Why GRADUATE STUDIES in PHYSICS, ENGINEERING PHYSICS & ASTRONOMY?

Our department provides exciting opportunities for graduate students to study in many stimulating research environments. In addition to a large number of high-profile professors, we have recently recruited many new world-class physicists who are setting up exceptional research programs in cutting-edge areas of theoretical, applied and experimental physics. In 2016 we had a record intake of excellent new graduate students, bringing our department total to over 75 Canadian and International students.

Why QUEEN’S?

The Department of Physics at Queen’s University is one of the leading Canadian research institutes in Physics. Our faculty includes high-profile, world-class physicists who work on cutting edge areas of theoretical, applied and experimental physics. Our staff and students carry out their research on campus as well as at external facilities including some of the largest astronomical and astro-particle observatories in the world, such as the Gemini Observatory in Hawaii, the Sudbury Neutrino Laboratory (SNOLAB), and the High Performance Computing Virtual Lab (HPCVL supercomputer).

Program STRUCTURE

MSc (2 years): course work, research project, thesis & defense.

A member of the Department of Physics, Engineering Physics & Astronomy, Professor Emeritus Art McDonald, was co-winner of the 2015 Nobel Prize in Physics for his research on neutrinos with the Sudbury Neutrino Observatory Collaboration.

RESEARCH Areas

- Condensed Matter Physics & Optics
- Engineering & Applied Physics
- Astrophysics & Astronomy
- Particle Physics & Particle Astrophysics

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

Visit the Department of Physics, Engineering Physics & Astronomy website to read faculty profiles and learn more about faculty members’ research areas. When you find a faculty member with similar research interests to yours, contact him/her and tell them about your interest in graduate work and related experience.
SUMMARY

A Master of Science in Physics, Engineering Physics & Astronomy equips 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 of sound ethical practices, social responsibility, sustainable research, and cultural sensitivity
- Professionalism in all aspects of work, research, and interactions
- Leadership: Initiate and vision leading people and discussion

WHERE CAN I GO?

A Master’s degree in Physics, Engineering Physics & Astronomy can take your career in many directions. Many of our MSc students choose to continue their academic inquiry with a PhD. Our Master’s students are equipped with a strong foundation for careers in:

- Academia and research
- Consulting
- Medical technologies: radiation physics, x-ray physics
- Renewable energy
- Technology sector

Visiting the world of work after graduation takes 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?

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### Application FAQs

**What do I need to know to APPLY?**

**ACADEMIC REQUIREMENTS**
- Honours undergraduate degree in Science or Applied Science and Engineering.
- **Grade requirements:** Minimum second class standing in undergraduate degree.

**ADDITIONAL REQUIREMENTS**
- If English is not a native language, prospective students must meet the English language proficiency requirements in writing, speaking, reading, and listening. The School of Graduate Studies requires the following minimum scores: TOEFL (paper-based): 550, (2) TOEFL iBT: Writing (24/30); Speaking (22/30); Reading (22/30); Listening (20/30), for a total of 88/120 (applicants must have the minimum score in each test as well as the minimum overall score), or (3) IELTS: 7.0 (academic module overall band score), or (4) PTE Academics: 65.

**KEY DATES & DEADLINES**
- Application due: February 15th.
- Notification of acceptance: 4 weeks after the full application has been received.

Before you start your application, please review the [graduate studies application process](#).

**What about FUNDING?**

MSc students in Physics receive minimum funding of $25,820 per year for the two years of the program. This basic level funding consists of graduate awards, school support, external scholarships, internal fellowships and bursaries, teaching assistantships, and research grants.

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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