

ARTF 111	Art History: Renaissance to Modern	3
Select at least 12 units, including at least two ARTF courses from the following:		
ARTF 100	Art Orientation	3
ARTF 107	Contemporary Art	3
ARTF 109	Modern Art	3
ARTF 113	Arts of Africa, Oceania, and the Americas	3
ARTF 125	Art History: Arts of the Asian Continent	3
ARTF 150A	Two-Dimensional Design	3
ARTF 150B	Beginning Graphic Design	3
ARTF 151	Three-Dimensional Design	3
ARTF 155A	Freehand Drawing I	3
ARTF 155B	Freehand Drawing II	3
ARTF 165A	Composition in Painting I	3
ARTF 170A	Contemporary Crafts I	3
ARTF 170B	Contemporary Crafts II	3
ARTF 195A	Ceramics I	3
ARTF 198A	Introduction to Printmaking I	3
ARTF 210A	Life Drawing I	3
ARTF 210B	Life Drawing II	3
CHIL 101	Human Growth and Development	3
CHIL 103	Lifespan Growth and Development	3
ENGL 209	Literary Approaches to Film	3
GEOG 102	Cultural Geography	3
PSYC 101	General Psychology	3
PSYC 230	Psychology of Lifespan Development	3
SOCO 101	Principles of Sociology	3

Total Units = 18

General Education: In addition to the courses listed above, students must complete one of the general education options listed on page 90:

- The IGETC pattern (page 112) is accepted by all CSU campuses and most UC campuses and majors. It is also accepted by some private/independent or out of state universities.
- The CSU GE pattern (page 120) is accepted by all CSU campuses and some private/independent or out of state universities. It is not accepted by the UC system.
- The San Diego Community College District General Education pattern (page 94) may be appropriate for students transferring to a private/independent or out of state university or to a high-unit major. Students selecting this option should meet with a counselor to determine the appropriate General Education courses for their individual transfer goals.

It is strongly recommended that students consult with a counselor to determine which general education option is most appropriate for their individual educational goals.

Electives as needed to meet minimum of 60 units required for the degree.

Astronomy

See "Physical Science" on page 231.

Automotive Technology

Award Type	Units
Certificate of Performance:	
Advanced Emission Specialist	5–8
Certificate of Achievement:	
Automotive Chassis	16
Automotive Electrical	16
Automotive Engine Performance	20
Automotive Transmissions	20
Associate of Science Degree:	
Automotive Technology	40*

* and courses to meet graduation requirements, general education and electives as needed to meet the minimum of 60 units required for the degree.

Program Description

The Automotive Technology program provides both classroom theory and extensive hands on (shop) entry-level employment training as well as professional upgrading to persons in the automotive industry. The program provides training for each of the areas tested for National Institute for Automotive Service Excellence (ASE) certification, and Bureau of Automotive Repair training for state licenses as well. Certificates of Achievement are offered in Automotive Chassis, Automotive Electrical, Automotive Engine Performance, and Automotive Transmissions. A Certificate of Performance is offered for Advanced Emissions Specialist.

The program emphasis is on various automotive manufacturer products. Specific NATEF Certified training in American Honda Motors and Toyota Motor Sales is available in designated courses. Students have the opportunity for internship training when available. If employed, student interns

may work for a repair facility while concurrently receiving formal training in Automotive Technology coursework. Upon completion, the student may have the opportunity for full-time employment at that repair facility. While progressing through the training, students are strongly encouraged to obtain at least two Automotive Service Excellence (ASE) Certifications.

Program Learning Outcomes

Students who complete the Automotive Technology program will be able to:

- Accurately diagnose and repair light duty automotive systems and components.
- Identify workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
- Research automotive repair data, instructions, and specifications using printed material as well as computer database systems.

Career Options:

Employment may be found as an entry-level automotive technician in an automotive manufacturer dealership such as Honda/Acura or Toyota/Lexus, an independent repair garage, or automotive repair franchises.

Some of the many career options in the field of Automotive Technology include:

- Maintenance Technician
- Repair Technician
- Master Technician
- Shop Foreman
- Dispatcher
- Service Advisor
- Service Manager
- General Manager
- Shop Owner
- Warranty Administrator
- Parts Counter Associate
- Collision Repair Mechanical Technician
- Vehicle Sales

Some management-related career paths require study beyond the Associate Degree level.

Faculty	Office	Telephone/Email
General Information	S-204F	619-388-7634
Joseph Young	S-204C	619-388-7672 jyoung@sdccd.edu
Mark Dinger	S-204D	619-388-7642 mdinger@sdccd.edu
Ryan Monroe	S-204E	619-388-7499 rmonroe@sdccd.edu
Martin Kennedy	S-204A	619-388-7711 mkennedy@sdccd.edu

Certificate of Performance: Advanced Emission Specialist*

Courses:		Units
AUTO 86	BAR Specified Diagnostic, Repair, and Level 2 Inspection Training	4
AUTO 270	Work Experience	1-4
		Total Units = 5-8

*A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.

Note: This program is not eligible for federal financial aid in accordance with Federal regulations.

Certificate of Achievement: Automotive Chassis

Courses Required for the Major:		Units
AUTO 61	Basic Electricity and Electrical Systems Fundamentals or	
AUTO 61T	Honda/Toyota Basic Electricity and Electrical Systems Fundamentals	4
AUTO 62	Advanced Electrical or	
AUTO 62T	Honda/Toyota Advanced Electrical	4
AUTO 76	Automotive Brake Systems or	
AUTO 76T	Honda/Toyota Automotive Brake Systems	4
AUTO 78	Suspension, Steering and Handling or	
AUTO 78T	Honda/Toyota Suspension, Steering and Handling	4
		Total Units = 16

Certificate of Achievement: Automotive Electrical

Courses Required for the Major:		Units
AUTO 61	Basic Electricity and Electrical Systems Fundamentals or	
AUTO 61T	Honda/Toyota Basic Electricity and Electrical Systems Fundamentals	4
AUTO 62	Advanced Electrical or	
AUTO 62T	Honda/Toyota Advanced Electrical	4
AUTO 65	Engine Performance or	
AUTO 65T	Honda/Toyota Engine Performance	4
AUTO 69	Climate Control Systems or	
AUTO 69T	Honda/Toyota Climate Control Systems	4
Total Units = 16		

Certificate of Achievement: Automotive Engine Performance

Courses Required for the Major:		Units
AUTO 56	Engine and Related Systems or	
AUTO 56T	Honda/Toyota Engine and Related Systems	4
AUTO 61	Basic Electricity and Electrical Systems Fundamentals or	
AUTO 61T	Honda/Toyota Basic Electricity and Electrical Systems Fundamentals	4
AUTO 62	Advanced Electrical or	
AUTO 62T	Honda/Toyota Advanced Electrical	4
AUTO 65	Engine Performance or	
AUTO 65T	Honda/Toyota Engine Performance	4
AUTO 67	Advanced Engine Performance or	
AUTO 67T	Honda/Toyota Advanced Engine Performance	4
Total Units = 20		

Certificate of Achievement: Automotive Transmissions

Courses Required for the Major:		Units
AUTO 61	Basic Electricity and Electrical Systems Fundamentals or	
AUTO 61T	Honda/Toyota Basic Electricity and Electrical Systems Fundamentals	4
AUTO 62	Advanced Electrical or	
AUTO 62T	Honda/Toyota Advanced Electrical	4
AUTO 65	Engine Performance or	
AUTO 65T	Honda/Toyota Engine Performance	4
AUTO 72	Manual Drive Train and Axles or	
AUTO 72T	Honda/Toyota Manual Drive Train and Axles	4
AUTO 74	Automatic Transmissions/Axles or	

AUTO 74T	Honda/Toyota Automatic Transmissions/Axles	4
Total Units = 20		

Associate of Science Degree: Automotive Technology

Courses Required for the Major:		Units
AUTO 56	Engine and Related Systems or	
AUTO 56T	Honda/Toyota Engine and Related Systems	4
AUTO 61	Basic Electricity and Electrical Systems Fundamentals or	
AUTO 61T	Honda/Toyota Basic Electricity and Electrical Systems Fundamentals	4
AUTO 62	Advanced Electrical or	
AUTO 62T	Honda/Toyota Advanced Electrical	4
AUTO 65	Engine Performance or	
AUTO 65T	Honda/Toyota Engine Performance	4
AUTO 67	Advanced Engine Performance or	
AUTO 67T	Honda/Toyota Advanced Engine Performance	4
AUTO 69	Climate Control Systems or	
AUTO 69T	Honda/Toyota Climate Control Systems	4
AUTO 72	Manual Drive Train and Axles or	
AUTO 72T	Honda/Toyota Manual Drive Train and Axles	4
AUTO 74	Automatic Transmissions/Axles or	
AUTO 74T	Honda/Toyota Automatic Transmissions Axles	4
AUTO 76	Automotive Brake Systems or	
AUTO 76T	Honda/Toyota Automotive Brake Systems	4
AUTO 78	Suspension, Steering and Handling or	
AUTO 78T	Honda/Toyota Suspension, Steering and Handling	4
Total Units = 40		

For graduation requirements see **Associate Degree Requirements** on page 88.

Electives as needed to meet minimum of 60 units required for the degree.

Recommended Electives: Automotive Technology 270.