

ENGINEERING PHYSICS

YOU CAN COUNT ON OUR ENGINEERING PHYSICS INTERNS FOR ANY ENGINEERING PROJECTS REQUIRING A STRONG GRASP OF THE FUNDAMENTAL SCIENCES AND STATE-OF-THE-ART TECHNOLOGIES.



OUR INTERNS HAVE MUCH TO OFFER YOU!

- Data gathering, processing and interpretation
- Digital model development and modelling
- Computerization of procedures, interface development
- Characterization of materials, processes or devices

Students at a more advanced level can take on just about any technologically advanced question and make significant contributions to the field. Because engineering physics training provides a more thorough grounding in certain areas of applied physics than other engineering programs, the students' activity framework is broader. Please don't hesitate to contact us to discuss your needs further.

AREAS OF INTERVENTION:

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|-----------------------|----------------------|---------------------------|
| › Photonics | › Nanostructures | › Magnetic systems |
| › Materials | › Optical systems | › Micromechanical systems |
| › Functional coatings | › Electronic systems | › Manufacturing processes |

LOOKING FOR SPECIALIZED SKILLS?

WE OFFER CANDIDATES IN MANY FIELDS OF SPECIALIZATION, INCLUDING:

Biomedical engineering

Engineering principles applied to the study, modification and monitoring of biological systems as well as to the design and production of apparatuses and equipment for diagnosing and treating patients as well as monitoring their physiological functions.

Photonic engineering

Application of physics concepts to photonics: imaging, tomography, telecommunications, optoelectronics, fibre optics, passive and active optical systems and components, lasers, non-linear optical devices and other applications (including biophotonics).

Micro- and nanotechnologies

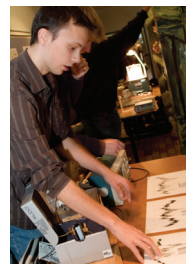
Application of physics to the design, production and characterization of devices and materials at the micro-metric and nanometric scale: microelectronic devices, sensors and actuators, electromechanical and magnetic systems, functional coatings, manufacturing processes, and techniques for characterizing optical, mechanical, electric and magnetic properties.

WHAT OUR INTERNS HAVE ACHIEVED FOR OTHER COMPANIES

- Study of aircraft engine structural constraints using fibre-optic sensors
- Design of a hydrogen sensor to prevent failure in high-voltage transformers
- Low-coherence interferometry applied to biomedical engineering
- Development of synthetic physical models to assess imaging systems
- Characterization of a device for optically measuring the electrical properties of implanted silicon
- Development of an automated energy optimization system for an ethylene synthesis process

ENGINEERING PHYSICS INTERN AVAILABILITY

- Internship duration: 4, 8 or 12 consecutive months, based on your needs.



HOW TO HIRE A POLYTECHNIQUE INTERN?

- An online internship job offer form is available on: **www.polymtl.ca/sp/en/employeur**.
- You can also e-mail your job offer to **service.placement@polymtl.ca**.
- To contact the Internship and Placement Services by telephone: **514 340-4730**.