## Graduate Programs

### **Overview**

The University offers graduate degrees in Education (MA, MEd), Computer Science (MSc), and Physics (MSc) and graduate Certificates in Management, Brewing Science, and a graduate level Micro-program in Climate Change.

## **Admission Requirements**

## Master of Education (MEd) and Master of Arts in Education (MA)

#### **General Admission Requirements**

- Completed Bachelor of Education or appropriate equivalent with a minimum average of 75%. Applicants to the Art Education concentration should have a completed undergraduate degree in a relevant discipline with a minimum average of 75%.
- Two years related professional experience.

#### **Required Supporting Documents**

- 2 references using the School of Education Reference Form.
- Proof of English proficiency. All applicants must submit proof of English proficiency. Consult the English Language Proficiency Requirements document to determine what, if any, supplementary documents you must provide.
- Copy of most recent university transcript.
- Letter of intent outlining why you believe you are a good candidate for graduate studies at Bishop's University.

MA applicants only: One-page description of your research interests, including area of interest, initial research questions, approach, possible resources required, and an approximate time line for completing the program.

Copy of personal identification document(s). Consult the Personal Identification Documents page to determine what document(s) you must provide.

### Master of Science (MSc)

#### **General Admission Requirements**

- Completed undergraduate degree in a related field with high academic standing
- Proof of English proficiency. All applicants must submit proof of English proficiency.

#### **Computer Science (Thesis option)**

The minimum requirements for admittance to the Master's program are an undergraduate degree with a major in Computing Science or equivalent, and a high upper-second class standing.

Candidates with high academic standing in an undergraduate degree other than computer science, who have some computer science background either academic or professional, may be admitted as graduate preparatory students. Preparatory students will be asked to complete up to one year of undergraduate courses to enhance their background.

In addition to academic performance, a combination of factors is taken into consideration in assessing the eligibility of a candidate for admission into graduate programs. One important such a factor is the availability of a faculty member competent and willing to supervise the academic program of studies and research of the candidate; a candidate will not be admitted to the program under any circumstance unless such a faculty member exists. Other factors include the performance of the candidate and the assessment provided by his/her referees as a measure of the likelihood that the candidate can successfully complete the course of studies and research.

#### **Computer Science (Project Option)**

The minimum requirements for admittance to the program are an undergraduate degree with a major in Computing Science, Information Technology, Computer Engineering, Electrical Engineering, Mathematics, Physics, or equivalent, as well as a 70% standing.

Candidates with insufficient academic background in Computer Science may be admitted as graduate preparatory students and will be asked to complete up to one year of undergraduate courses to enhance their background.

#### **Physics (Thesis-based)**

The program is open to graduates of any university of recognized standing who have obtained at least a Bachelor's degree with honours with a Class II standing (GPA of 3/4 or its equivalent). An applicant who has followed a combined program (e.g., majors in math and physics), must have obtained at least a Class II standing in their physics courses. Applicants who do not satisfy these requirements may, with the permission of the University, be admitted to a qualifying year to bring their standing up to that of an honours degree. Alternatively, the department may require students to do additional courses to those that are considered mandatory to meet the minimum requirements. Even if MSc applicants meet the minimum requirements, the department is not obligated to accept applicants based on the availability of supervisors, financial considerations, ability to offer the necessary courses, or the ranking of more qualified candidates.

## **Application procedure**

The application procedure for our graduate degrees is the following two-step process:

Pre-apply by completely filling in the departmental form. Note that the form is different for the two options (course-based and thesis-based). If the form contains all the pertinent information then you will receive from the department a fairly accurate evaluation, which in most cases indicate that your official application will be successful. Pre-applications are free of charge.

• Once you receive a positive evaluation from the department you must go to the Bishop's on-line application system and submit an official application (fees apply) in order to be granted official admission by the Admission Office.

Note that the two steps above can also be completed at the same time. However, in this case the application fees will be charged irrespective of the departmental decision.

## **Micro-program Climate Change**

The basic entry requirement will be an undergraduate degree in any field from a recognized university with at least a B standing in the final two years of study. There are no specific pre-requisites, but students will need to be comfortable with basic mathematical and scientific concepts.

## **Graduate Certificate in Business**

#### **General Admission Requirements**

- Undergraduate degree in a field other than business from a recognized university.
- Minimal academic average of 70%.
- No business experience necessary.

#### **Required Supporting Documents**

- Most recent university transcript.
- Proof of English proficiency (if applicable).

The online application must be completed and an application fee will need to be paid at the time of application.

# **Graduate Certificate in Brewing Science**

To quality for enrolment, students must hold a B.Sc. in Biochemistry, Biology, Chemistry, or another discipline relating to one or more of the three (e.g. Chemical or Biological Engineering) and a minimum graduating average of 60% (C+).

This program has a limited enrolment.

### **Application procedure**

The application procedure for our Graduate Certificates and Micro-program is the following:

- 1. Complete the application form.
- 2. Provide a copy of all of the following:
  - a. A statement of interest, no longer than 400 words in length, indicating why you want to be enrolled in the program and what you hope to gain from it
  - b. An official copy of all university transcripts
- 3. Pay the application fee by:
  - a. Cheque payable to Bishop's University
  - b. Credit card in person or by telephone (MasterCard or Visa accepted)

- 4. Submit the complete application package to the office of Jean Porter (Divisional Secretary/Natural Sciences) in one of the following ways:
  - a. In-person at the Divisional Secretary's office during business hours:
     Lennoxville Campus
     Johnson Building, Room J-117A
     2600, rue College
     Sherbrooke QC J1M 1Z7
  - b. Or by mail:
     Bishop's University
     c/o Jean Porter
     Divisional Secretary/Natural Sciences
     2600, rue College
     Sherbrooke QC J1M 1Z7

## Regulations for Graduate Studies in Education (MA, MEd)

To qualify for the degree of Master of Education or Master of Arts in Education, a candidate must be a graduate of this or another approved university and must complete 45 credits of graduate-level work in Education.

Courses leading to these programs are offered year round, on the Bishop's campus and possibly at off campus locations, via technology.

#### **General Academic Regulations**

- Applicants may be admitted to one of the following: the Master of Arts in Education or the Master of Education program.
- 2. M.Ed./M.A. students who receive a grade lower than 70% have failed the course and are not permitted to continue in the program without formal permission of the School of Education's Review Committee.
- 3. Students enrolled in either the M.Ed. or the M.A. who have not registered for any course during a period of more than 24 months are deemed to have withdrawn. They may reapply for admission to the program, subject to the same procedures and conditions as new applicants.
- 4. Full-time status for graduate level studies is defined to be 9 credits or more.

#### **Transfer Credit**

A candidate for the Master of Arts in Education or the Master of Education degree may, with the permission of the Dean of the School of Education, complete up to three appropriate courses (9 graduate-level credits) at another recognized institution. Candidates should obtain prior approval for such courses. Such courses may not be used to meet the requirements of core courses or projects, monographs, or theses.

## **Regulations for Graduate Studies** in Science (MSc)

The Division of Natural Sciences and Mathematics of Bishop's University offers a Master of Science degree (M.Sc.) program in the Departments of Chemistry, Computer Science, and Physics. Potential students are referred to the appropriate departmental section of this Calendar for specific program information.

#### Admission

- 1. Completed applications will be forwarded to the appropriate department for evaluation. Recommendations for admission to a degree program are made by the department to the Dean. Final approval for admission is made by the Dean.
- 2. Advanced courses of instruction leading to the Master of Science degree are open to graduates of any university of recognized standing who have obtained at least a Bachelor's degree with Honours with Class II standing or its equivalent. An applicant who has followed a combined program must have obtained at least a Class II standing in the subject of the Masters degree.
- 3. Applicants who do not satisfy these requirements may, with the permission of the department concerned and the Dean, be admitted to a qualifying semester(s) or year to bring their standing up to that of an Honours B.Sc. degree.
- 4. Admission to graduate courses does not in itself imply candidacy for a graduate degree.
- 5. All information is processed through the Admissions Office.
- 6. These regulations for admission are minimum requirements. Additional requirements may be specified by departments, with the approval of the Division.

#### **General Regulations**

- Apart from any qualifying semesters, the minimum period of registration for the M.Sc. shall be one academic year of fulltime study, including research, or its equivalent in part-time study. This requirement must be met regardless of the amount of graduate work previously completed in any other program or at any other university.
- 2. The maximum time allowed for the fulfillment of the requirements for graduation shall normally be four years in the case of full–time students, excluding any qualifying or inactive semesters. For part-time students the course-work required for qualifying semesters (if any) and the regular credit requirements of the program must be completed at the rate of no fewer than 6 credits per year.
- 3. Students may choose to leave the program temporarily for one semester, but only with permission of their supervisor; these students shall be considered inactive for that semester. Such a one-semester leave of absence from the program will not normally be allowed more than twice.
- 4. Students must obtain a minimum of 65% in each required course. Courses may not be repeated more than once.
- 5. Each degree candidate will be assigned, by the department in which the thesis is to be submitted, to a supervisor who shall be a faculty member of the department and who will

- be responsible for advising the candidate and directing his/her research. Co-supervisors may also be assigned with the department's approval.
- 6. The course of study will be arranged by the supervisor. The subject of the thesis also requires approval by the supervisor.
- 7. The responsibilities of the students include: informing themselves of program requirements and deadlines, working within these deadlines, communicating regularly with their supervisors; and submitting annual progress reports to their supervisors and the Division.
- 8. Students may receive (limited) financial support from the University in the form of research assistantships, undergraduate marking, tutoring and/or laboratory demonstrating duties. Such support requires approval in writing from both the department and the Dean. Duties and remuneration will be clearly stated and in no case shall duties exceed ten hours per week on average.
- All students in graduate courses or degree programs enjoy the protection of the University's policy and procedures on academic review and appeal (see pp. 21–24 of the University Calendar) and on research ethics (see the Vice-Principal for documentation).
- 10. A passing grade is 65% or better or "P" for pass. A grade less than 65% or "F" is a failure.
- 11. Full-time status for graduate level studies is defined to be 9 credits or more.

#### **Supervision**

- It is the responsibility of the supervisor to monitor the progress of students throughout the graduate program, to ensure that all conditions of admission and requirements are fulfilled, to provide students with information on their program, and to advise them how to resolve problems which may arise during their program.
- 2. Thesis supervisors must be tenured or tenure-stream faculty or adjunct faculty. Sessional and contract faculty may co-supervise students with the department's approval. Emeritus Professors may co-supervise. In all cases, the department must ensure continuity of appropriate supervision of their graduate students.
- 3. Problems that cannot be resolved by discussion between the student and the supervisor shall be referred to the Dean.
- 4. Information concerning sources of financial support and policies on obtaining same should be sought from the Dean.
- 5. Students must receive guidance and constructive criticism concerning their progress on a regular basis through the program, including regular meetings and/or e-mail communication with supervisors, attendance at research seminars, and appropriate responses to the student's annual progress report.
- 6. By April 15 of each year, M.Sc. candidates must submit to their supervisors a progress report covering both courses and research programs. This report must include the candidate's name, program and semester, a list of courses completed and their grades, a list of courses in which the candidate is registered, and a list of courses yet to be taken. A statement concerning the research work must include the title of the thesis

(or if this has not yet been decided, a general title of the project), a short outline of the work to its present state, including the amount of work done and the significant findings of the research, plus a statement of the work proposed for the future and a realistic estimate of the time required for its completion.

7. The supervisor will evaluate the annual progress report and grant a grade of "satisfactory" or "unsatisfactory". Copies of this graded report will go to the department concerned and to the Division. The department m ay compel a student to withdraw from the M.Sc. degree program in the event of an "unsatisfactory" grade on an annual progress report. Students have the right to have this decision reviewed, first by the Dean and then by the Academic Review Committee.

#### **Thesis Regulations**

- All M.Sc. students must make a satisfactory oral presentation and defense of their thesis before graduating. Three copies of the thesis of a degree candidate must be submitted, with the approval of the supervisor, to the Division at least two months in advance of the marks deadline of the semester in which it is to be defended.
- 2. The three copies of the thesis delivered to the Division must be accompanied by a letter from the supervisor informing the Division of the names of the two persons who have consented to act as examiners of the thesis (see Regulation 3). The secretary of the Division shall forward one copy of the candidate's thesis to each examiner with an appropriate covering letter.
- 3. The thesis shall be orally presented and defended before two examiners other than the supervisor, one of whom shall be an external examiner who is a specialist in the candidate's field of interest. The examiners shall be selected by the supervisor and department concerned, subject to the approval of the Dean. A thesis will be accepted only following approval of its defense by both examiners. A thesis may be returned to the candidate for revision on the advice of one or both examiners and subsequently re-defended (once only).
- 4. After the thesis has been defended and accepted, at least three copies shall be properly bound by the University at the candidate's expense, one for deposit in the Library, one for the retention of the department concerned and one for the supervisor. At the request of the candidate, a fourth copy maybe bound for his/her personal use.
- 5. Advice concerning the preparation and presentation of theses is to be provided by the supervisor and department concerned.
- 6. It is the responsibility of a supervisor to uphold and to transmit to students the highest professional standards of research and scholarship in the preparation of theses; to provide guidance in all phases of the student's research; to meet with their students regularly; to provide prompt feedback on submitted work, including drafts of the thesis; and to clarify expectations regarding collaborative work, authorship, publication and conference presentations which may result from the student's research.