# Program Handbook

## Master of Science in Materials Physics

Faculty of Math and Science

Revised May 2023

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## About This Handbook

The content in this program handbook is accurate at the date of posting and is applicable for the current academic year. Program handbooks are updated annually, and students should ensure they are referring to the current version. Occasionally, changes to policy and program requirements do occur so students should also check with their supervisor, program chair or the Faculty of Graduate Studies on critical matters where they are unsure.

This program handbook should be read in conjunction with general policies and guidelines as outlined in the Brock University Graduate Calendar and the Brock Faculty Handbook.

# 1 WELCOME

Welcome to the Department of Physics at Brock University. The Master of Science in Materials Physics International Student Program (MSMP) is one of three graduate programs in the department, the other two being the PhD in Physics, and the MSc in Physics Program.

# 2 PROGRAM DESCRIPTION

## 2.1 Program Overview

This handbook provides information pertaining to the Brock University Master of Science in Materials Physics Program (MSMP), which is non funded international student program (ISP).

The MSMP program offers two options: a 16-month (four term) course-based option and a 2 year (six term) course-plus-project (MRP) option.

The objective of the 16-months-long course-based program is to provide intensive, “hands-on” graduate training in advanced experimental, theoretical, and computational techniques of modern materials science. The goal is to prepare highly knowledgeable and skilled graduates, who will be well-trained as materials scientists to fill jobs in industry, government agencies, research institutes and universities worldwide. The program is being offered in the Department of Physics and its focus is on the applications of condensed-matter Physics to the development and characterization of novel materials, from semiconductors to thin films to superconductors to liposomes.

Through the mentorship of our faculty, you will learn to work both independently and in collaboration with others. You will learn to identify important and critical problems and to use appropriate methods and techniques to address them. An essential part of your training will be to communicate your results to a scientific audience as well as to the non-technical management staff, and to evaluate business and societal impact of your work without prejudice. These goals will be achieved through presentations at graduate research seminars and through the production of detailed technical laboratory and term reports conforming to the rigorous standards of scientific and technical publications in the fields of Materials Science and Technology.

## 2.2 English Language Skills Development

International students will receive a thorough training in the use of technical English and in the style of technical and scientific interactions in the workplace, starting with a mandatory Graduate Science Preparatory Program (GSPP) and continuing throughout the program. It is an essential element of the program that many of the graduate classes be shared with the Canadian graduate students, to avoid segregating international students into common-language-based groups and to ensure that the working language remains English.

### *2.2.1 Graduate Science Preparation Program*

All students accepted into the program will be required to complete an intensive Graduate Science Preparation Program (GSPP) usually during the first term of the MSc program. The GSPP program will prepare students for the academic demands of graduate programs at Brock University. Many students

have the language prerequisite for admission to Brock but struggle academically in their graduate studies. GSPP addresses this issue, concentrating on the development of academic skills such as critical thinking and synthesizing arguments and ideas, referencing and plagiarism, academic presentations and discussions, and the development of specialized vocabulary.

## 2.3 Major Research Project Option

For full-time students in the Major Research Project (MRP) option, the Materials Physics MSc is normally a six term or 24 month program.

All students in the program will be initially admitted to the course-based option. Admission to the Major Research Project (MRP) option is on a competitive basis. Students may be admitted to the MRP option following completion of the first three terms of the MSMP (ISP) course-based option. MRP students are required to maintain a minimum 75% overall average. Admission to the MRP option is on the basis of grades, and supervisor availability. An interview may be required. MRP students will complete all of the requirements for the MSMP course-based program prior to starting the MRP.

Potential fields of research which may be pursued are described below.

# 3 PROGRAM GOVERNANCE AND ADMINISTRATION

The Physics program has several governance and administrative bodies that support students and faculty.

## 3.1 Program Governance

An overview of Brock University' governance structure can be found on the University Secretariat webpages. The following committees and units are responsible for varying aspects of the governance and administration of the thesis based Master of Science in Physics program.

### *Faculty of Graduate Studies*

The Faculty of Graduate Studies works closely with Brock's six academic Faculties — Applied Health Sciences, Education, Humanities, Mathematics and Science, Social Sciences, and the Goodman School of Business — to:

- support the growth and development of the graduate studies sector;
- integrate graduate studies into the research, pedagogical, and outreach missions of the University;
- provide quality administrative service and support to current and future graduate students, supervisors, and graduate programs; and
- offer competitive funding packages to financially support students through their studies.

Academic regulations and University policies are outlined in the Graduate Calendar. All students are required to be aware of, and adhere to, these regulations and policies. Students who have maintained enrolment in each calendar year (May to April) may complete the degree program using the Academic Regulations section and program degree requirements operative in the year in which that program was

entered, or any subsequent Calendar published while enrolled. Students who interrupt their studies for more than one calendar year (by not enrolling in at least 1 credit) become subject to the Calendar regulations in effect at the time of their re-registration.

For more information, visit the Faculty of Graduate Studies website.

## *Department of Physics*

The people of the Physics Department are engaged in experimental and theoretical research, primarily in the fields of condensed matter physics, materials science, biophysics and theoretical physics. We are dedicated to high-quality teaching, at both undergraduate and graduate level (we offer B.Sc., M.Sc. and Ph.D. degrees). Hands-on access to research grade equipment and computing facilities provide our graduates with excellent problem-solving skills. We collaborate with physicists all over the world and are involved in the community at large.

## *Brock University Graduate Council*

Brock's Graduate Council normally meets monthly and is chaired by the Dean of the Faculty of Graduate Studies. The Council provides a forum to exchange and discuss ideas and information about graduate programs and to advise the Dean of Graduate Studies on all matters pertaining to graduate studies at Brock.

## *Senate Graduate Studies Committee (SGSC)*

This Senate standing committee oversees and makes recommendations on all matters directly related to graduate academic programs and related policies, considering and pursuing policy initiatives to enhance the academic programs, well-being and reputation of the University. Meeting schedules and minutes are available from the University Secretariat's website.

## *Graduate Program Committee (GPC)*

Graduate Programs at Brock are governed by a Graduate Program Committee (GPC), administered by a Graduate Program Director (GPD), and supported by a Graduate Program Administrative Coordinator (GPAC).

- **Graduate Program Committee (GPC):** The GPC has responsibility for recruitment and admissions, preparation of the Graduate Calendar submission, course offerings, teaching allocations, scholarship adjudication, student progress, community liaison, responding to student concerns, changes to the structure of the program and the selection of the Graduate Program Director. The Graduate Program Committee is normally composed of the Graduate Program Director (who serves as chair) and faculty members of the department.
- **Graduate Program Director (GPD)**: The GPD is appointed by the Graduate Program Committee to oversee the graduate program. The GPD carries out all duties in regular consultation with the Graduate Program Committee. The Director has the support of an administrator/coordinator and receives an administrative course release. The usual term is three years.
- **Graduate Program Administrative Coordinator (GPAC):** The GPAC oversees the day-to-day operations of the program and provides administrative support to the Graduate Program Director.

## 3.2 Program Administration

### *Administrative Contacts*

**Important**: All Master of Science in Materials Physics inquiries should be directed to msmp@brocku.ca

**Graduate Program Director (GPD)**
Dr. Maureen Reedyk
mreedyk@brocku.ca

**Graduate Program Administrative Coordinator (GPAC)**
Jessica Campbell
jcampbell4@brocku.ca
905-688-5550 x3412

Courtney Lee (on leave)
clee2@brocku.ca
905-688-5550 x 3412

**Graduate & Administrative Specialist, Faculty of Mathematics and Science**
Elena Genkin
egenkin@brocku.ca
905-688-5550 x 3551

### *Faculty and Staff of Physics*

**Professors**
Stephen Anco (Mathematics), Peter Berg (Physics), Shyamal K. Bose (Physics), David A. Crandles (Physics), Fereidoon S. Razavi (Physics), Maureen Reedyk (Physics), Kirill Samokhin (Physics), Thomas Wolf (Mathematics), Tony Yan (Chemistry)

**Associate Professors**
Thad A. Harroun (Physics), Edward Sternin (Physics)

**Assistant Professors**
Gavin Hester (Physics), Jasneet Kaur (Physics), Barak Shoshany (Physics), Ganesh Ramachandran (Physics), Pouria Ramazi (Mathematics and Statistics)

**Adjunct Professors**
Tapash Chakraborty (University of Manitoba), Josef Dubicki (Hamilton Health Sciences), John Katsaras (NRC, Chalk River), Reinhard Kremer (Max-Planck Institute, Germany), Jerry Sokolowski (University of Windsor), Ole Steuernagel (University of Hertfordshire, UK), Heping Xu

**Professors Emeritus**
John E. Black (Physics), Bozidar Mitrovic (Physics), Stuart M. Rothstein (Chemistry)

A full Department of Physics faculty listing, along with profiles and research interests, can be found in the Department's faculty directory.

**Physics Laboratory Supervisor/ Instructor**
Ivana Komljenovic Metcalf, ikmetcalf@brocku.ca
905-688-5550, ext. 3417

**Laboratory Demonstrator**
Fulvio (Phil) Boseglav, fboseglav@brocku.ca
905-688-5550, ext. 4019

**Graduate Laboratory Supervisor**
Sara Monfared, smonfared@brocku.ca
905-688-5550, ext. 4723

# 4 ADMISSIONS

## 4.1 General Admissions Policy

Admission to the course based Master of Science in Materials Physics program in the Department of Physics under the Faculty of Math and Science requires that students fulfill admission requirements of Brock University, the Faculty of Graduate Studies, and the Master of Science in Materials Physics program. Final recommendation for admission is by the Physics Graduate Program Committee.

The Brock University Faculty of Graduate Studies establishes regulations for admission, which specify the minimum entrance requirements. These requirements are designed to ensure that students entering a graduate program have both the capacity and preparation necessary to effectively undertake a program of study at the graduate level. However, possession of the minimum entrance requirements is not a guarantee of admission. Resource allocations play a significant role in the number of students that any graduate program may adequately accommodate. The University reserves the right to limit enrollment and to refuse admission to any candidate.

Brock University has a non-discriminatory policy to ensure against discrimination of applicants based on race, color, national or ethnic origin, creed, sex, or sexuality.

## 4.2 Minimum Admission Requirements

Successful completion of four year Bachelor's degree, or equivalent from an accredited University in Physics or a closely related discipline, with a minimum B average over the last two years of full-time undergraduate study. A sufficient knowledge of English as specified by the Faculty of Graduate Studies. The Graduate Record Examination (GRE) is recommended for international students, but not required.

The Graduate Admissions Committee will review all applications and recommend admission for a limited number of suitable candidates. Applicants holding a degree without sufficient background in Physics may be required to complete additional qualifying undergraduate courses prior to an admission decision.

For information on the admissions process, including application dates and required supporting documents, please visit the Faculty of Graduate Studies How to Apply pages.

Students are encouraged to contact us for a pre-admission evaluation. Be sure to attach electronic copies of all relevant transcripts and a brief statement of interest. We will arrange for a personal interview, via a suitable teleconference facility if necessary.

Brock's Office of International Recruitment can help you with your application.

## 4.3 Offer Letters and Acceptance

Assessment of academic background and eligibility for admission to the program is the responsibility of the Physics Graduate Program Committee. Recommendations for acceptance of applicants are made by the Graduate Program Committee to the Brock University Faculty of Graduate Studies. The official letter of acceptance and offer of admission will be issued by Brock University's Dean of Graduate Studies.

Applicants who are admitted, pending receipt of final transcripts, must submit an official copy of their final transcripts to Brock University's Faculty of Graduate Studies prior to registration.

Applicants receiving an offer of admission to the Master of Science in Materials Physics program in the Faculty of Math and Science must normally accept that offer within three weeks from the date of issue. Failure to do so may result in the offer being withdrawn.

Students accepted for admission to the Masters of Science in Materials Physics program in the Department of Physics in the Faculty of Math and Science must commence their program of study on the date specified in their letter of acceptance. If circumstances prevent a student from starting study on the specified date, the University can rescind the original offer, and the applicant may be required to submit a new application.

## 4.4 Major Research Project Option

All students in the program will be initially admitted to the course-based option. Admission to the Major Research Project (MRP) option is on a competitive basis. Students may be admitted to the MRP option following completion of the first three terms of the MSMP (ISP) course-based option. MRP students are required to maintain a minimum 75% overall average. Admission to the MRP option is on the basis of grades, and supervisor availability. An interview may be required. MRP students will complete all of the requirements for the MSMP course-based program prior to starting the MRP. MRP students will normally complete the MRP over the two terms following completion of the MSMP course-based program requirements.

# 5 FEES & FUNDING

## 5.1 Fees

The fee structure of degree programs offered through the Faculty of Mathematics and Science are as outlined by Brock University and the Faculty of Graduate Studies. Students should consult the Graduate Calendar, the Graduate Tuition and Fees webpage, the Brock Physics Webpage and the information provided in their offer letter for the most current fee scale.

## 5.2 Funding and Financial Assistance

The Master of Science in Materials Physics International Student Program is an unfunded program. Graduate students in the Faculty of Math and Science may be eligible for a variety of scholarships, fellowships, and awards administered by Brock University and external agencies. A listing of these awards can be obtained by consulting the section on Financial Assistance in the Graduate Studies Calendar.

- **Brock internal funding support** The Master of Science in Materials Physics Program does not include Brock internal funding support as it is not a funded program. Students in the program may however apply for Graduate Assistantships (employment income earned through teaching assistant or research assistant positions), although there is no guarantee of receiving such funding.
- **External funding** is generally secured by students through an application for grants and fellowships offered by governments, foundations or other agencies. These applications may be accepted prior to a student beginning their studies, or during their graduate studies.
- A listing of available awards may be obtained by consulting the Faculty of Graduate Studies' Funding Information and Awards and Scholarships webpages.

# 6 DEGREE REQUIREMENTS

## 6.1 Overview

The Master of Science in Materials Physics degree requirements consist of 10 half credits of course work.

## 6.2 Courses

### *6.2.1 Required Courses*

Students must enroll in theoretical courses, experimental/ laboratory courses, a computational science course, and a research seminar course.

**Theoretical courses:**
PHYS 5P70 (Advanced Condensed Matter Physics)
PHYS 5P74 (Magnetism & Magnetic Materials)
Two 0.5 Credit Courses from: PHYS 5P11 (Theoretical Foundations of Materials Physics I), PHYS 5P12 (Theoretical Foundations of Materials Physics II), PHYS 5P30 (Advanced Electromagnetism), PHYS 5P41 (Advanced Statistical Physics), PHYS 5P50 (Advanced Quantum Mechanics I, PHYS 5P61 (Nuclear Physics), PHYS 5P83 (Foundations of Materials Physics Characterization)

**Experimental/laboratory courses:**
PHYS 5P79 (Advanced Experimental Methods in Condensed Matter Physics)
PHYS 5P80 (Experimental Methods in Materials Physics)
PHYS 5P81 (Sample Preparation and Characterization Techniques for Materials Physics)
PHYS 5P82 (Materials Physics Term Project)

**Computational course:**
PHYS 5P10 (Introduction to Scientific Computing)

**Research seminar course:**
PHYS 5P92 (Graduate Seminar in Materials Physics)
Detailed information about the registration policies and procedures can be found on the Graduate Studies webpage, currently at http://www.brocku.ca/graduate-studies/current-students

### *6.2.2 Major Research Project*

Every Materials Physics MSc (MRP) candidate must complete the course requirements of the course-based program, and a PHYS 5P96/PHYS 5P97 Project under supervision of a faculty advisor. All candidates must conduct, submit, and present a PHYS 5P96/PHYS 5P97 project which demonstrates proficiency in applying concepts in Materials Physics. The project is typically completed in the final two terms of study. MRP students will normally complete PHYS 5P96/PHYS 5P97 over the two terms following completion of the MSMP course-based program requirements.
Course Evaluation

Faculty must provide students with a course syllabus, including an evaluation scheme, in the first week of class. All course grades must be submitted on or before the deadline listed by the Faculty of Graduate Studies via BrockDB GradeBook; the GPD will subsequently approve those grades. Only the Faculty of Graduate Studies may release final grades. Students must meet the minimum academic performance criteria set out in the Brock University Graduate Calendar (see Academic Regulations and University Policies, Section X). Course evaluation information is also available in the Faculty Handbook (Section 3B, #10 Evaluation).

# 7 ACADEMIC PERFORMANCE & PROGRESS

## 7.1 Academic Performance and Continuation

Graduate students must achieve and maintain minimum satisfactory academic performance to be eligible to continue in a graduate program. Graduate students must maintain a minimum cumulative average of at least a B-(70%) during each term of study. If a graduate student falls below the minimum cumulative average the student will be automatically placed on academic probation for the subsequent term by the Faculty of Graduate Studies. A probationary student must achieve the minimum cumulative average, normally during the probationary term, to be eligible to continue as a graduate student.

## 7.2 Recommended Completion Timelines

For full-time students, the course based program duration is normally four terms (16 months). Full-time students must complete all courses and degree requirements within three years from the date of first registration.

Students registered in the MRP option will normally complete it in the two terms following the course based components for the total duration of 6 terms (2 years).

## 7.3 Evaluation of Student Progress

Grades

The following grades are awarded for graduate courses:

A+ - 90-100
A - 80-89

B - 70-79
C - 60-69
F - 59 or lower

IN (Incomplete) is a temporary grade granted to a student, in exceptional circumstances who has been unable to complete some part of the term work in a course. A grade must be submitted no later than 56 days from the last day of classes in each term. In the case of the thesis, major essay or project, an IN grade should only be granted when the thesis or major research paper is essentially complete (only minor revision or thesis defence scheduling required). If the IN is not replaced by a letter grade within 56 days, the IN will be changed to the default grade.

IP (In Progress)
A grade of IP may be awarded if a student fails to complete all course requirements within the prescribed time limit. A student who receives an IP grade for a course, must re-register for that course in the term following that for which an IP grade is received. With the exception of the thesis, major research paper or proposal courses, no half-credit graduate course shall be denoted IP for more than one term.

For graduate courses in the MSc in Materials Physics (ISP) program, the grades A+, A, B, C, F, IN (Incomplete), IP (In Progress), Pass/Fail, CR/NC (Credit/No-Credit), SA/UN Satisfactory/Unsatisfactory, NW (Not Withdrawn), or AG (Aegrotat standing) will be recorded on the transcript. Grades A+ A, B, and C are considered to be passing grades and eligible for graduate credit. However, of the ten half-credits required to complete Materials Physics (ISP) degree requirements, a maximum of one-half credit at the C level may be used for degree credit and the student must achieve an overall minimum B average in the ten half-credits that comprise degree requirements to be eligible to graduate.
https://brocku.ca/webcal/2022/graduate/acad.html#sec55

Major research paper or project grades shall be reported to the Faculty of Graduate Studies in the usual fashion with letter and numerical grades. If a failing grade is awarded for a major research paper or project, the student will be withdrawn from the program.

## 7.4 Application to Graduate

Students must apply to graduate. For details visit the Faculty of Graduate Studies here
https://brocku.ca/graduate-studies/current-students/important-dates-and-forms/apply-to-graduate/

In order to graduate, all degree requirements must be completed and all the necessary documentations submitted to the faculty of graduate studies 6 weeks prior to the date of the convocation ceremony (spring or fall).

The graduate program director will sign off on the completion of degree requirements only after MRP supervisor(s) advise that they have received complete versions of data, lab books, samples, etc. (if applicable).

# 8 ACADEMIC INTEGRITY, ACADEMIC MISCONDUCT, APPEALS

## 8.1 Academic Integrity

In accordance with the Brock University Academic Integrity Policy, all students are expected to display the highest standards of academic integrity. Academic integrity means upholding a strong personal and

professional ethic within your own work, and that of your colleagues. In upholding the principles of academic integrity, graduate students are expected to demonstrate respect and acknowledgement of others' words and ideas when conducting research, writing, publishing, and teaching.

For more information, visit Brock's Academic Integrity webpages.

## 8.2 Academic Misconduct

Integrity is fundamental to the process of research and scholarship, and misconduct damages the entire academic enterprise. Academic dishonesty, while traditionally defined as plagiarism, also includes inappropriate collaboration with other students, data falsification, fabrication of results, and the unauthorized resubmission of previous work.

In the event a student is suspected of engaging in academic dishonesty, professors will contact the Graduate Program Director and there will be an interview between Graduate Program Director and the student. During this interview students have the right to have an advisor present such as their academic advisor or Brock's Ombudsperson. Students have the right to decline to attend this interview but should note that the investigation of academic dishonesty will continue, and they will forfeit their right to defend against the claims. If the Graduate Program Director and the professor find the claims valid, they will be forwarded to the Dean's Office for adjudication. In the production of a major research project, the department may recommend the student be removed from the program of study with a notation from the Dean appended to the student's record. Please note that an act of academic misconduct constitutes sufficient grounds for dismissal from the program.

University procedures covering academic misconduct can be found on the Graduate Students - Academic Integrity webpage and in the Graduate Calendar.

## 8.3 Appeals

Appeal types and procedures at the Graduate level are outlined in the Faculty Handbook as well as the Graduate Calendar.

Students who have concerns about a grade in a particular course should first discuss the issue with the instructor of the course in question. If the issue cannot be resolved, the student should refer the matter to the Graduate Program Committee through your Faculty / School's Associate Dean, Research and Graduate Studies. If the student is not satisfied with the decision of the Graduate Program Committee, the student may appeal to the Faculty / School Dean. If the student is not satisfied with the Faculty / School's Dean's decision, the student may appeal to the Dean of Graduate Studies. Lastly, if the student is not satisfied with the decision of the Dean of Graduate Studies, the Student may appeal to the University's Student Appeals Board. Dissatisfaction with a penalty will not be considered sufficient grounds for an appeal. For more information on appeals process and timing, see the Brock University Graduate Calendar and visit the Brock Ombudsperson website.

# 9 HEALTH, SAFETY & WELLNESS

The health and safety of individuals is to be a primary objective in every area of University operation. Every person utilizing University premises must comply with this policy and all related regulations, standards, programs, and procedures. Health, Safety and Wellness provides information, resources, tools, and support to assist each Brock community member in creating and fostering a healthy, safe, and

environmentally sustainable place to visit, study, live, and especially, work. Students should also be aware of Brock's Occupational Health & Safety Policy.

Students employed by the University are required under the Ontario Occupational Health and Safety Act to take the mandatory Health and Safety Awareness Training available via Brock's Health Safety and Wellness Toolbox on SharePoint (requires a Brock employee login).

Under the Accessibility for Ontarians with Disabilities Act (AODA) and Human Rights, students employed at Brock University are legally obliged to undertake mandatory online training. It can also be found on Isaak, Brock University's Sakai-based learning management system. Isaak/Sakai uses the same account and password as the my.Brocku.ca portal. Employees are required to print the page after selecting the "Submit for Grading" button following completion of the quizzes and provide it to their supervisor. Information about Student Accessibility Services (SAS) can also be found online.

Please review Brock's information on health, safety and wellness during the pandemic. At this time, students, staff, faculty and others visiting campus must complete a self-screen survey for COVID-19 risk. Information on access to campus (and answers to other FAQs) can be found here.

# 10 STUDENT RESOURCES

There are many services and resources available to students across campus. Some of these are noted below. For a full list of services and supports available at Brock, please visit the University's A-Z listing at: https://brocku.ca/directory/a-z/.

**Faculty of Mathematics and Science**

To find information for current graduate students in the faculty of Mathematics and Science visit

https://brocku.ca/mathematics-science/resources-for-graduate-students/#1572900755270-c9652ddc-3650

**Academic Policies**

Academic policies for undergraduate and graduate students are outlined in the respective Brock University Calendars (visit https://brocku.ca/webcal/) and the Faculty Handbook (visit: https://brocku.ca/university-secretariat/faculty-handbook/).

**Graduate Students Association**

The Graduate Students' Association (GSA) is a student organization that represents the interests of all graduate students at Brock University: MBA, MEd, MAcc, MA, MS, MSc, MTL & all PhD students (approximately 1700 in total). For more information on the services they provide, visit: http://www.brocku.ca/gsa.

**Student Wellness & Accessibility Centre**

Staff at the Student Wellness & Accessibility Centre have extensive experience and a wealth of knowledge to help students develop the skills and strategies they need to reach their full potential at Brock, including support in crisis management, personal counselling, student health, and student accessibility. If support is needed, students are encouraged to contact student counselling services at 1-

833-BROCK-33, or visit them in Schmon Tower ST 400. For more information, visit: https://brocku.ca/health-wellness-accessibility/.

**Health, Safety & Wellness**

Health, Safety and Wellness provides information, resources, tools, and support to assist each Brock community member in creating and fostering a healthy, safe, and environmentally sustainable place to visit, study, live, and especially, work. For more information, please visit: https://brocku.ca/human-resources/health-safety-and-wellness/.

**James A. Gibson Library**

The Library at Brock offers a variety of resources to students, including a study space and lockers for graduate students on the 6th floor. To see all the services provided by the library, visit: https://brocku.ca/library/.

**Faculty of Graduate Studies**

The Faculty of Graduate Studies (FGS) aims to help Brock graduate students to become well-rounded, ethical, and creative thinkers and researchers who will contribute to the betterment of society.

The FGS recognizes that alongside coursework and research, graduate school is an opportunity for personal and professional growth and development. Visit the Faculty of Graduate Studies website to learn more about the Professional Development opportunities available to Brock graduate students: https://brocku.ca/graduate-studies/student-development/.

The FGS also has oversight of graduate student admissions, funding, scholarships, student records, and orientation activities. For details, visit: https://brocku.ca/graduate-studies/.

**Career Services**

Graduate students have unique needs when it comes to planning their careers and finding work. Students may be headed towards a career in research or teaching, or preparing for a specific job in the private or not-for-profit sector. Whatever it may be, Career Services has a variety of resources and programming designed to help students figure out where they're going and how to get there. For information on the services and resources Career Services provides for students, visit: https://brocku.ca/ccee/career-education/campus/.

**Brock International**

Brock International offers in-person and virtual support services tailored specifically to international students, including immigration consulting, academic coaching, language support, transitioning to life in Canada and living in the Niagara region, and working as an international student. For more information on these services as well as a listing of events and workshops for international students, visit https://brocku.ca/international/.

**Financial and Administrative Services**

Financial and Administrative Services is the place to visit for questions regarding tuition, fees, accessing financial accounts, due dates, how to make payments, how to get refunds from withdrawn courses, and anything else related to student finances. For more information, visit: https://brocku.ca/safa/tuition-and-fees/overview/graduate/.

# 11 APPENDICES

1. Graduate Calendar
https://brocku.ca/webcal/2022/graduate/phys.html

2. Academic regulations and University policies
https://brocku.ca/webcal/2020/graduate/acad.html

3. Code of Student Conduct
https://brocku.ca/webcal/2020/graduate/code.html

4. Other University policies (e.g. governing IT use)
https://brocku.ca/university-secretariat/policies-procedures-and-best-practices/

5. Graduate Studies academic regulations from the Faculty Handbook
https://brocku.ca/university-secretariat/faculty-handbook/section-3#_genIndex85

6. Registration Policies and Procedures
https://brocku.ca/graduate-studies/current-students/Registration/

7. Brock Universities Master of Science In Materials Physics Webpage
https://www.physics.brocku.ca/Programs/MSMP/