



CREDENTIAL	PROGRAM CODE	AREA OF INTEREST	LOCATION	DURATION
Ontario College Diploma	Fall: 0311   Winter: 0318	Engineering Technology	Thunder Bay	2 -year

## 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



### Experiential Learning

Applied Research



### 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.



### Rod Kotanen Program Coordinator

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# 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.

## 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](http://confederationcollege.ca/articulation-agreements) for more information.

## First Semester

CS 050 College Writing  
MA 133 Mathematics I  
MC 165 Microsoft Office  
TM 107 Physical Science for Aerospace & Mechanical Engineering  
TM 112 Engineering Graphics CAD 1

### Select one of the following:

TM 010 Metal Fabric Methods - Theory<sup>1</sup>  
TM 011 Metal Fabric Methods - Lab<sup>1</sup>  
TM 121 Metal Fabric Methods<sup>1</sup>

### Select one of the following:

TM 013 Machine Shop I - Theory<sup>2</sup>  
TM 014 Machine Shop I - Lab<sup>2</sup>  
TM 136 Machine Shop 1<sup>2</sup>

## Second Semester

CS 219 Communications for Technology  
MA 231 Mathematics II  
SY 066 Sociology of Community: The Indigenous Context  
TM 207 Statics  
TM 212 Engineering Graphics/CAD 2  
TM 269 Energy & Environment Issues Manufacturing

### Select one of the following:

TM 021 Aircraft Assembly Methods - Theory<sup>1</sup>  
TM 022 Aircraft Assembly Methods - Lab<sup>1</sup>  
TM 221 Aircraft Assembly Methods 1<sup>1</sup>

### Select one of the following:

TM 023 Machine Shop II - Theory<sup>2</sup>  
TM 024 Machine Shop II - Lab<sup>2</sup>  
TM 236 Machine Shop 2<sup>2</sup>

## Third Semester

GE General Elective  
TM 313 Strength of Materials  
TM 321 Aircraft Assembly Methods 2  
TM 333 Chemistry of Metals, Polymers and Ceramics  
TM 336 CNC Programming and Metal Cutting Theory  
TM 347 Tool Design 1  
TM 348 Manufacturing and Joining Processes

## Fourth Semester

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



**Have questions? Want to apply?**  
Contact [recruitment@confederationcollege.ca](mailto:recruitment@confederationcollege.ca)

