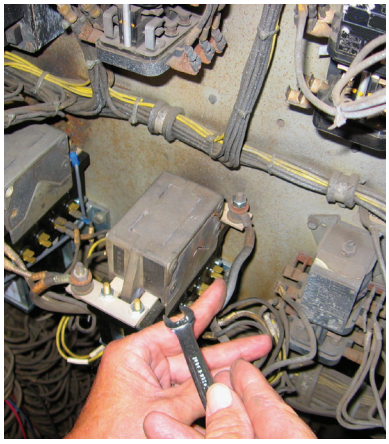
Be Something...

Transportation Technology



What preparation will this program give me?

The Auto Body and Paint program prepares students to work as qualified technicians, continue toward a Baccalaureate degree in advanced schools of technology, or broaden their skills in management, design or business.

The Automotive Technology program prepares students to understand how their car works or to enter the field of auto mechanics. College of Alameda is part of the Toyota Associates Program, providing students with Toyota training and affording them special opportunities towards jobs in local Toyota dealerships.

Upon completion of the Aviation Maintenance Technology program, students will be well prepared to test for the FAA Airframe & Powerplant (A&P) Certificate, the entry point to a career in aviation maintenance.

The Diesel and Truck Mechanics program prepares students to work as heavy-duty diesel and truck mechanics, and upgrades the skills of those already in the trade. Those who want to become familiar with diesel technology (e.g., to use biodiesel or used grease to power diesel vehicles) or are interested in learning more about their own diesel vehicles are also welcome.

What kind of job will I be qualified for when I finish?

Auto Body and Paint: A graduate of the Auto Body program can become an auto body repairer or an automotive service technician. A repairer or service technician may advance to supervisor, open his/her own shop, or work as an auto damage appraiser for an insurance company. A graduate of the Auto Paint program may become an automotive painter.

Automotive Technology: The program prepares students for work as apprentice auto mechanics or to continue toward a Baccalaureate degree in advanced schools of technology in preparation for future management and teaching careers in the automotive industry.

Aviation Maintenance Technology: Aircraft Mechanics do preventive maintenance and repair work, and can specialize or work on many aircraft types. Some become lead mechanics, inspectors or shop supervisors. Airframe mechanics work on all aircraft parts except instruments, power plants and propellers. Powerplant mechanics work on engines and some on propellers. Combo airframe/ powerplant mechanics work on everything but instruments. Avionics technicians repair and maintain avionics systems. Job options also include becoming FAA inspectors or flight engineers, or opening an aircraft maintenance facility. Graduates have been hired by BART, AC Transit and Amtrak.

Diesel and Truck Mechanics: Heavy-Duty Diesel and Truck service technicians and mechanics repair and maintain diesel engines and overall systems of trucks and other heavy vehicles. Mechanics and Technicians also maintain and repair self-contained diesel generated power sets and marine applications. Workers become foremen, shop supervisors, managers, field service engineers, marine diesel power engineers, or other advanced positions in the field. Positions as instructors are also available. Hourly salaries for technicians and mechanics range from $18 for entry level positions to well over $40 for experienced positions. Many students have continued to obtain advanced degrees in engineering.

A career in diesel engine repair can offer relatively high wages and the challenge of skilled repair work.

Source: Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2008-09 Edition*

What classes will I take?
Required Courses:

Auto Body and Paint

Auto Body

		Units
AUTOB 10	Basic Auto Body Repair Concepts	10
AUTOB 20	Advanced Repair Concepts	10
MATH 225	Math for Technicians (or higher)	3
ATECH 26	Intro to Auto Electric Systems	4
	Total Required Units	**27**

Auto Paint

		Units
AUTOB 30	Paint Preparation/ Equipment	10
AUTOB 40	Advanced Study/ Refinishing	10
MATH 225	Math for Technicians (or higher)	3
ATECH 26	Intro to Auto Electric Systems	4
	Total Required Units	**27**

Automotive Technology

The program offers Certificates in any of the following areas:

Engine Performance	(54 units)
Chassis & Drivetrain	(42 units)
Chassis Specialist	(34 units)
Engine Repair Specialist	(34 units)
Automotive Electronics Specialist	(34 units)
Drivetrain Specialist	(34 units)
Light Duty Auto Repair	(16 units)

Aviation Maintenance Required Courses:

Airframe

Evening Program Sequence:

		Units
AMT 056L	Basic Science of Aviation Maintenance Technology	3
AMT 056	Basic Science of Aviation Maintenance Technology	6.5

(see next page)

Aviation Maintenance Required Courses:		Units
Airframe (cont.)		
Evening Program Sequence:		
AMT 058L	Survey of Aviation Maintenance Technology	3
AMT 058	Survey of Aviation Maintenance Technology	6.5
AMT 062L	Airframe Systems I	3.0
AMT 062	Airframe Systems I	6.5
AMT 064L	Airframe Systems II	3.0
AMT 064	Airframe Systems II	6.5
AMT 066L	Airframe Systems and Review	3.0
AMT 066	Airframe Systems and Review	6.5
	Total Required Units	**43**

OR Afternoon Program Sequence:		
AMT 80	Aircraft Component Inspection I	3
AMT 81	Aircraft Component Inspection II	3
AMT 82	Aircraft Component Inspection III	3
AMT 83	Aircraft Component Repair I	5.5
AMT 84	Aircraft Component Repair II	5.5
AMT 85	Aircraft Component Repair III	3
AMT 86	Advanced Aircraft Component Inspection I	8.5
AMT 87	Advanced Aircraft Component Inspection II	8.5
AMT 88	Advanced Aircraft Component Inspection III	3
	Total Required Units	**43**

Powerplant		
AMT 056L	Basic Science of Aviation Maintenance Technology	3
AMT 056	Basic Science of Aviation Maintenance Technology	6.5
AMT 058L	Survey of Aviation Maintenance Technology	3
AMT 058	Survey of Aviation Maintenance Technology	6.5
AMT 70L	Theory of Powerplants I	3
AMT 70	Theory of Powerplants I	5
AMT 74L	Theory of Powerplants II	3
AMT 74	Theory of Powerplants II	5
AMT 76L	Theory of Advanced Powerplants I	3
AMT 76	Theory of Advanced Powerplants I	5
AMT 78L	Theory of Advanced Powerplants II	3
AMT 78	Theory of Advanced Powerplants II	5
	Total Required Units	**51**

Diesel and Truck Mechanics		Units
DMECH 11	Truck Mechanics Chassis Systems I	6
DMECH 20A	Truck Mechanics I	4
DMECH 12	Truck Mechanics Chassis Systems II	6
DMECH 20B	Truck Mechanics II	4
AUTOB 12	Service Welding for Transportation Technology	2
DMECH 14	Diesel Engines I	4
DMECH 21A	Diesel Engines Lecture/Laboratory	6
ATECH 23	Automotive Air Conditioning	4
DMECH 15	Diesel Engines II	4
DMECH 21B	Diesel Engines Lecture/Laboratory	6
	Total Required Units	**46**

What degree will I receive and how many course credits will I need?

Auto Body and Paint: Certificates of Completion are granted in Auto Body or Auto Paint upon completion of the 27 units of required coursework. The Associate in Science degree will be awarded upon completion of the required courses plus general education requirements.

Automotive Technology: Certificates of Completion are granted in: Engine Performance, Chassis & Drivetrain, Chassis Specialist, Engine Repair Specialist, Automotive Electronics Specialist, and Drivetrain Specialist. Certificates are awarded upon completion of the required courses. The Associate in Science degree is awarded upon completion of the required courses plus general education requirements. A Certificate of Achievement in Light-Duty Auto Repair is also available upon completion of required courses.

Aviation Maintenance Technology: A Certificate of Completion in Airframe or Powerplant is given after completion of required coursework. An Associate in Science degree in either field is given after completion of required coursework and general education requirements. In addition, Students in the following courses receive Certificates of Achievement: Theory of Powerplants I, Theory of Powerplants II, Advanced Avionics and Powerplants I, Advanced Avionics and Powerplants II.

Diesel and Truck Mechanics: A Certificate of Completion is awarded upon completion of the 46 units of required coursework. The Associate in Science Degree is awarded upon completion of this coursework plus general education requirements.

Where do I get more information?

Contact the College of Alameda at (510) 522-7221

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