Bachelor of Technology

REQUIREMENTS FOR ADMISSION (ONTARIO)

- English
- Calculus
- Chemistry
- Physics

77-80% ANTIPECTED ADMISSION AVERAGE 240 TARGET ENROLLMENT (*) ACIC APPLICATION CODE

AUTOMATION ENGINEERING TECHNOLOGY (AET)

- MAT: Automation & Vehicle Engineering Technology (AVET)
- MTE: Biotechnology (BIO)
- MFT: Automation Engineering Technology (AET)

TOP FIVE PROGRAM STRENGTHS (according to surveyed students)

- Small class sizes: Our average lecture size is 40-60 students
- Co-op work: Students spend 700+ hours in the lab applying engineering theory
- Quality of facilities: Engineering Technology Building (2009) and McMaster Automotive Resources Centre (2013)
- Management courses: Approximately 25% of the curriculum is devoted to courses in business and management
- Student body: Our average class size is 200 students

FIRST YEAR AT A GLANCE

TOTAL: 30 units REQUIRED: 30 units

First year courses:

- Engineering Technology 1CH3 – Chemistry
- Engineering Technology 1CP3 – C++ Programming
- Engineering Technology 1EL3 – Electricity and Electronics I
- Engineering Technology 1MC3 – Mathematics I
- Engineering Technology 1MT3 – Mathematics II
- Engineering Technology 1PH3 – Physics
- General Technology 1CZ3 – Communication Skills I
- General Technology 1EZ3 – Communication Skills II
- WHMIS 1A00 – Introduction to Health & Safety

Plus 6 units from course list of chosen stream:

Automotive and Vehicle Engineering Technology Stream

- Engineering Technology 1ME3 – Mechanics
- Engineering Technology 1PR3 – Object-Oriented Programming

Biotechnology Stream

- Engineering Technology 1AC3 – Analytical Chemistry
- Engineering Technology 1BI3 – Biology

Automation Engineering Technology Stream

- Engineering Technology 1AC3 – Analytical Chemistry
- Engineering Technology 1PR3 – Object-Oriented Programming

WHY CHOOSE McMASTER?

TOP 5 PROGRAM STRENGTHS (according to surveyed students)

- Hands-on labs: Students spend 700+ hours in the lab applying engineering theory
- Small class sizes: Our average lecture size is 40-60 students
- Co-op work: Students spend 700+ hours in the lab applying engineering theory
- Quality of facilities: Engineering Technology Building (2009) and McMaster Automotive Resources Centre (2013)
- Management courses: Approximately 25% of the curriculum is devoted to courses in business and management

LEADING TECHNOLOGY | THREE STREAM SPECIALIZATIONS |

The W. Booth School of Engineering Practice and Technology offers the Bachelor of Technology (B.Tech) program in response to today's industry needs.

Our students go beyond learning from a textbook – they learn from experiential projects in lectures, labs, and paid industry employment.

Students apply directly to their desired stream specialization. There are three streams from which to choose:

- Automotive and Vehicle Engineering Technology (AVET)
- Biotechnology (BIO)
- Automation Engineering Technology (AET)

Management courses are integrated into the curriculum for all streams.

BEYOND FIRST YEAR

MANDATORY CO-OP

- Mandatory 12 months of paid co-op work experience
- Support is provided by Engineering Co-op and Career Services
- Wage rates for co-ops are between $15-$22/hour

The co-op schedule is as follows:

<table>
<thead>
<tr>
<th>FALL</th>
<th>WINTER</th>
<th>SUMMER</th>
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</thead>
<tbody>
<tr>
<td>Year 1 AVET/BIO/AET 1 – A</td>
<td>AVET/BIO/AET 1 – B</td>
<td>Optional CO-OP</td>
</tr>
<tr>
<td>Year 2 AVET/BIO/AET 2 – A</td>
<td>AVET/BIO/AET 2 – B</td>
<td>4 Month CO-OP</td>
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<tr>
<td>Year 3 AVET/BIO/AET 3 – A</td>
<td>AVET/BIO/AET 3 – B</td>
<td>8 Month CO-OP</td>
</tr>
<tr>
<td>Year 4 AVET/BIO/AET 4 – A</td>
<td>AVET/BIO/AET 4 – B</td>
<td>Optional CO-OP</td>
</tr>
</tbody>
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FUTURE CAREERS

What have our graduates done with their degree?

Automotive and Vehicle Engineering Technology

- Develop new hybrid and green vehicle technologies
- Design power and control systems, engines and bodies
- Perform complex analysis on mechanical components, assemblies and systems

TOP CO-OP EMPLOYERS: Fiat Chrysler Canada, General Motors Canada, PCC Aerostuctures, Magna, Linear

Biotechnology

- Work in biotechnology, food, and pharmaceutical industries
- Monitoring quality control and assurance of biomaterials and bioproducts
- Work in bioinformatics, genetic and protein engineering, nanobiotechnology, and bioremediation

TOP CO-OP EMPLOYERS: Apotex, Maple Leaf Foods, Ontario Ministry of Agriculture and Food, PepsiCo Canada, St. Joseph’s Healthcare Hamilton

Automation Engineering Technology

- Use hardware and software to improve the efficiency of plants and labs in industries such as petrochemicals, power generation, pharmaceuticals, and primary steel
- Design control systems and assembly lines
- Develop and program robotics
- Advise on safety policies and procedures for automated technologies

TOP CO-OP EMPLOYERS: Evertz Microsystems, GE Canada, RBC Royal Bank, Opus Automation

CANADA RANKS AMONG THE TOP FIVE COUNTRIES IN BIOTECHNOLOGY

eng.mcmaster.ca/future
B. Tech. Management Advantage

The B. Tech. program has long recognized industry demands for engineering technology professionals who understand the essentials of business and management. The program has responded to these demands by integrating technical and management courses into the B. Tech. curriculum. As a result, our students have the knowledge and skills necessary to become effective project leaders, supervisors and managers within changing professional environments.

The B. Tech. program develops students and graduates with a rare combination of applied engineering and management skills. Engineering technology graduates often understand the technology but not the business side of the industry. Business School graduates often understand management skills but not the technology. B. Tech. graduates understand both sides of the picture, and perhaps most importantly, how the two sides fit together. B.Tech. students and graduates are able to “think inside and outside the box”, in fact they can re-design the box and help sell it.

CIM ACCREDITATION

The B. Tech. program is accredited by the Canadian Institute of Management (CIM), which recognizes B. Tech. as a leader in business and management education.