

Select four (4) units from the following list of courses:

Intro to Environmental Sustainability	ARCH	A101	(1)
CAD 2D for Architecture	ARCH	A150	(2)
BIM 1 for Architecture	ARCH	A155	(2)
BIM 2 for Architecture	ARCH	A156	(2)
3-D Modeling: Sketchup 1	ARCH	A160	(2)
3-D Modeling: Rhino or 3D Studio Max 1	ARCH	A162	(2)
Presentation Graphics for Architecture	ARCH	A165	(2)
Video for Architecture	ARCH	A167	(1)
Intro to Fabrication/Safety for Architecture	ARCH	A170	(1)
Fabrication 1 for Architecture	ARCH	A171	(2)
Fabrication 2 for Architecture	ARCH	A172	(2)
Design/Build for Architecture 1	ARCH	A201	(1)
Design/Build for Architecture 2	ARCH	A202	(2)

ASSOCIATE DEGREES

Complete the Certificate of Achievement and either the Associate in Arts or Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

ARCHITECTURAL DRAFTING AND DESIGN

CERTIFICATE OF ACHIEVEMENT

Required prerequisite:

Architectural Design Certificate of Achievement (19)

Required Courses

Course			Units
	Fall		
Arch Plan & Const Documents	ARCH	A185	(4)
Arch Dwg/Design Theory 2	ARCH	A215	(4)
Architectural Tech Elective(s)	ARCH		(2)
	Spring		
Building Materials & Systems	ARCH	A220	(4)
Arch Dwg/Design Theory 3	ARCH	A230	(5)
Architectural Tech Elective(s)	ARCH		(2)
	Subtotal:		(21)
	Total:		(40)

Select four (4) units from the following list of courses:

Intro to Environmental Sustainability	ARCH	A101	(1)
CAD 2D for Architecture	ARCH	A150	(2)
BIM 1 for Architecture	ARCH	A155	(2)
BIM 2 for Architecture	ARCH	A156	(2)
3-D Modeling: Sketchup 1	ARCH	A160	(2)
3-D Modeling: Rhino or 3D Studio Max 1	ARCH	A162	(2)
Presentation Graphics for Architecture	ARCH	A165	(2)
Video for Architecture	ARCH	A167	(1)
Intro to Fabrication/Safety for Architecture	ARCH	A170	(1)
Fabrication 1 for Architecture	ARCH	A171	(2)
Fabrication 2 for Architecture	ARCH	A172	(2)
Design/Build for Architecture 1	ARCH	A201	(1)
Design/Build for Architecture 2	ARCH	A202	(2)

Suggested electives:

Land & Building Development	ARCH/CNST	A225	(3)
Building Codes & Standards	ARCH	A250	(2)
History of Architecture 1	ARCH	A290	(3)
History of Architecture 2	ARCH	A296	(3)
Freehand Drawing	ART	A120	(3)
Computer Use in Technology	CHT	A100	(3)
Intro to Computer Graphics	DMAD	A181	(3)
Illus & Computer Graphics 1	DMAD	A190	(4)
Fund of Interior Design	ID	A100	(3)
Interior Design Studio 1	ID	A105	(2)
Space Planning	ID	A170	(3)
Interior Design Studio 3	ID	A265	(2)
Technical Math	TECH	A040	(3)

ASSOCIATE DEGREES

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–See *COMMERCIAL ART*



The Aviation Maintenance Technology program is divided into five areas: Airframe, Powerplant, Airframe and Powerplant, Avionics, and Helicopters.

The Aviation Maintenance Technology fields are of continuing growth and opportunity. The opportunities vary from field to field depending on the population's need for travel, business, and pleasure. Overall, the opportunities and availability outlooks are good to excellent. Each program prepares students in a specific area of aviation and will enable them to seek entry-level or higher levels of employment in the aviation industry.

The Aircraft Maintenance Technology program mission, following counsel of local community and industry leaders, is to provide quality instruction to promote student success with comprehensive training for those interested in entering the aviation maintenance profession and for professionals in the aviation maintenance field striving to improve their knowledge and skills in the areas comprising of Airframe, Powerplant, Avionics and Helicopter Maintenance

Program Outcomes

Students successfully completing the Orange Coast College Aviation Maintenance Technology program will have the necessary skills and training for proficiency in taking written, oral and practical exams for certification which may be required for employment.

Working craftsmen will be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

The following job titles include senior positions earned after beginning in an entry-level position and advancing upward:

- Airframe & Powerplant Technician**
- Airframe Mechanic**
- Powerplant Mechanic**
- Avionics Technician**
- Airline Maintenance Mechanic**
- General Aviation Maintenance Mechanic**
- Aircraft Manufacturer Flight Test Mechanic**
- Civil Defense Aircraft Mechanic**
- U.S. Military Aircraft Mechanic**
- FAA Repair Station Technician**
- Helicopter Mechanic**
- Executive Aviation Mechanic**
- Aircraft Inspector**
- Engine Overhaul Mechanic (Turbine or Recips.)**
- Aircraft Hydraulic, Pneumatic, Electrical Technician**

Note: Although the courses are sequenced, they may be started at any time.

AIRFRAME

This program provides training for the student who desires to be an Airframe Technician. The training received enables the technician to return to service an airplane, related part, and appliance after performing, supervising or inspecting its maintenance or alterations. This Certificate of Achievement can be acquired in two semesters, one intersession, and one summer school session.

This certificate would enable students to achieve employment at local aircraft manufacturing and repair facilities.

CERTIFICATE OF ACHIEVEMENT

Required Courses			
Course			Units
Fall			
General Maintenance Records	AMT	A150	(4)
General Electricity	AMT	A151	(3)
General Airfrm/Pwrplnt Fuel	AMT	A152	(2)
General Mat/Processes/Weld	AMT	A153	(3)
General Wgt/Bal/Math/Physics	AMT	A154	(3)
Intersession			
General Blueprint Read/Draft	AMT	A155	(2)
Airframe & Powerplant Instrument	AMT	A180	(2.5)
Spring			
Airframe & Pwrplnt Elec	AMT	A160	(6)
Fall			
Powerplant Recip Engines	AMT	A170	(6)
Powerplant Fuel/Mtr/Exhst	AMT	A171	(4)
Intersession			
Powerplant Ignition Sys	AMT	A174	(2.5)
Spring			
Pwrplnt Prplr/Lube Sys	AMT	A172	(4)
Powerplant Gas Turbine Eng	AMT	A173	(6)
Total:			(40.5)

Program approved by the Federal Aviation Administration (FAA).

Completion of the above enables the student to take the FAA Airframe written examination.

ASSOCIATE DEGREE

Complete the Certificate of Achievement and Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

POWERPLANT

This program provides training for the student who desires to be a Powerplant Technician. The training received enables the technician to return to service an aircraft powerplant and propeller after performing, supervising or inspecting its maintenance, overhaul or alterations.

This certificate would enable a student to achieve employment in local powerplant and propeller overhaul facilities and repair stations.

CERTIFICATE OF ACHIEVEMENT

Required Courses			
Course			Units
Fall			
General Maintenance Records	AMT	A150	(4)
General Electricity	AMT	A151	(3)
General Airfrm/Pwrplnt Fuel	AMT	A152	(2)
General Mat/Processes/Weld	AMT	A153	(3)
General Wgt/Bal/Math/Physics	AMT	A154	(3)
Intersession			
General Blueprint Read/Draft	AMT	A155	(2)
Airframe & Powerplant Instrument	AMT	A180	(2.5)
Spring			
Airframe & Pwrplnt Elec	AMT	A160	(6)
Fall			
Powerplant Recip Engines	AMT	A170	(6)
Powerplant Fuel/Mtr/Exhst	AMT	A171	(4)
Intersession			
Powerplant Ignition Sys	AMT	A174	(2.5)
Spring			
Pwrplnt Prplr/Lube Sys	AMT	A172	(4)
Powerplant Gas Turbine Eng	AMT	A173	(6)
Total:			(48)

Program approved by the Federal Aviation Administration (FAA).

Completion of the above enables the student to take the FAA Powerplant written examination.

ASSOCIATE DEGREE

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AIRFRAME & POWERPLANT

This program provides students with the technical skills and systems analysis necessary for entry-level positions as Airframe and Powerplant Certificated Mechanics in the aviation industry, such as airframe inspection, powerplant inspection, maintenance, and return-to-flight status of all types of U.S. Certificated aircraft.

Trained technicians are also successful in related fields of aircraft manufacturing, electronics, hydraulics, pneumatics, welding, sheet metal, quality control, civil and military defense. Additionally, students who have followed this program may earn an engineering degree at any one of several four-year institutions.

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CERTIFICATE OF ACHIEVEMENT

Required Courses		Units	
Course			
Fall			
General Maintenance Records	AMT	A150	(4)
General Electricity	AMT	A151	(3)
General Airfrm/Pwrplnt Fuel	AMT	A152	(2)
General Mat/Processes/Weld	AMT	A153	(3)
General Wgt/Bal/Math/Physics	AMT	A154	(3)
Intersession			
General Blueprint Read/Draft	AMT	A155	(2)
Airframe & Powerplant Instrument	AMT	A180	(2.5)
Spring			
Airframe & Pwrplnt Elec	AMT	A160	(6)
Airframe Sheet Mtl/Composite	AMT	A161	(5.5)
Airframe Asmbly/Rig/ECS	AMT	A162	(3)
Airframe Comm/Nvgation Sys	AMT	A181	(2)
Summer			
Arfrm Hyd & Lndg Gear	AMT	A163	(4.5)
Fall			
Powerplant Recip Engines	AMT	A170	(6)
Powerplant fuel/Mtr/Exhst	AMT	A171	(4)
Intersession			
Powerplant Ignition Sys	AMT	A174	(2.5)
Spring			
Powerplant Prplr/Lube Sys	AMT	A172	(4)
Powerplant Gas Turbine Eng	AMT	A173	(6)
Total:		(63)	

Program approved by the Federal Aviation Administration (FAA).

ASSOCIATE DEGREE

Complete the Certificate of Achievement and Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

AVIONICS

The Avionics program is designed to prepare students for entry-level positions as installation, maintenance, and repair technicians for avionic equipment in private, corporate, and commercial aircraft.

The aircraft industry is quickly evolving its level of sophisticated navigational and communications systems to include microprocessor-based systems in all areas of the airframe. This requires a new competent work force capable in the state-of-the-art technology of the future.

This two-semester certificate program combines theory and laboratory practices with hands-on application in actual aircraft. Upon completion, the student will be ready for employment in this fast growing and exciting field.

CERTIFICATE OF SPECIALIZATION

Required Courses		Units	
Course			
Fall			
General Electricity	AMT	A151	(3)
Aircraft Avionics Circuits	AMT	A182	(4)
Avionics Rules & Regulations	AMT	A188	(1.5)
Intersession			
Airframe & Powerplant Instrument	AMT	A180	(2.5)
Spring			
Airframe Comm/Nvgation Sys	AMT	A181	(2)
Aircraft Avionics Systems	AMT	A184	(4)
Total:		(17)	

ASSOCIATE DEGREE

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HELICOPTER THEORY AND MAINTENANCE

This program provides students with the general knowledge of rotary wing development, technology, construction, and a general survey of the helicopter industry.

This program also provides a good understanding of the helicopter type aircraft to interested individuals, technicians, and pilots.

CERTIFICATE OF SPECIALIZATION

Required Courses		Units	
Course			
Fall			
Theory and Operations	AMT	A140	(3)
Spring			
Helicopter Maintenance	AMT	A290	(4)
Total:		(7)	

AVIATION PILOT TRAINING

This program offers training areas such as corporate piloting, commuter airline piloting, aerial photography, and flight instruction. The curriculum also exposes students to space systems and employment opportunities in local aerospace corporations.

CERTIFICATE OF ACHIEVEMENT

Required Courses		Units	
Course			
Fall			
Private Pilot Ground School	APT	A130	(5)
Aviation-Meteorology	APT	A133	(3)
Basic Air Transportation	APT	A180	(3)
Spring			
Aviation-Navigation	APT	A132	(3)
Instrument Ground School	APT	A134	(3)