

Aerospace Manufacturing Engineering Technician

Program Code, Fall Intake: 0311

Program Code, Winter Intake: 0318



Overview

Your ideas can change the world! From building planes to developing new products that improve peoples' lives, there's never been a more exciting time to pursue a career in advanced manufacturing.

This two-year diploma program teaches you how to function effectively in Canada's aerospace industry. Work with advanced design programs such as CATIA. Learn about carbon fibre composites and how these materials make a world of difference in flight and other industries. Get hands-on experience in machining, CNC, rapid prototyping with 3D printing, laser cutting and other manufacturing fundamentals. You'll learn the aircraft design, modelling and manufacturing basics you need to develop a fulfilling career, bringing solutions to life and making a mark in the fields of aviation and advanced manufacturing and engineering.



Top Highlights

- Developed in consultation with Canada's leading aerospace companies including Bombardier, Boeing and Magellan Aerospace
- Learn and work in our state-of-the-art lab facilities located in the new Technology, Education and Collaboration Hub
- Learn from experienced faculty who have worked in the industry
- Transfer your innovation, design and other skills to industries including mass transit and car manufacturing



Learner Testimonial

The AMET program offers the perfect balance between trades, technology and engineering. The teachers and state-of-the-art equipment excited and motivated me, and I enjoyed the blend of hands-on education, theory classes and project-based learning. The program taught me to always take solution-oriented approaches and I gained a substantial amount of manufacturing knowledge to prepare me for my career. The AMET program is well established amongst some of the largest manufacturing companies so there are never-ending job prospects upon graduation.

Greg G. / Alumnus / 2019 (2-yr) & 2020 (3-yr)
Lead Advanced Manufacturing Technologist /
Northwestern Ontario Innovation Centre

Aerospace Manufacturing Engineering Technician

Admission Requirements

- Ontario Secondary School Diploma (or equivalent) with courses from the College (C), University (U), University/College (U/C), or Open (O) preparation levels with Grade 12 English (C/U) Level.
- or successful completion of the Mature Student Assessment.
- or successful completion of the General Education Development Test (GED).
- or appropriate credits from the Academic and Career Entrance program (ACE).

Other Required Courses

- Grade 11 MCF3M Functions and Applications or MCR3U Functions or Grade 12 MAP4C Foundations for College Math or MCT4C Mathematics for College Technology or University Preparation.

Alternative Pathways

If you do not possess the necessary admission requirements (or equivalency), we encourage you to consider our Pre-Technology-Technology/Aviation program which will provide the necessary preparation to apply to this program. Completion of the Pre-Technology-Technology/Aviation program does not guarantee admission to the Aerospace Manufacturing Engineering Technician program in a subsequent year.

Employment Opportunities

Graduates of Confederation College's Aerospace Manufacturing Engineering Technician Diploma program go on to work at aerospace manufacturing and design companies including Bombardier, Boeing, Bell Helicopter, Airbus and others. Many of the skills and knowledge you'll learn here can be easily transferred to other industries including automotive, rail and industrial manufacturing.

Articulation Agreements

Confederation College has agreements in place that permit credits earned throughout this program to be transferred to programs at other colleges and universities.

Visit: confederationcollege.ca/articulation-agreements for more information.

First Semester

| | |
|--------|---|
| TM 107 | Physical Science for Aerospace & Mechanical Engineering |
| TM 112 | Engineering Graphics CAD I |
| TM 121 | Metal Fabrication Methods |
| TM 136 | Machine Shop I |
| CS 050 | College Writing |
| MA 133 | Mathematics I |
| MC 165 | Microsoft Office |

Second Semester

| | |
|--------|---|
| CS 219 | Communications for Technology |
| TM 207 | Statics |
| TM 212 | Engineering Graphics/CAD II |
| TM 221 | Aircraft Assembly Methods 1 |
| TM 236 | Machine Shop II |
| TM 269 | Energy & Environment Issues Manufacturing |
| MA 231 | Mathematics II |
| GE | General Elective |

Third Semester

| | |
|--------|--|
| TM 313 | Strength of Materials |
| TM 321 | Aircraft Assembly Methods 2 |
| TM 333 | Chemistry of Metals, Polymers and Ceramics |
| TM 348 | Manufacturing and Joining Processes |
| TM 347 | Tool Design I |
| TM 336 | CNC Programming and Metal Cutting Theory |
| GE | General Elective |

Fourth Semester

| | |
|--------|----------------------------------|
| MA 331 | Mathematics III |
| TM 436 | CNC Programming |
| TM 427 | Intro to Operations Management |
| TM 433 | Fluid Power |
| TM 452 | Metallurgy and Materials Testing |
| TM 453 | Composites I |
| GE | General Elective |

For information, please contact:

Rod Kotanen
Program Coordinator
(807) 475-6450 | Arvid.Kotanen@confederationcollege.ca