

GRADUATE STUDIES 2022/23 INFORMATION SHEET

MEDICAL BIOPHYSICS

MSc, PhD, CAMPEP PhD

With a background in the biological or physical sciences, engineering, or medical and health sciences, you can pursue an MSc or PhD in Medical Biophysics. The Department also offers degrees with collaborative specializations in Molecular Imaging or Machine Learning in Health and Biomedical Sciences. There is also an option to pursue a Commission on Accreditation of Medical Physics Education Programs (CAMPEP) option in parallel with a PhD, which facilitates development into careers as a clinical medical physicist.

Through your training, you will be exposed to a full breadth of research and engineering-relevant methodologies from the fields of:

- Cardiovascular and Microvascular Biophysics
- Cutting-edge Computational Methods
- Knowledge Translation
- Machine Learning and Artificial Intelligence
- Medical Imaging (including CT, MRI, PET, Ultrasound)
- Medical Physics/Radiotherapy
- Medical Technology Development
- Molecular Imaging
- Musculoskeletal Imaging, Physics and Joint Replacement
- Neuroimaging
- Radiobiology and Cancer Treatment

CAREERS

With your graduate training in Medical Biophysics you can pursue professional school, post-doctoral research and advanced training or careers as a:

- Data Scientist
- Medical Physicist (CAMPEP)
- Clinical Research Project Assistant
- Industrial Research Scientist
- Medical Laboratory Technologist
- Medical Imaging Technologist
- Research Assistant/Associate/Analyst

Graduates from our programs have pursued careers as a:

- Director, Collaboration at Next Generation Manufacturing Canada (Ngen)
- General Manager in a Medical Imaging Division at GE Healthcare
- Lead Data Scientist at Mely.ai
- Medical Physicist at the London Regional Cancer Program
- Staff Scientist & Collaboration Manager at Siemens Healthineers
- Scientific Evaluator at Health Canada
- University Professor at University of Toronto

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MEDICAL BIOPHYSICS

| | MSc | PhD (With previous MSc or MEng OR direct entry from a Honors BSc program) | CAMPEP* – Accredited PhD *Commission on Accreditation of Medical Physics Education Programs (With previous MSc or MEng OR direct entry from a Honors BSc program) |
|-------------------------------|--|--|--|
| TIME TO COMPLETION | Six academic terms (2 years) | 12 academic terms (4 years) when entering program with previous MSc 15 academic terms (5 years) when entering program with Honors BSc | 12 academic terms when entering program with previous MSc 15 academic terms when reclassified from MSc to PhD (5 years from initial MSc entry date) or direct entry from Honors BSc |
| ADMISSION REQUIREMENTS | <ul style="list-style-type: none"> A 4 year Honors Degree from an accredited post-secondary institution Consideration provided to applicants with minimum 78% average, but preference provided to applicants with minimum of an A- or 80% average (based on last 2 years of Undergraduate Degree) | <ul style="list-style-type: none"> MSc in the Biomedical Sciences, Engineering, or Physics Direct entry PhD students with a admission average of >85% will be considered for direct entry placement if graduate positions are available | <ul style="list-style-type: none"> Eligible for PhD program and permission for CAMPEP enrolment from thesis supervisor MSc and completed: Undergraduate Physics including at least three upper level (3rd or 4th year) half-courses in traditional physics (e.g. thermal physics, classical mechanics/dynamics) OR Engineering Degree Exceptional Undergraduate Honors Physics including at least three upper level half-courses in physics and >85% admission average OR Engineering Degree Exceptional students with minimal course deficiencies may be granted provisional enrolment, with approved plan for deficiency correction in place, at the discretion of the Program Director |
| APPLICATION DEADLINES | <p>Domestic: Fall: Open September 1 / Close June 1 Winter: Open September 1 / Close November 1 Summer: Open September 1 / Close March 1</p> <p>International: Fall: Open January 1 / Close March 1 Winter: Open April 1 / Close September 1 Summer: Open September 1 / Close February 1</p> | | |
| FUNDING | <ul style="list-style-type: none"> All MSc trainees guaranteed stipend of \$15,400/year for living expenses in addition to full tuition support All PhD trainees guaranteed stipend of \$16,400/year for living expenses in addition to full tuition support All MSc and PhD trainees eligible for teaching and research assistantship funding in addition to mandatory full tuition and living expense support | | |

For more information, please visit schulich.uwo.ca/biophysics/graduate/future_students/application_information.html or send an email to ask askmbp@schulich.uwo.ca