Combining a Diploma in Engineering with a Major in Physics

More information at mystfx.ca/physics/

Benefits for Engineering Students

• Two degrees (BSc and Dipl Eng) during the normal time for a BSc.

• Learn to think like a scientist.

• You can only utilize what you are aware of. A physics degree will provide you with a broader education, which will give you more options in your career.

• Get exposed to the latest developments in science and technology. In our courses, we teach about quantum computing, superconducting circuits, novel materials like graphene, and why relativity is essential for GPS networks.

• Building engines or bridges can wait: this is your chance to learn more about black holes, quarks, and the Big Bang.

• You can always change your mind: minimal commitment (just three additional courses) until year 2 in a three-year plan towards the diploma.

• The combined degree is popular among engineering students who plan to take 3 years for the diploma. For one year more, you get a second degree.

• Only in physics can you combine the Diploma with an Advanced Major BSc.

How it works

• Year 1 of engineering and physics are very similar (Physics, Math, Chemistry).

• Take programming (ENGR 147) during year 1 or 2.

• In year 2, take PHYS 201, PHYS 241, and PHYS 242.

• Talk to the Chair of physics about course selections in year 3 and 4.

• You will take the same, or equivalent, courses as BSc students.

• Advanced Major students work on a research project in their fourth year.

Engineering and physics can be easily combined because the skills taught in both programs are similar. In engineering, a more practical approach is pursued, in which the laws of nature are applied to design new technology. In physics, the laws themselves are investigated, which leads to the discovery of new phenomena. Combining the two degrees gives you the best of both worlds.