manual Power Trains	2.0
• AUT 112L	Manual Power Trains Lab	1.0
• AUT 1130	Engine Repair	2.0
• AUT 113L	Engine Repair Lab	1.0
• AUT 1160	Automotive Electrical Systems	2.0
• AUT 116L	Automotive Electrical Systems Lab	1.0
• AUT 1170	Engine Electrical Systems	2.0
• AUT 117L	Engine Electrical Systems Lab	1.0
• AUT 1210	Suspension and Steering Systems	2.0
• AUT 121L	Suspension and Steering Systems Lab	1.0
• AUT 1220	Automatic Transmissions and Transaxles	2.0
• AUT 122L	Automatic Transmissions and Transaxles Lab	1.0
• AUT 1230	Engine Performance	2.0
• AUT 123L	Engine Performance Lab	1.0
• AUT 2110	Advanced Steering Suspension and Alignment	2.0
• AUT 2120	Advanced Engine Performance	2.0
• AUT 2130	Advanced Emission Control Systems	2.0
• AUT 2210	Advanced Braking and Control Systems	2.0
• AUT 2220	Automatic Transmissions and Electronic Controls	2.0
• AUT 2250	Electronic Fuel Management Systems	2.0
• AUT 2240	Automotive HVACR	2.0
Complete 8 credits from the following:		8.0
• AUT 201R	Automotive Service Practicum (2.0)	
• AUT 281R	Cooperative Work Experience (1.0)	

Graduation Requirements:

- 1 Completion of a minimum of 64 semester credits
- 2 Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
- 3 Residency hours--minimum of 20 credit hours through course attendance at UVSC
- 4 Completion of GE and specified departmental requirements

AS Pre Major in Automotive Technology

60 CREDITS

General Education Requirements: 35 Credits

• ENGL 1010	Introduction to Writing	3.0
• ENGL 2020	Intermediate Writing--Science and Technology	3.0
or ENGL 2020	Intermediate Writing--Science and Technology (3.0)	
Complete one of the following:		3.0
• MATH 1030	Quantitative Reasoning (3.0)	
• MATH 1040	Introduction to Statistics (3.0)	
• MATH 1050	College Algebra (4.0)	
Complete one of the following:		3.0
• POLS 1000	American Heritage (3.0)	
• HIST 2700	US History to 1877 (3.0)	
and HIST 2710	US History since 1877 (3.0)	
• HIST 1700	American Civilization (3.0)	

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- HIST 1740 US Economic History (3.0)
- POLS 1100 American National Government (3.0)

Complete the following:

- PHIL 2050 Ethics and Values 3.0
- HLTH 1100 Personal Health and Wellness (2.0)
- or PES 1097 Fitness for Life 2.0

Distribution Courses

- Biology 3.0
- Physical Science 3.0
- Additional Biology or Physical Science 3.0
- Humanities Distribution 3.0
- Fine Arts Distribution 3.0
- Social/Behavioral Science 3.0

Discipline Core Requirements: 16 Credits

- Choose from AUT or related 1000 level of higher courses 16.0

Elective Requirements: 9 Credits

- Choose electives from 1000 level or higher courses 9.0

Graduation Requirements:

- 1 Completion of a minimum of 60 semester credits.
- 2 Overall grade point average of 2.0 (C) or above. (Departments may require higher GPA.)
- 3 Residency hours--minimum of 20 credit hours through course attendance at UVSC.
- 4 Completion of GE and specified departmental requirements.

BS in Technology

Management 124 CREDITS

The following technical area is available (see the Technology Management section of this catalog for complete degree requirement listings).

Specialization in

Automotive Technology 45 Credits

Emphasis Requirements: 45 Credits

- AUT 1110 Brake Systems 2.0
- AUT 111L Brake Systems Lab 1.0
- AUT 1120 Manual Power Trains 2.0
- AUT 112L Manual Power Trains Lab 1.0
- AUT 1130 Engine Repair 2.0
- AUT 113L Engine Repair Lab 1.0
- AUT 1160 Automotive Electrical Systems 2.0
- AUT 116L Automotive Electrical Systems Lab 1.0
- AUT 1170 Engine Electrical Systems 2.0
- AUT 117L Engine Electrical Systems Lab 1.0
- AUT 1210 Suspension and Steering Systems 2.0
- AUT 121L Suspension and Steering Systems Lab 1.0
- AUT 1220 Automatic Transmissions and Transaxles 2.0
- AUT 122L Automatic Transmissions and Transaxles Lab 1.0
- AUT 1230 Engine Performance 2.0
- AUT 123L Engine Performance Lab 1.0
- AUT 2110 Advanced Steering Suspension and Alignment 2.0
- AUT 2120 Advanced Engine Performance 2.0
- AUT 2130 Advanced Emission Control Systems 2.0
- AUT 2140 Chassis Electrical and Electronics Systems 2.0
- AUT 2210 Advanced Braking and Control Systems 2.0
- AUT 2220 Automatic Transmissions and Electronic Controls 2.0
- AUT 2240 Automotive HVACR 2.0
- AUT 2250 Electronic Fuel Management Systems 2.0

Complete 5 credits from the following:

- AUT 201R Automotive Service Practicum (2.0)
- AUT 281R Cooperative Work Experience (1.0)

Recommended Automotive Courses

The following course is recommended for students who would like to learn more about the operation and maintenance of their vehicle.

- AUT 1000 Survey of Automotive Technology 2.0

The following course is recommended for the aggressive students with automotive engine experience wanting additional learning of increased horsepower or for the street rod enthusiast.

- AUT 2410 High Performance Engine Class 3.0

See Course Descriptions section of the catalog for detailed course information. This department manages the following course prefixes:

- AUT, Automotive Technology
- CRT, Collision Repair Technology
- DMT, Diesel Mechanics Technology