

# Aviation Maintenance Technologies

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The Aviation Maintenance Technologies Department at Cincinnati State offers a Federal Aviation Administration (FAA) approved degree program in Aviation Maintenance Technology and two certificate programs. Each program prepares graduates for a career maintaining and servicing aircraft components and systems.

All technical courses are conducted at the Cincinnati State airport facility, located on the Cincinnati State West Campus in Harrison, Ohio. Some non-technical courses are offered at the West Campus, or may be taken on the main campus or, in some cases, through online instruction.

## Aviation Maintenance Technology (AMT)

Aviation maintenance technicians keep aircraft operating safely and efficiently by servicing, repairing, and overhauling aircraft components and systems. Graduates of the program earn an Associate of Applied Science degree in conjunction with federal licensing. Coursework covers every system of today's aircraft. Mechanical skills are developed using the fleet of aircraft owned by Cincinnati State.

The aviation facility, located on the Cincinnati State West Campus in Harrison, Ohio, includes airframe, powerplant, and avionics labs. In addition, this facility houses a hangar equipped with seven aircraft and a lab equipped with computer-based training on modern transport aircraft.

## Aviation Mechanics Certificates (AVAC, AVONC, and AVPC)

The Aviation Maintenance Technology program includes three certificate programs, Aviation Mechanics Airframe, Avionics, and Aviation Mechanics Powerplant. Following successful completion of the Airframe and/or Powerplant certificate requirements, students may take FAA licensing tests. Certification requirements are subject to current Federal Aviation Administration requirements and may change without notice.

The Avionics Certificate provides advanced skills in aviation electronics for students who are FAA-certified aviation mechanics. Graduates are able to troubleshoot and repair in a flight-line environment: onboard computers, automatic pilot, instrument navigation and communication equipment, and powerplant electronic control systems. Potential employers include corporate aviation departments and airlines. Certification requirements are subject to current Federal Aviation Requirements and may change without notice.

## Aviation Maintenance Technology (AMT)

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 12 credit hours taken at Cincinnati State.

		<b>Credits</b>
<b>Semester 1</b>		
AMT 100	Aviation Standard Practices	6
AMT 105	Aircraft Orientation	4
AMT 110	Aircraft Electricity	4
AMT 115	Aircraft Weight and Balance	4
MAT 121	Technical Algebra and Geometry with Statistics	3
<b>Semester 2</b>		
ENG 101	English Composition	3
AMT 120	Aircraft Non-Metal Structures	5
PHY 121	Technical Physics 1	3
AMT 130	Aircraft Welding Processes	3
AMT 135	Aircraft Landing Gear Systems	5
AMT 140	Airframe Electrical Systems	6
<b>Semester 3</b>		
PHY 122	Technical Physics 2	3
AMT 125	Aircraft Metal Structures	5
AMT 145	Airframe Electronic Systems	2
AMT 150	Airframe Systems	4
AMT 155	Airframe Assembly and Rigging	5
AMT 160	Airframe Inspection	2
<b>Semester 4</b>		
ENG 104	Composition and Technical Communication	3
AMT 191	Part-Time Cooperative Education 1: Aviation Maintenance Technology	1
AMT 201	Powerplant Maintenance 1	8

AMT 215	Aircraft Propellers	4
<b>Semester 5</b>		
PSY 100	Applied Psychology: Human Relations	3
COMM 110	Public Speaking	3
AMT 192	Part-Time Cooperative Education 2: Aviation Maintenance Technology	1
ECO 1XX Economics Elective		3
AMT 202	Powerplant Maintenance 2	7
AMT 205	Starting and Ignition Systems	5
<b>Semester 6</b>		
PHY 110	Health Physics	3
AMT 193	Part-Time Cooperative Education 3: Aviation Maintenance Technology	1
AMT 200	Engine Instruments and Electrical Systems	5
AMT 203	Powerplant Maintenance 3	5
AMT 210	Engine Fuel and lubrication Systems	7
Total Credits:		126

## Electives

### Economics Elective

ECO 105	Principles of Microeconomics	3
ECO 110	Principles of Macroeconomics	3

## Aviation Mechanics Airframe Certificate (AVAC)

		Credits
<b>Semester 1</b>		
AMT 100	Aviation Standard Practices	6
AMT 105	Aircraft Orientation	4
AMT 110	Aircraft Electricity	4
AMT 115	Aircraft Weight and Balance	4
MAT 121	Technical Algebra and Geometry with Statistics	3
<b>Semester 2</b>		
ENG 101	English Composition	3
AMT 120	Aircraft Non-Metal Structures	5
PHY 121	Technical Physics 1	3
AMT 130	Aircraft Welding Processes	3
AMT 135	Aircraft Landing Gear Systems	5
AMT 140	Airframe Electrical Systems	6
<b>Semester 3</b>		
PHY 122	Technical Physics 2	3
AMT 125	Aircraft Metal Structures	5
AMT 145	Airframe Electronic Systems	2
AMT 150	Airframe Systems	4
AMT 155	Airframe Assembly and Rigging	5
AMT 160	Airframe Inspection	2
Total Credits:		67

## Avionics Certificate (AVONC)

		Credits
<b>Semester 1</b>		
AMT 100	Aviation Standard Practices	6
AMT 105	Aircraft Orientation	4
AMT 110	Aircraft Electricity	4
AMT 115	Aircraft Weight and Balance	4

MAT 121	Technical Algebra and Geometry with Statistics	3
<b>Semester 2</b>		
ENG 101	English Composition	3
AMT 140	Airframe Electrical Systems	6
AMT 150	Airframe Systems	4
AMT 155	Airframe Assembly and Rigging	5
<b>Semester 3</b>		
PHY 121	Technical Physics 1	3
AMT 200	Engine Instruments and Electrical Systems	5
AMT 271	Avionics 1	4
<b>Semester 4</b>		
PHY 122	Technical Physics 2	3
AMT 272		4
Total Credits:		58

## Aviation Mechanics Powerplant Certificate (AVPC)

		Credits
<b>Semester 1</b>		
AMT 100	Aviation Standard Practices	6
AMT 105	Aircraft Orientation	4
AMT 110	Aircraft Electricity	4
AMT 115	Aircraft Weight and Balance	4
MAT 121	Technical Algebra and Geometry with Statistics	3
<b>Semester 2</b>		
ENG 101	English Composition	3
PHY 121	Technical Physics 1	3
AMT 201	Powerplant Maintenance 1	8
AMT 215	Aircraft Propellers	4
<b>Semester 3</b>		
PHY 122	Technical Physics 2	3
AMT 202	Powerplant Maintenance 2	7
AMT 205	Starting and Ignition Systems	5
<b>Semester 4</b>		
AMT 200	Engine Instruments and Electrical Systems	5
AMT 203	Powerplant Maintenance 3	5
AMT 210	Engine Fuel and lubrication Systems	7
Total Credits:		71