Twin Cities Campus

Biological Sciences M.B.S.

CCAPS Graduate Programs Instruction

College of Continuing and Professional Studies

Link to a list of faculty for this program.

Contact Information:

College of Continuing Education, Master of Biological Science Program, 20 Ruttan Hall, 1994 Buford Avenue, St. Paul, MN 55108 (612-

624-4000; fax: 612-626-2800) Email: ccembs@umn.edu

Website: http://www.cce.umn.edu/Master-of-Biological-Sciences/index.html

• Program Type: Master's

- Requirements for this program are current for Fall 2017
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- Degree: Master of Biological Sciences

Along with the program-specific requirements listed below, please read the <u>General Information</u> section of the catalog website for requirements that apply to all major fields.

The master of biological sciences (MBS) degree is a highly flexible graduate-level program designed to meet the needs of members of the working community who wish to increase their knowledge in areas of modern biology. Students focus their studies in one of three broad areas: molecular biosciences, cellular and organismal biology, or environmental and population biology. Limited elective credits in areas, such as education, business, and public health can be used to support a student's individual career goals and program focus. The degree enables recipients to learn new job skills, change professional emphasis, or provide added value to their present job and may be completed on a part-time basis.

Program Delivery

This program is available:

• via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

To be admitted, students must have a bachelor's degree from an accredited post-secondary US institution or its foreign equivalent.

Other requirements to be completed before admission:

Evidence of knowledge of current, college-level concepts of basic chemistry, organic chemistry, and some biology coursework is required. Transcripts showing equivalent coursework combined with professional experience will be considered for application toward fulfillment of the prerequisites for admission. Two years of relevant experience in the workforce is preferred for admission.

Special Application Requirements:

A statement of career goals, letters of reference, transcripts for all undergraduate and post-baccalaureate degrees or coursework, and an updated resume must accompany the application. Application deadlines are in the spring for fall semester admission, and in the fall for spring semester admission. Please refer to the program website for further details.

International applicants must submit score(s) from one of the following tests:

• TOEFL

Internet Based - Total Score: 84
Internet Based - Writing Score: 21
Internet Based - Reading Score: 19
Paper Based - Total Score: 563

• IELTS

Total Score: 6.5Reading Score: 6.5Writing Score: 6.5

• MELAB

- Final score: 84

Key to test abbreviations (TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the <u>General Information</u> section of the catalog website.

Program Requirements

Plan B: Plan B requires 30 major credits and 0 credits outside the major. The final exam is oral. A capstone project is required. Capstone Project: The Plan B project is carried out under the direction of a faculty member. It can be literature-based or lab-based with a testable hypothesis and a final paper of 30-50 pages in length, which is an in-depth examination and analysis of a particular area, problem, technique, etc.

Plan C: Plan C requires 30 major credits and 0 credits outside the major. The is no final exam. A capstone project is required. **Capstone Project:** The Plan C requirement is the Capstone course APS 8003.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

The program includes coursework, independent study, and a project for Plan B master's students or capstone course for Plan C master's students. With guidance from program advisors, students complete 30 credits. MBS candidates may transfer up to 12 credits into the program. Foundation credits may be waived or substituted if the student can show proficiency in the subject area. A bioethics requirement may be met with a credit or non-credit course. Coursework is taken from the regular graduate-level coursework. An overall GPA of 3.00 is required for the degree to be awarded.

Introductory Course (1 credit)

MBS 6001 - Introduction to Research in the Biological Sciences (1.0 cr)

Biochemistry Foundation (3 credits)

BIOC 6021 - Biochemistry (3.0 cr)

Biological Scieces Courses (17 - 23 credits)

Courses in the student's area of concentration within the biological sciences chosen in consultation with student's advisor. One course in at least two of the following areas should be taken: Molecular Biosciences, Cellular and Organismal Biology, Environmental and Population Biology. Up to 7 credits of directed research or directed study courses can be included. Plan C students MUST take at least 1 credit of APS 8110.

Take 17 - 23 credit(s) from the following:

•Courses in the student's area of concentration within the biological sciences chosen in consultation with student's adviser.

Electives (0 - 6 credits)

Elective courses outside the biological sciences chosen with student's advisor.

Take 0 - 6 credit(s) from the following:

•Electives courses outside the biological sciences chosen with student's adviser.

Final Project or Capstone (3 credits)

Plan B students take APS 8002 in their final semester. Plan C students take APS 8003 in their final semester.

MBS 6002 - Final Project Course for Plan B MBS Students (3.0 cr)

or MBS 6003 - Capstone Course for Plan C MBS Students (3.0 cr)