



21250 Stevens Creek Blvd.
Cupertino, CA 95014
408-864-5678
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Academic Year
2019 - 2020

Automotive Technician

An evening, in-service program for practicing apprentices and technicians, auto enthusiasts and students seeking to enter the automotive technician workforce

Business, Computer Sciences and
Applied Technologies Division
Bldg. L1, Room L14
408-864-8797

Counseling and Advising Center
Student and Community
Services Bldg., 2nd Fl.
408-864-5400

- Automotive Machining and Engine Repair
- Engine Performance
- Automotive Chassis
- Automotive Powertrain
- Smog Technician

Please visit the Counseling and Advising Center to apply for degrees and for academic planning assistance.

Certificate of Achievement Requirements

Completion of all major courses with a "C" grade or higher, or with a "Pass" if the course was taken on a Pass/No Pass (P/NP) basis and the "Pass" is equal to a "C" grade or higher.

Note: A maximum of six (6) quarter units may be transferred from other academic institutions.

Certificate of Achievement-Advanced Requirements

1. Completion of all major courses with a "C" grade or higher, or with a "Pass" if the course was taken on a Pass/No Pass (P/NP) basis and the "Pass" is equal to a "C" grade or higher.
2. Demonstrated proficiency in English and mathematics as evidenced by eligibility for EWRT 1A or EWRT 1AH or ESL 5 and eligibility for MATH 114.

Note: A maximum of 18 quarter units may be transferred from other academic institutions.

A.A./A.S. Degree Requirements

1. Completion of all General Education (GE) requirements (32-43 quarter units) for the A.A./A.S. degree. GE units must be completed with a minimum 2.0 GPA ("C" average).
2. Completion of all major courses with a "C" grade or higher, or with a "Pass" if the course was taken on a Pass/No Pass (P/NP) basis and the "Pass" is equal to a "C" grade or higher. Major courses can also be used to satisfy GE requirements (except for Liberal Arts degrees).

Note: A maximum of 22 quarter units from other academic institutions may be applied toward the major.

3. Completion of a minimum of 90 degree-applicable quarter units (GE and major units included). All De Anza courses must be completed with a minimum 2.0 GPA ("C" average). All De Anza courses combined with courses transferred from other academic institutions must be completed with a minimum 2.0 GPA ("C" average).

Note: A minimum of 24 quarter units must be earned at De Anza College.

Automotive General Service Technician

Certificate of Achievement

This Certificate of Achievement prepares a student for employment as an entry-level technician performing vehicle inspections, new car preparation and general automotive maintenance.

Program Learning Outcomes - upon completion, students will be able to:

- Perform basic engine service, cooling system maintenance and battery testing.
- Perform tire service including balancing, disc and drum brake service, and basic front and rear suspension service.

Certificate of Achievement

1. Meet the requirements for this certificate level.
2. Complete the following.

AUTO 50A	Introduction to Automotive Principles	4
AUTO 50B	Applied Automotive Principles	2
AUTO 51A	Introduction to Automotive Principles - Chassis Systems	4
AUTO 51B	Applications of Automotive Principles - Chassis Systems	2
AUTO 60	Automotive Electrical Systems	9
Total Units Required		21

Automotive Machining and Engine Repair Technology

Certificate of Achievement

This Certificate of Achievement prepares students for an entry-level engine diagnostics technician position in the automotive repair industry.

Program Learning Outcomes - upon completion, students will be able to:

- Demonstrate an understanding of four-stroke engine theory, basic safe machining practices and engine assembly.

1. Meet the requirements for this certificate level.
2. Complete the following.

AUTO 64	Automotive Machining and Engine Repair	9
AUTO 64HP	High Performance Engine Preparation	9
Total Units Required		18

Automotive Machining and Engine Repair Technology

Certificate of Achievement-Advanced

A.S. Degree

This Certificate of Achievement-Advanced and A.S. degree prepares students with advanced skills for an entry-level position in automotive engine diagnostics.

Program Learning Outcomes - upon completion, students will be able to:

- Demonstrate an understanding of four-stroke engine theory, basic safe machining practices, estimates and repair orders, and engine assembly.
- Identify the basic electrical circuits and diagnose automotive electrical systems.
- Apply the basic principles of physics as they work in the automotive industry.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level.
2. Complete the following.

AUTO 53A	Automotive Mechanisms	4
AUTO 60	Automotive Electrical Systems	9
AUTO 60A	Electrical Schematic Diagnosis	4.5
AUTO 60B	Automotive Electronics	4.5
AUTO 60C	Automotive Ignition, Fuel and Emission Systems	9
AUTO 64	Automotive Machining and Engine Repair	9
AUTO 64HP	High Performance Engine Preparation	9
Total Units Required		49

A.S. Degree

Major Complete the Cert. of Achievement-Advanced requirements 49

GE General Education (32-43 units)

Electives Elective courses required when major units plus GE units total is less than 90

Total Units Required90

Engine Performance

Basic Engine Performance Technology

Certificate of Achievement

This Certificate of Achievement prepares a student to be successful as an entry-level technician in vehicle electrical systems repairs.

Program Learning Outcomes - upon completion, students will be able to:

- Identify the basic electrical circuits and diagnose automotive electrical systems.
- Apply the basic principles of physics as they work in the automotive industry.

1. Meet the requirements for this certificate level.
2. Complete the following.

AUTO 53A	Automotive Mechanisms	4
AUTO 60	Automotive Electrical Systems	9
AUTO 60A	Electrical Schematic Diagnosis	4.5
AUTO 60B	Automotive Electronics	4.5
Total Units Required		22

Intermediate Engine Performance Technology

Certificate of Achievement

This Certificate of Achievement prepares a student to be successful as an entry-level technician in vehicle ignition, fuel and ignition systems.

Program Learning Outcomes - upon completion, students will be able to:

- Interpret and analyze automotive ignition, fuel and ignition systems.

1. Meet the requirements for this certificate level.
2. Complete the following.

AUTO 60C	Automotive Ignition, Fuel and Emission Systems	9
AUTO 60D	Ignition Analysis and Oscilloscope Diagnosis	4.5
AUTO 60E	Automotive Fuel Injection	4.5
Total Units Required		18

Advanced Engine Performance Technology

Certificate of Achievement

This Certificate of Achievement helps prepare students for an entry-level position in the automotive repair industry.

Program Learning Outcomes - upon completion, students will be able to:

- Utilize the appropriate diagnostic equipment, documentation and troubleshoot principles on various automotive systems.

1. Meet the requirements for this certificate level.
2. Complete the following.

AUTO 60F	No-Start Diagnosis	4.5
AUTO 60G	Advanced Scan Tool Diagnosis	4.5
AUTO 60H	Advanced Drivability and Onboard Diagnostics	4.5
AUTO 60J	Advanced Lab Scope and Waveform Diagnosis	4.5
Total Units Required		18

Advanced Engine Performance Technology

Certificate of Achievement-Advanced

A.S. Degree

This Certificate of Achievement-Advanced and A.S. degree prepares students with advanced skills for an entry-level position in the automotive repair industry utilizing appropriate diagnostic equipment, documentation and troubleshooting principles on various automotive systems.

Program Learning Outcomes - upon completion, students will be able to:

- Identify the basic electrical circuits and diagnose automotive electrical systems.
- Apply the basic principles of physics as they work in the automotive industry.
- Interpret and analyze automotive ignition, fuel and ignition systems.
- Utilize appropriate diagnostic equipment, documentation and troubleshooting principles on various automotive systems.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level.
2. Complete the following.

AUTO 53A	Automotive Mechanisms	4
AUTO 60	Automotive Electrical Systems	9
AUTO 60A	Electrical Schematic Diagnosis	4.5
AUTO 60B	Automotive Electronics	4.5
AUTO 60C	Automotive Ignition, Fuel and Emission Systems	9
AUTO 60D	Ignition Analysis and Oscilloscope Diagnosis	4.5
AUTO 60E	Automotive Fuel Injection	4.5
AUTO 60F	No-Start Diagnosis	4.5
AUTO 60G	Advanced Scan Tool Diagnosis	4.5
AUTO 60H	Advanced Drivability and Onboard Diagnostics	4.5
AUTO 60J	Advanced Lab Scope and Waveform Diagnosis	4.5
Total Units Required		58

A.S. Degree

<i>Major</i>	<i>Complete the Cert. of Achievement-Advanced requirements</i>	58
<i>GE</i>	<i>General Education (32-43 units)</i>	
<i>Electives</i>	<i>Elective courses required when major units plus GE units total is less than 90</i>	
Total Units Required		90

Automotive Chassis

Automotive Chassis Technology

Certificate of Achievement

This Certificate of Achievement prepares students for an entry-level position in automotive undercar inspection and repair procedures.

Program Learning Outcomes - upon completion, students will be able to:

- Perform undercar inspections and repair suspension, steering, hydraulic and active braking systems.

1. Meet the requirements for this certificate level.
2. Complete the following.

AUTO 61A	Automotive Brake Systems	4.5
AUTO 61B	Electronically Controlled Brake Systems	4.5
AUTO 62A	Automotive Suspension, Steering and Alignment	9
Total Units Required		18

Automotive Chassis Technology

Certificate of Achievement-Advanced

A.S. Degree

This Certificate of Achievement-Advanced and A.S. degree prepares students with advanced skills for an entry-level position in the automotive repair industry in undercar inspection and repair procedures.

Program Learning Outcomes - upon completion, students will be able to:

- Perform undercar inspections and repair suspension, hydraulic and active braking systems.
- Diagnose vehicle alignment concerns.
- Identify the basic electrical circuits and diagnose automotive electrical systems.
- Apply the basic principles of physics as they work in the automotive industry.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level.
2. Complete the following.

AUTO 53A	Automotive Mechanisms	4
AUTO 60	Automotive Electrical Systems	9
AUTO 60A	Electrical Schematic Diagnosis	4.5
AUTO 60B	Automotive Electronics	4.5
AUTO 61A	Automotive Brake Systems	4.5
AUTO 61B	Electronically Controlled Brake Systems	4.5
AUTO 62A	Automotive Suspension, Steering and Alignment	9
AUTO 62B	Advanced Wheel Alignment	9
Total Units Required		49

A.S. Degree

<i>Major</i>	<i>Complete the Cert. of Achievement-Advanced requirements</i>	49
<i>GE</i>	<i>General Education (32-43 units)</i>	
<i>Electives</i>	<i>Elective courses required when major units plus GE units total is less than 90</i>	
Total Units Required		90

Automotive Powertrain Technology

Certificate of Achievement

This Certificate of Achievement helps prepare students for an entry-level position in the automotive repair industry in automotive transmission and differential.

Program Learning Outcomes - upon completion, students will be able to:

- Demonstrate knowledge of the overall operation of an automotive transmission and differential.

1. Meet the requirements for this certificate level.
2. Complete the following.

AUTO 63	Automatic Transmissions and Transaxles	9
AUTO 63A	Advanced Manual Drive Train	9
AUTO 63D	Transmission Diagnostic and Repair Techniques	4.5
Total Units Required		22.5

Smog Technician

Certificate of Achievement

This Certificate of Achievement prepares students for an entry-level position in the automotive repair industry performing California state smog inspections.

Program Learning Outcomes - upon completion, students will be able to:

- Perform a complete California state smog inspection.

1. Meet the requirements for this certificate level.
2. Complete the following.

AUTO 60C	Automotive Ignition, Fuel and Emission Systems	9
AUTO 65P	Smog Inspector - Level 1 Training	7
AUTO 65W	Smog Inspector - Level 2 Training	2.5
Total Units Required		18.5

Automotive Powertrain Technology

Certificate of Achievement-Advanced

A.S. Degree

This Certificate of Achievement-Advanced and A.S. degree prepares students with advanced skills for an entry-level position in automotive transmission and differential repair.

Program Learning Outcomes - upon completion, students will be able to:

- Demonstrate knowledge of the overall operation of an automotive transmission and differential.
- Identify the basic electrical circuits and diagnose automotive electrical systems.
- Apply the basic principles of physics as they work in the automotive industry.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level.
2. Complete the following.

AUTO 53A	Automotive Mechanisms	4
AUTO 60	Automotive Electrical Systems	9
AUTO 60A	Electrical Schematic Diagnosis	4.5
AUTO 60B	Automotive Electronics	4.5
AUTO 63	Automatic Transmissions and Transaxles	9
AUTO 63A	Advanced Manual Drive Train	9
AUTO 63D	Transmission Diagnostic and Repair Techniques	4.5
Total Units Required		44.5

A.S. Degree

Major	Complete the Cert. of Achievement-Advanced requirements	44.5
GE	General Education (32-43 units)	
Electives	Elective courses required when major units plus GE units total is less than 90	
Total Units Required		90