Aircraft Maintenance
Airframe

Certificate in Applied Science
Credit Requirements: 29 Semester Credit Hours
This certificate, along with the General and Powerplant certificates, prepares the student to sit for the certification exams required by the Federal Aviation Administration to become certified airframe and powerplant maintenance technicians. Students are prepared for employment repairing aircraft, engines and related systems with airlines, government agencies, aircraft manufacturers and aircraft service companies.

For admission into this program the student must be a high school graduate or possess a GED and take TTC’s placement test or meet the college’s SAT or ACT requirements.

Recommended Sequence of Courses
First Semester – Spring
ACM 125 Wood Structures, Coverings and Finishes 2
ACM 135 Sheet Metal and Non-metallic Structures 4
ACM 145 Aircraft Welding 2
ACM 165 Hydraulic and Pneumatic Systems 3
Total 11

Second Semester – Summer
ACM 150 Assembly and Rigging 3
ACM 155 Aircraft Environmental Systems 3
ACM 160 Utility and Warning Systems 3
ACM 167 Landing Gear Systems 3
Total 12

Third Semester – Fall
ACM 170 Aircraft Electrical Systems 4
ACM 172 Aircraft Fuel Systems 1
ACM 174 Airframe Inspection 1
Total 6

Aircraft Maintenance
General

Certificate in Applied Science
Credit Requirements: 18 Semester Credit Hours
This certificate, along with the Airframe and Powerplant certificates, prepares the student to sit for the certification exams required by the Federal Aviation Administration to become certified airframe and powerplant maintenance technicians. Students are prepared for employment repairing aircraft, engines and related systems with airlines, government agencies, aircraft manufacturers and aircraft service companies.

For admission into this program the student must be a high school graduate or possess a GED and take TTC’s placement test or meet the college’s SAT or ACT requirements.

Recommended Sequence of Courses
First Semester – Fall
ACM 101 General Regulations 2
ACM 102 Aviation Sciences 3
ACM 105 Basic Aircraft Electricity 4
ACM 110 Aircraft Drawings 1
ACM 115 Ground Handling and Servicing 3
ACM 120 Materials and Corrosion Control 4
Total 17

Second Semester – Spring
ACM 114 Fluid Lines and Fittings 1
Total 1

Aircraft Maintenance
Powerplant

Certificate in Applied Science
Credit Requirements: 30 Semester Credit Hours
This certificate, along with the General and Airframe certificates, prepares the student to sit for the certification exams required by the Federal Aviation Administration to become certified airframe and powerplant maintenance technicians. Students are prepared for employment repairing aircraft, engines and related systems with airlines, government agencies, aircraft manufacturers and aircraft service companies.

For admission into this program the student must be a high school graduate or possess a GED and take TTC’s placement test or meet the college’s SAT or ACT requirements.
Recommended Sequence of Courses

First Semester – Fall
ACM 201 Lubricating Systems 2
ACM 205 Ignition and Starting Systems 3
ACM 245 Powerplant Fuel Systems 4
Total 9

Second Semester – Spring
ACM 220 Turbine Engines 3
ACM 234 Propellers and Components 4
ACM 240 Engine Electrical Instrumentation and Fire Protection 3
ACM 250 Induction Cooling and Exhaust 3
Total 13

Third Semester – Summer
ACM 210 Reciprocating Engine Overhaul 4
ACM 212 Engine Installation 3
ACM 226 Engine Inspection 1
Total 8

Avionics Maintenance Technology

Certificate in Applied Science
Credit Requirements: 40 Semester Credit Hours
This certificate prepares the student to sit for the certification exams required by the Federal Communications Commission (FCC) and National Center for Aerospace and Transportation Technologies (NCATT) to become certified avionics maintenance technicians. Students will gain the skills needed to exceed employer expectations. Instruction includes installation, maintenance, troubleshooting and calibration of systems related to navigation, communication, power generation and other critical electrical, electronic and ancillary systems required to keep aircraft flying safely.

Admission into this program requires proof of high school graduation (or GED) and qualifying scores on SAT, ACT or the TTC placement test.

Recommended Sequence of Courses

First Semester – Fall
AVT 101 Basic Electricity for Avionics 4
AVT 110 Aircraft Electronic Circuits 4
AVT 115 Aircraft Digital Circuits 3
AVT 145 Avionics Circuit Repair 3
Total 14