If it moves, a mechanical engineer designed it! Mechanical engineers are responsible for a wide range of mechanical, thermal and biomedical systems and devices, from computer parts to power plants, from manufacturing systems to spacecraft. This is a broad-based area of engineering, and graduates find work in almost every industrial sector, including high tech, aerospace, manufacturing, auto, energy, biomedical and consulting.

This program is offered in English and in French. French courses are available in first year and almost all of second year. Most third and fourth year courses are offered in English only.

Program Requirements

Co-operative education is available with this program.

Compulsory First-Year Courses:
- **ADM 1100** Introduction to Business Management 3 Units
- **ADM 1340** Financial Accounting 3 Units
- **CHM 1311** Principles of Chemistry 3 Units
- **ENG 1112** Technical Report Writing 3 Units
- **GNG 1103** Engineering Design 3 Units
- **GNG 1105** Engineering Mechanics 3 Units
- **GNG 1106** Fundamentals of Engineering Computation 3 Units
- **MAT 1320** Calculus I 3 Units
- **MAT 1322** Calculus II 3 Units
- **MAT 1341** Introduction to Linear Algebra 3 Units
- **MCG 1100** Introduction to Mechanical Engineering 3 Units
- **PHY 1122** Fundamentals of Physics II 3 Units

Compulsory Second-Year Courses:
- **ADM 2320** Marketing 3 Units
- **CVG 2140** Mechanics of Materials I 3 Units
- **ELG 2336** Electric Circuits and Machines for Mechanical Engineering 3 Units
- **GNG 2101** Introduction to Product Development and Management for Engineers and Computer Scientists 3 Units
- **MAT 2322** Calculus III for Engineers 3 Units
- **MAT 2377** Probability and Statistics for Engineers 3 Units
- **MAT 2384** Ordinary Differential Equations and Numerical Methods 3 Units
- **MCG 2101** Introduction to Design 3 Units
- **MCG 2108** Mechanics II 3 Units
- **MCG 2130** Thermodynamics I 3 Units
- **MCG 2131** Thermodynamics II 3 Units
- **MCG 2360** Engineering Materials I 3 Units
- **MCG 2361** Engineering Materials II 3 Units

Compulsory Third-Year Courses:
- **ADM 3313** New Venture Creation 3 Units
- **ELG 3336** Electronics for Mechanical Engineers 3 Units
- **GNG 4170** Engineering Law 3 Units
- **MAT 3320** Mathematics for Engineers 3 Units
- **MCG 3110** Heat Transfer 3 Units
- **MCG 3130** Dynamics of Machinery 3 Units
- **MCG 3131** Machine Design 3 Units
- **MCG 3145** Advanced Strength of Materials 3 Units
- **MCG 3306** System Dynamics 3 Units
- **MCG 3307** Control Systems 3 Units
- **MCG 3340** Fluid Mechanics I 3 Units
- **MCG 3341** Fluid Mechanics II 3 Units

Compulsory Fourth-Year Courses:
- 3 course units from:
  - **GNG 4120** Technology Entrepreneurship for Engineers and Computer Scientists 3 Units
  - **HIS 2129** Technology, Society and Environment Since 1800 3 Units
  - **PHI 2394** Scientific Thought and Social Values 3 Units
- **MCG 4308** Mechanical Vibration Analysis 3 Units
- **MCG 4322** Computer-Aided Design 6 Units
- **MCG 4328** Manufacturing 3 Units
- **MCG 4340** Mechanical Engineering Laboratory 3 Units
- 3 course units of science electives 3 Units

Total: 132 Units