

# MECHANICAL ENGINEERING TECHNOLOGY

241.A0



**3 YEARS**

[www.dawsoncollege.qc.ca/mechanical-engineering-technology](http://www.dawsoncollege.qc.ca/mechanical-engineering-technology)

## If you would like to:

- ☐ Learn about robotics, automation and machinery
- ☐ Use advanced technology in a hands-on mechanical laboratory setting
- ☐ Collaborate in a team environment
- ☐ Have the option of studying Automated Manufacturing or Mechanical Design
- ☐ Design, build and prototype anything you can imagine

Then the Mechanical Engineering Technology Program could be for you.

“Through hands-on learning in the machine shop and with the software, I got to apply theoretical knowledge and gain practical experience in manufacturing.

— Navid H.

The Mechanical Engineering Technology Program will prepare you to work in the design, construction, installation, control and use of mechanical devices in the manufacturing of goods. The labs at Dawson are equipped with both conventional equipment (lathes and welding facilities) and high-tech resources (CAD, CNC machining tools and robotics) to give you the skills needed to work in the exciting field of Mechanical Engineering. Study with small teams of students and gain experience that often leads to immediate employment upon graduation.

## What will you learn?

- To program and service automated equipment
- To machine and operate conventional and CNC equipment
- To communicate and present technical information
- To plan and manage the manufacture of goods
- To design mechanical devices of moderate complexity

## Where will this program lead you?

Graduates of the program often pursue careers as mechanical engineering technologists in the following areas: Computer Aided Manufacturing (CAM), Computer Aided Design (CAD), quality control and inspection, research and development, technical sales and project management. Other graduates choose to continue their studies at the university level in Engineering or other programs. These sometimes require additional prerequisites.

### What do you need to apply?

- A Diploma of Secondary Studies (DES) or academic background judged equivalent to the DES
- Sec IV Mathematics – Technical & Scientific option or Science option 564-426 or 565-426 or Sec V Cultural, Social & Technical option 563-504
- Sec V Physics 553-504

### What else should you know?

As a student in Mechanical Engineering Technology, you will choose either the Mechanical Design or the Automated Manufacturing option for the final year of the program.

Students often find summer internships due to steady demand from local industry. In addition to being recognized across Canada, graduates can work in the U.S.A. and Mexico under the TN NAFTA Professionals agreement (please consult the official agreement for further information).

### Application Deadline

March 1

### DID YOU KNOW?

Students entering this program are eligible for *Bourses Perspective* scholarships. These \$1,500 scholarships will be awarded to students after each successful full-time term, for a total of \$9,000 for a three-year program.

Information about how to apply can be found online by searching for “Québec Perspective Scholarship Program” in your browser.



### LIST OF SPECIFIC COURSES

All students must also take General Education courses such as English, French, Humanities and Physical Education, in addition to complementary courses.

#### YEAR 1

#### YEAR 2

#### YEAR 3 • Mechanical Design

#### YEAR 3 • Automated Manufacturing

Term 1	Term 3	Term 5	Term 5
<ul style="list-style-type: none"><li>■ Engineering Mathematics I</li><li>■ Introduction to CIM</li><li>■ Introduction to Mechanical Engineering Technology</li><li>■ Metrology</li><li>■ Engineering Graphics</li><li>■ Engineering Materials</li></ul>	<ul style="list-style-type: none"><li>■ Engineering Mathematics II</li><li>■ CAD II</li><li>■ Machine Tools II</li><li>■ Manufacturing Processes</li></ul>	<ul style="list-style-type: none"><li>■ Pneumatic Systems</li><li>■ Machine Design</li><li>■ Sheet Metal Design</li><li>■ Design Modification</li><li>■ CAD IV</li><li>■ System Design I</li></ul>	<ul style="list-style-type: none"><li>■ Design Modifications</li><li>■ Production Tooling</li><li>■ Production Planning</li><li>■ NC Lathe</li><li>■ Automated Circuits I</li><li>■ Industrial Automation</li></ul>
Term 2	Term 4	Term 6	Term 6
<ul style="list-style-type: none"><li>■ Engineering Physics I</li><li>■ Machine Tools I</li><li>■ Mechanical Components I</li><li>■ Quality Control</li><li>■ CAD I</li><li>■ Heat Treatment</li></ul>	<ul style="list-style-type: none"><li>■ Engineering Physics II</li><li>■ Tooling Manufacturing</li><li>■ CNC Operation</li><li>■ Mechanical Components II</li><li>■ CAD III</li></ul>	<ul style="list-style-type: none"><li>■ Emerging Technologies</li><li>■ 3D Modelling</li><li>■ System Design II</li><li>■ Design Project</li></ul>	<ul style="list-style-type: none"><li>■ Graphic Programming</li><li>■ Automated Circuits II</li><li>■ Industrial Systems</li><li>■ Manufacturing Project</li></ul>