

# **Aerospace Manufacturing Engineering Technician**



**CREDENTIAL** 

Ontario College Diploma

**PROGRAM CODE** 

Fall: 0311 | Winter: 0318

**AREA OF INTEREST** 

**Engineering Technology** 

LOCATION **Thunder Bay** 

DURATION

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 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 1 TM 011 Metal Fabric Methods - Lab 1 TM 121 Metal Fabric Methods 1

# 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 2 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	<b>CNC Programming and Metal Cutting Theory</b>

Tool Design 1 TM 347

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

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NOTE: Content subject to change. Visit the program website for the most current information.





