Why GRADUATE STUDIES in ELECTRICAL & COMPUTER ENGINEERING?

As a MEng student in the important field of Electrical and Computer Engineering (ECE), you can play a vital role in future developments in such areas as microchip design, bioelectronics, machine intelligence, autonomous vehicles & robots, next-generation Internet, fibre optics, communications & wireless networks, network security, power engineering, green energy, and thousands of other areas. Almost every aspect of modern life is impacted by electrical and computer engineering.

The MEng program is a course work based professional program that suits students who are interested in acquiring advanced engineering knowledge and skills to enhance employment opportunities as a technical specialist in industry.

Why QUEEN’S?

As a MEng student in ECE at Queen’s you are part of one of the most research intensive universities in Canada. Our research program is internationally renowned with a wide range of research activities in all of the major specialization areas of electrical and computer engineering.

Queen’s ECE offers a number of cross-disciplinary opportunities in collaboration with the departments of Mathematics & Statistics, Physics, Computing, Mechanical Engineering, Mining, the School of Kinesiology and Health Studies, as well as a collaborative graduate program in Computational Science and Engineering.

Our students come from all over the world. At Queen’s, graduate students from all disciplines learn and discover in a close-knit intellectual community.

Program STRUCTURE

MEng (1 year): Complete 8 term length courses pre-approved by the department, and seminars.

MEng with Academic Project option (3 semesters): Complete a semester-long project supervised by faculty in Department.

STUDY Areas

- Communications and Signal Processing
- Computer and Software Engineering
- Microelectronics, Electromagnetics and Photonics
- Power Electronics
- Biomedical and Intelligent Systems

Visit the Electrical and Computer Engineering website to read about program options.
**Electrical & Computer Engineering MEng MAP**

**WHERE CAN I GO?**
A Master’s degree in Electrical and Computer Engineering can take your career in many directions. Some of our MEng students choose to continue their academic career with an MASc or PhD. Our Master’s students are equipped with a strong foundation for careers in numerous sectors, such as:
- Tech companies, such as Qualcomm, Ciena, Microsoft, Google, IBM, Cisco
- Startups in all sectors, such as wearable devices, intelligent apps
- Businesses such as financial, pension, actuarial, intellectual properties
- Taking time to explore career options, build experience, and network can help you have a smooth transition to the world of work after graduation.

**WHAT WILL I LEARN?**
A graduate degree in Electrical and Computer Engineering can equip you with valuable and versatile skills, such as:
- Knowledge and technical skills
- Effective communication skills in multiple forms for diverse audiences
- Information management: prioritize, organize and synthesize large amounts of information
- Time management: Meet deadlines and manage responsibilities despite competing demands
- Project management: develop ideas, gather information, analyze, critically appraise findings, draw and act on conclusions
- Creativity and innovation
- Perseverance
- Independence and experience as a collaborative worker
- Awareness, an understanding of sound ethical practices, social responsibility, responsible research and cultural sensitivity
- Professionalism in all aspects of work, research, and interactions
- Leadership: initiative and vision leading people and discussion

**WHY CHOOSE QUEENS?**
With a strong research and innovation focus, numerous industry partnerships, and a commitment to student success, the School of Engineering at Queen’s University prepares you to be a leader in your field.

**ACHIEVE YOUR ACADEMIC GOALS**

**GETTING STARTED**
- Start with key priorities like completing your coursework.
- Attend the Departmental Speaker Series (ELEC 891).

**INTERMEDIATE STAGE**
- Complete your coursework.
- Complete the Academic Integrity Tutorial.
- Find your way through the academic process with help from departmental and Expanding Horizons professional development workshops, the department Grad Chair and the SGS Habitat
- Attend a graduate conference, such as an IEEE sponsored conference.
- Start keeping an eportfolio of your skills, experiences and competencies.

**WRAPPING UP**
- Finish your coursework and ensure you have enough credits to graduate.
- Attend a major conference in your field, such as an IEEE conference.
- Set up a meeting with the School of Graduate Studies for a Grad Chat to discuss your research interests.
- Consider putting an article in The Conversation.

**MAXIMIZE LEARNING IMPACT**

**GETTING STARTED**
- Participate in innovation activities, such as the Queen’s Innovation Connector.

**INTERMEDIATE STAGE**
- Consider positions in student services, the SGPS, or media outlets like the Queen’s Journal Blog, and the SGS Blog: Look in the AMS Clubs Directory for more ideas.
- Look into the Queen’s University IEEE Student Branch.

**WRAPPING UP**
- Practice articulating the skills you have been developing in settings outside the university, such as casual conversation, networking, and interviews.
- Get help from a Career Services workshop.
- Check out opportunities for extra training through CTL, Expanding Horizons, Mitacs, or other sources to boost your skills.

**BUILD SKILLS AND EXPERIENCE**

**GETTING STARTED**
- Serve on departmental, faculty or university committees. Talk to the Graduate Electrical and Computer Engineering (ECE) student society for tips on getting involved.
- See professional development workshops from Expanding Horizons.

**INTERMEDIATE STAGE**
- Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups.
- Prepare for work or studies in a multi-cultural environment by taking the OUC and Four Directions Aboriginal Student Centre’s Training Certificate.
- If you are an international student interested in staying in Canada, consider speaking with an International Student Advisor.

**WRAPPING UP**
- Do some targeted networking with people working in careers of interest, through the Queen’s University IEEE Student Branch’s networking dinners, QueenConnects on LinkedIn, the Queen’s Alumni Association, professional associations, and at conferences. Get help from a Career Services workshop.
- Consider joining professional associations, such as The Institute of Electrical and Electronics Engineers.

**ENGAGE WITH YOUR COMMUNITY**

**GETTING STARTED**
- Explore how you can connect with your community through experiential opportunities on- and off-campus.
- Consider volunteering with different community organizations, such as the Engineering Society Design Teams.

**INTERMEDIATE STAGE**
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**LAUNCH YOUR CAREER**

**GETTING STARTED**
- Finding a career that fits starts with knowing yourself. Get help by taking a Career Services career planning workshop or meeting with a career counsellor. Check out books like So What Are You Going to Do With That? for advice on various career options.
- Tune into IEEE messages and publications targeting student members and career building. Learn about the jobs and careers of other ECE grads.
- Start reading publications like University Affairs and the Chronicle of Higher Education. Browse non-academic labour market websites. Stay on the lookout for special events like Graduate Student Career Forum to explore your career pathways.

**INTERMEDIATE STAGE**
- Explore different careers of interest by reading alumni profiles on the SGS website, and using QueenConnects on LinkedIn to connect with Queen’s alumni, or find alumni in various careers through “Ask an Alum”.

**WRAPPING UP**
- Participate in hiring committees and attend job talks. Research careers of interest. Craft your CV or Resume and job application materials.
- Start focusing on areas of interest. Research organizations of interest and start putting together your resume for potential positions of interest. Get help from Career Services with job searching, resumes, or interviews.

* This map is intended to provide suggestions for activities and careers, but everyone’s abilities, experiences, and constraints are different. Build your own Grad Map using our online My Grad Map tool.

Visit careers.queensu.ca/gradmaps for the online version with links!
Application FAQs

What do I need to know to APPLY?

ACADEMIC REQUIREMENTS
- Honours Bachelor degree in Engineering (any) or Science (closely related field).
- Grade requirements: Minimum cumulative average of 75% or B from Canadian or US Universities, or 80% for international students.

ADDITIONAL REQUIREMENTS
- Curriculum Vitae.
- English Proficiency requirements as listed on the ECE graduate website.

KEY DATES & DEADLINES
- Application due: January 31 (international), March 1 (domestic).
- Notification of acceptance: usually before the end of April for international students, end of May for domestic students.

Before you start your application, please review the Graduate studies application process.

What about FUNDING?

M.Eng. student in a course work program do not receive financial support.