

Associate in Applied Science and Career Certificates

AUTOMOTIVE TECHNOLOGY

Engineering, Math and Physical Sciences Division
Room T102, (847) 543-2044

The Automotive Technology programs offer courses leading to three Associate in Applied Science degrees: Under Hood Technician, Transmission Technician and Under the Car Technician. These programs will provide students with a solid foundation and a variety of skills to enter the automotive industry, or to pursue further undergraduate study. The program is Master Certified by the National Automotive Technician Education Foundation, Inc. (NATEF). This is the highest level of certification that NATEF awards. NATEF was founded in 1983 as an independent, non-profit organization with a single mission: to evaluate technician training programs against standards developed by the automotive industry and recommend qualifying programs for certification (accreditation) by the National Institute for Automotive Service Excellence (ASE).

Upon successful completion of the program, students will be prepared to take the ASE technician certification exams. Students who pass the ASE certification exams and have completed the work experience required by ASE will be awarded certification by ASE.

To complete an AAS, students must meet the General Requirements on page 93. In addition, students should select General Education electives (*) from those listed on page 94. All course prerequisites must be met.

UNDER HOOD TECHNICIAN (Associate in Applied Science) Plan 24AH

Completion of this program prepares students for employment in the areas of automotive repair. Fifteen hours of required General Education coursework is built into the program.

Phase I	20
AUT 171 Engine Rebuilding	5
AUT 172 Auto Electrical I	5
AUT 174 Introduction to Automotive Technology	4
ENG 120 Technical Composition <i>or</i>	
ENG 121 English Composition I	3
MTH 114 Applied Mathematics I <i>or</i>	
MTH Elective (higher than MTH 114)	3
Phase II	16
AUT 173 Auto Electrical II	5
AUT 215 Automotive Management <i>or</i>	
AUT 217 Automotive Service Consulting	3
AUT 271 Engine Performance I.....	5
CMM 111 Communication Skills* <i>or</i>	
CMM 121 Fundamentals of Speech*.....	3

Phase III	34
AUT 272 Engine Performance II	5
AUT 274 Automatic Transmissions and Trans Axles ..	5
AUT 275 Air Conditioning and Heating	5
AUT 276 Engine Systems Diagnosis	5
AUT 277 Advanced Specialization	5
Humanities or Fine Arts Elective*	3
Social Science Electives*	3

Total Hours for AAS Degree

UNDER THE CAR TECHNICIAN (Associate in Applied Science) Plan 24AJ

These programs prepare students for employment in diagnosing, testing, and repairing brakes, suspension and alignment, and driveline systems. General Education coursework is built into the program.

Phase I	20
AUT 171 Engine Rebuilding	5
AUT 172 Auto Electrical I	5
AUT 174 Introduction to Automotive Technology	4
ENG 120 Technical Composition <i>or</i>	
ENG 121 English Composition I	3
MTH 114 Applied Mathematics I <i>or</i>	
MTH Elective (higher than MTH 114)	3
Phase II	16
AUT 175 Braking Systems.....	5
AUT 176 Suspension and Alignment	5
AUT 215 Automotive Management <i>or</i>	
AUT 217 Automotive Service Consulting	3
CMM 111 Communication Skills <i>or</i>	
CMM 121 Fundamentals of Speech.....	3

Phase III	27-29
AUT 273 Manual Drive Train and Axles	5
AUT 274 Automatic Transmissions and Trans Axles ..	5
AUT 277 Advanced Specialization	5
AUT Elective <i>or</i>	
EWE 220 Cooperative Work Experience I	3-5
Humanities or Fine Arts Elective*	3
Social Science Electives*	3

Total Hours for AAS degree

**UNDER HOOD TECHNICIAN
(Certificate) Plan 24AV**

Completion of this program prepares students for employment in the areas of automotive repair.

AUT 171	Engine Rebuilding	5
AUT 172	Auto Electrical I	5
AUT 173	Auto Electrical II	5
AUT 174	Introduction to Automotive Technology	4
AUT 215	Automotive Management <i>or</i>	
AUT 217	Automotive Service Consulting	3
AUT 271	Engine Performance I	5
AUT 272	Engine Performance II	5
AUT 275	Air Conditioning and Heating	5
AUT 276	Engine Systems Diagnosis	5
AUT 277	Advanced Specialization	5
MTH 114	Applied Mathematics I <i>or</i>	
MTH	Elective (higher than MTH 114)	3

Total Hours for Certificate.....50

**TRANSMISSION TECHNICIAN
(Certificate) Plan 24AX**

AUT 171	Engine Rebuilding	5
AUT 172	Auto Electrical I	5
AUT 174	Introduction to Automotive Technology	4
AUT 215	Automotive Management <i>or</i>	
AUT 217	Automotive Service Consulting	3
AUT 273	Manual Drive Train and Axles	5
AUT 274	Automatic Transmissions and Trans Axles	5
AUT 277	Advanced Specialization	5
MTH 114	Applied Mathematics I <i>or</i>	
MTH	Elective (higher than MTH 114)	3

Total Hours for Certificate.....35

**UNDER THE CAR TECHNICIAN
(Certificate) Plan 24AY**

AUT 174	Introduction to Automotive Technology	4
AUT 175	Braking Systems.....	5
AUT 176	Suspension and Alignment.....	5
AUT 215	Automotive Management <i>or</i>	
AUT 217	Automotive Service Consulting	3
AUT 273	Manual Drive Train and Axles	5
AUT 277	Advanced Specialization	5
MTH 114	Applied Mathematics I <i>or</i>	
MTH	Elective (higher than MTH 114)	3

Total Hours for Certificate.....30

**AUTOMOTIVE AIR CONDITIONING
AND HEATING SPECIALIST
(Certificate) Plan 24UG**

This certificate prepares students for initial employment diagnosing and repairing automotive heating and air conditioning systems.

AUT 172	Auto Electrical I	5
AUT 174	Introduction to Automotive Technology	4
AUT 275	Air Conditioning and Heating	5

Total Hours for Certificate.....14

**AUTOMOTIVE ELECTRICAL SPECIALIST
(Certificate) Plan 24UH**

This Certificate prepares students for employment diagnosing and repairing chassis and body electrical and electronic circuits.

AUT 172	Auto Electrical I	5
AUT 173	Auto Electrical II	5
AUT 174	Introduction to Automotive Technology	4

Total Hours for Certificate.....14

**AUTOMOTIVE FUEL SYSTEMS
SPECIALIST
(Certificate) Plan 24UI**

This Certificate prepares students for initial employment diagnosing and repairing automotive engine fuel system problems.

AUT 174	Introduction to Automotive Technology	4
AUT 271	Engine Performance I.....	5
AUT 272	Engine Performance II	5

Total Hours for Certificate.....14

**AUTOMOTIVE SERVICE SPECIALIST
(Certificate) Plan 24UJ**

This Certificate prepares students for initial employment in the automotive service industry.

AUT 171	Engine Rebuilding	5
AUT 172	Auto Electrical I	5
AUT 174	Introduction to Automotive Technology	4

Total Hours for Certificate.....14

Associate in Applied Science and Career Certificates

AUTOMOTIVE BRAKES AND SUSPENSION SPECIALIST

(Certificate) Plan 24UK

This Certificate prepares students for initial employment diagnosing and repairing automotive braking, suspension and alignment problems.

AUT	174	Introduction to Automotive Technology4
AUT	175	Braking Systems.....	5
AUT	176	Suspension and Alignment	5

Total Hours for Certificate.....14

AUTOMOTIVE OIL CHANGE SPECIALIST

(Certificate) Plan 24UL

This Certificate prepares students for employment in the oil change business.

AUT	171	Engine Rebuilding	5
AUT	174	Introduction to Automotive Technology4
AUT	175	Braking Systems.....	5

Total Hours for Certificate.....14

AUTOMOTIVE TRANSMISSION SPECIALIST

(Certificate) Plan 24UM

This Certificate prepares students for initial employment diagnosing and repairing manual transmission, automatic transmission and driveline problems.

AUT	174	Introduction to Automotive Technology4
AUT	273	Manual Drive Train and Axles	5
AUT	274	Automatic Transmissions and Trans Axles	..5

Total Hours for Certificate.....14

For more information on recommended courses or program specific advising, contact the following faculty members or the Engineering, Math and Physical Sciences division at (847) 543-2044:

Lance David Derrek Keesling Ted Wells