Why GRADUATE STUDIES in ELECTRICAL & COMPUTER ENGINEERING?

As a MASc 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.

Graduate students and their work are an important part of an ongoing research process that provides the community with ways of understanding natural, cultural, imaginative, social and technological phenomena. Check out whygradstudies.ca for more reasons to choose graduate studies in engineering.

Why QUEEN’S?

As a MASc 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 and 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

MASc (2 years): 4 courses and seminars, plus a research thesis.

“As a graduate student at Queen’s, you’re part of a small, tightly-knit community and you have the opportunity to connect with the faculty and students in your department in a way that is simply not possible at other universities.”

— Dustin Dunwell, MSc (Eng)

RESEARCH Areas

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

We encourage you to identify an area of research interest and contact a potential supervisor before applying.

Visit the Electrical and Computer Engineering website to read about research groups and faculty profiles. When you find a faculty member with similar research interests to yours, contact him/her and tell them about your interest in graduate work, area of research interest and related experience.

School of Graduate Studies
Create an impact

www.queensu.ca/sgs
## GETTING STARTED

**ACHIEVE YOUR ACADEMIC GOALS**
- Start with key priorities like developing your relationship with your supervisor and completing your coursework.
- Consider how your course papers can contribute to your MASc thesis research.
- Start your research as soon as possible, aiming to get traction by the end of your first year.
- Attend the Departmental Speaker Series (ELEC 891).

**MAXIMIZE RESEARCH IMPACT**
- Start to think about the audiences for your research.
- Look into applying for NSERC, ODG, and other scholarships. Winning them will boost your academic career.
- Participate in innovation activities, such as the *Queen's Innovation Connector*.

**BUILD SKILLS AND EXPERIENCE**
- Serve on departmental, faculty, or university committees. Talk to the Graduate Electrical & Computer Engineering (GECE) student society for tips on getting involved.
- Use Research Assistant and Teaching Assistant positions to develop your research or teaching skills.
- See professional development workshops from *Expanding Horizons*.

**ENGAGE WITH YOUR COMMUNITY**
- 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*.
- Visit careers.queensu.ca/gradmaps for the online version with links!

## INTERMEDIATE STAGE

**GETTING STARTED**
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## WRAPPING UP

**WHEN 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
  - Information management
  - Systems, General Dynamics

**WHERE CAN I GO?**
A Master's degree in Electrical and Computer Engineering can take your career in many directions. Many of our MASc students choose to continue their academic inquiry with a 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 Systems, General Dynamics
- Startups in all sectors, such as wearable technology, healthcare, and automotive
- Intellectual properties, actuarial, and financial services
- Governmental and non-governmental organizations
- Research and development firms
- Consulting firms
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Application FAQs

What do I need to know to APPLY?

ACADEMIC REQUIREMENTS
• 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
• Statement of Interest/Statement of Research.
• 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?

Minimum funding guarantee for MASc students is $22,000 (domestic & international) per year throughout years 1-2. Students are usually funded through a combination of research assistantships, teaching assistantships, and/or scholarships.

Apply for external funding from OGS, NSERC and other sources. Queen’s will automatically issue a $5,000 top-up to Masters winners of federal government tri-council awards. For more information, see the School of Graduate Studies’ information on awards and scholarships.

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