Get to know
MATHMATICS AND ENGINEERING

This one-of-a-kind program in Canada teaches highly sophisticated mathematical approaches to engineering issues. As a Mathematics and Engineering student, you will study pure and applied mathematics along with engineering courses in your chosen area of specialization. You will learn to analyze and solve engineering problems requiring superior mathematics skills, such as those involving modern communications, control, and mechatronic systems.

Degree OPTIONS
Bachelor of Applied Science
Bachelor of Applied Science with Professional Internship
Option in Applied Mechanics / Computing and Communications / Systems and Robotics

Queen's ADMISSIONS
Students apply to Queen's Engineering (QE) through the OUAC (Ontario University Application Centre) website. Secondary School prerequisites include five 4U and 4M courses, one of which must be English 4U. Calculus and Vectors 4U, Chemistry 4U, and Physics 4U are all required along with one of Advanced Functions 4U, Biology 4U, Data Management 4U, Computer Science 4U, Earth and Space Science 4U. A final grade of 70% must be obtained in English 4U. Applicants outside of Ontario may have additional requirements.

Course HIGHLIGHTS
Mathematics and Engineering students have the opportunity to take a wide range of technical courses to help prepare them for the many possible career destinations available. Such courses include:
- Number Theory and Cryptography
- Lagrangian Mechanics, Dynamics, and Control
- Coding Theory
- Stochastic Processes and Applications
- Modern Control Theory
- Information Theory
- Optimization Theory and Applications

A Common START
Queen's is unique in offering a common First Year along with an open discipline choice. When you do choose your program, you don't have to worry about caps or quotas. Provided you pass all of your First Year courses, you are guaranteed a place in your engineering program of choice. Queen's also offers Section 900, a special extended program for students struggling with First Year courses. Take things at a slower pace and recover in time for Second Year.

Computer Science 4U, Earth and Space Science 4U. A final grade of 70% must be obtained in English 4U. Applicants outside of Ontario may have additional requirements.

Get started thinking about the future now — where do you want to go after your degree? Having tentative goals (like careers or grad school) while working through your degree can help with short-term decisions about courses and experiences, but also help you keep motivated for success.

Get the help you need
Queen's provides you with a broad range of support services from your first point of contact with the university through to graduation. At Queen's, you are never alone. We have many offices dedicated to helping you learn, think and do.

Ranging from help with academics and careers, to physical, emotional, or spiritual resources — ranging from help with academics and careers, to physical, emotional, or spiritual resources — Queen's has attracted students with an ambitious spirit. Queen's has the highest retention rates, the highest graduation rates, and one of the highest employment retention rates among recent graduates. We are a research intensive university focused on the undergraduate experience. The BBC has identified us as one of the GREATEST UNIVERSITY TOWNS in the world — and is often awarded the safest city in Canada.

For 175 years, our community has been more than a collection of bright minds — Queen's has attracted students with an ambitious spirit. Queen's has the highest retention rates, the highest graduation rates, and one of the highest employment rates among recent graduates. We are a research intensive university focused on the undergraduate experience. The BBC has identified us as one of the GREATEST UNIVERSITY TOWNS in the world — and is often awarded the safest city in Canada.

We are a university city at the core; just a quick drive to Toronto, Montreal, Ottawa and recover in time for Second Year. First Year courses. Take things at a slower pace and recover in time for Second Year.

That is a degree from Queen's.
2ND YEAR

Courses include: Algebraic Structures, Differential Equations, Advanced Calculus, Real Analysis, and Linear Algebra. You will take the second EDPS course - APSC200. Your other 5-6 courses depend on your option.

3RD YEAR

Courses include: Functions of a Complex Variable, Control, Mathematical Methods for Engineering & Physics, Engineering Design & Practice, and Engineering Economics. Your other 6-7 courses depend on your option.

4TH OR FINAL YEAR

Courses include: Mathematics & Engineering Seminar and the Engineering Mathematics Design Project course. Your remaining courses will depend on your option! Complete all the required courses based on your academic plan and option, and you are set to graduate.

What could I do after graduation?

- Aerospace Systems
- Artificial Intelligence
- Astronomy
- Biomedical Engineering
- Business Administration and Management
- Computer Engineering
- Computer Programming
- Control Systems Engineering
- Cryptography
- Data Analysis
- Data Mining
- Data Processing
- Electronics
- Fibre and Laser Electro-Optics
- Financial Analysis
- Information Systems
- International Development
- Machine Learning
- Management Consulting
- Mechatronics
- Medicine
- Robotics
- Satellite Communications
- Securities
- Signal Processing
- Software Design
- Telecommunications

*Some careers may require additional training. Listed careers are suggestions only.

Visit careers.queensu.ca/majormap for the online version with links!

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