PHYSICS
Major, Bachelor of Science (Honours) | degree PLAN

GET THE COURSES YOU NEED

Sample Year by Year

1ST YEAR
- PHYS 104/6.0 or PHYS 106/6.0
- MATH 110/6.0 or MATH 111/6.0
- 6.0 units from MATH 120/6.0, MATH 121/6.0, (MATH 123/3.0 and MATH 124/1.0)
- 12.0 units of electives

2ND YEAR
- PHYS 206/3.0
- PHYS 212/3.0
- PHYS 213/3.0
- PHYS 239/3.0
- PHYS 242/3.0
- PHYS 250/3.0
- MATH 221/3.0 or MATH 280/3.0
- MATH 225/3.0 or MATH 231/3.0
- 6.0 units of electives and/or minor

3RD YEAR
- PHYS 334/3.0
- PHYS 345/3.0
- PHYS 350/6.0
- PHYS 372/1.0
- PHYS 316/3.0 and PHYS 317/3.0 OR (MATH 228/3.0 and MATH 338/3.0)
- 9.0 units of electives and/or minor

4TH YEAR
- PHYS 432/3.0
- 6.0 units from PHYS 315/3.0, PHYS at the 400-level or above
- 21.0 units of electives and/or minor

* Please note if you were admitted to the Plan prior to May 2018 your requirements are slightly different.

Note that degree requirements are revised regularly. The most current requirements, including course lists and options, are found in the Academic Calendar at: QUartsci.com/academic-calendar

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PHYSICS
Physic at Queen’s combines high-calibre research with an intermediate-scale learning setting, enabling attention and care towards undergraduate teaching as well as exposure to a broad range of topics and expertise. Our students will learn in an engaging environment with the opportunity to conduct interdisciplinary research in state-of-the-art laboratories, and work on projects involving international collaborators such as the experiments in dark matter and neutrinos happening below the surface of the Earth at the Sudbury Neutrino Observatory.

11% of alumni work in GOVERNMENT
18% of alumni work in TECHNOLOGY
18% of alumni work in BUSINESS & LAW
31% of alumni work in EDUCATION & RESEARCH

**REASONS to study PHYSICS AND ASTRONOMY**

1. The department is one of Canada’s leading teaching and research institutes in Physics and Astronomy.
2. Award-winning physics educators such as 3M National Teaching Fellow James Fraser.
3. Our internship program (QUIP) offers a wide range of careers to explore and companies to learn from.
4. Brand new astroparticle physics institute named after Queen’s Nobel Prize Laureate Art McDonald.
5. 25+ summer research assistant positions offered by the department to students every summer.

**STORY**

“For me, the community within the Physics Department was by far the best aspect of studying Physics at Queen’s. The engaging instructors, knowledgeable technologists, helpful administrative and support staff, and my collaborative peers all contributed to my learning in the most positive way.”

-Kate Fenwick, BScH ’17

**2018-19 Thresholds**

2.3 cGPA AUTOMATIC ACCEPTANCE
- min C+ in PHYS 10#

PENDING LIST
- min pass in PHYS 10#

“Thresholds are made on a competitive basis and are updated annually. For the latest information please visit: QUartsci.com/physics

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PHYSICS, ENGINEERING, PHYSICS AND ASTRONOMY
Faculty of Arts and Science
Stirling Hall
64 Radar Lane
613-533-2707
queensu.ca/physics
GET THE COURSES YOU NEED

1ST YEAR
In first year you will have the chance to explore the foundations of Physics in biology, chemistry, math and geology along with some electives.

2ND YEAR
Start going deeper into the discipline of Physics, while considering a minor and/or certificate such as Global Action and Engagement. Attend Degree + in the Fall term to learn more about Certificates and Internship options.

3RD YEAR
A chance to start grouping courses in areas of interest, or to keep it more general and explore many areas of Physics. Meet with an Academic Advisor to make sure you are on track and have planned out your courses for next year — for some ideas, see the back page.

4TH OR FINAL YEAR
In fourth year you will have the chance to participate in research-based courses that can lead to Graduate School or to your future career path. Make sure to finish up all your courses for your major and your optional minor and/or certificate(s).

GET RELEVANT EXPERIENCE

Join teams or clubs on campus such as Queen’s Astronomy Club, Queen’s University Experimental Sustainability Team (QUEST), Queen’s Space Engineering Team (OSEIT), or Queen’s Solar Design Team.

See the AMS Clubs Directory or the Queen’s Get Involved page for more ideas.

GET CONNECTED WITH THE COMMUNITY
Volunteer on or off-campus with different community organizations such as Science Rendezvous or Let’s Talk Science. Consider joining an intramural sport or an athletics team. Off-campus community organizations welcome Queen’s students — see what’s out there!

GET THINKING GLOBALLY
Prepare for work or studies in a multi-cultural environment by taking QUC’s International Competency Certificate, and research possible immigration regulations.

Speak to a QUC advisor to get involved in their programs, events, and training opportunities.

GET READY FOR LIFE AFTER GRADUATION
Grasping with program decisions? Go to Majors Night or get some help wondering about career options from Career Services.

Build your transferrable skills in time management, organization, writing and more with Student Academic Success Services.

Was this helpful? A degree in Physics can equip you with valuable and versatile skills, such as:

- Knowledge of physics theories and mathematical models
- Proficiency in mathematics
- Facility for quantitative mathematical and computational analysis
- Experience with laboratory equipment
- Design experiences and develop and write research proposals
- Review scientific literature
- Draw conclusions from data and evaluate sources of error
- Explain technical information clearly in writing and verbal communication
- Use statistical software
- Adopt a systematic, analytical approach to problems

Where can I go?
A degree in Physics can take your career in many directions. Many students choose to continue their academic inquiry with a Master’s. Our students are equipped with a strong foundation for careers in:

- Aerospace
- Astrophysics
- Computer simulations
- Forensic science
- Geophysics
- Imaging
- Nanoscience
- Photonics
- Planetary science
- Radiology
- Remote sensing
- Robotics
- Space science
- Technology industry

Taking time to explore career options, build experience and network can help you have a smooth transition to the world of work after graduation.