



Twin Cities Campus

Plant Biological Sciences Minor

Plant and Microbial Biology

College of Biological Sciences

Link to a [list of faculty](#) for this program.

- **Students will no longer be accepted into this program after Spring 2018. Program requirements below are for current students only.**
- **Plant Biological Sciences is now Plant and Microbial Biology. Please refer to the Plant and Microbial Biology program for current admissions and program requirements.**

Contact Information:

Plant and Microbial Biology Graduate Program; 140 Gortner Labs, 1479 Gortner Avenue, St. Paul, MN 55108 (612-625-4222; fax: 612-625-1738)

Email: pbiogp@umn.edu

Website: <https://cbs.umn.edu/academics/departments/pmb/graduate-education>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Spring 2018
- Length of program in credits (Masters): 6
- Length of program in credits (Doctorate): 12
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Plant biological sciences encompasses all aspects of the basic biology of both higher and lower plants. Major emphases include molecular and physiological approaches to development; physiological, structural, and functional studies at the cellular and organismal levels; systematic and evolutionary biology; and molecular genetics and applied biotechnology. Students study plants from the subcellular and molecular to the whole plant and community levels of biological organization. They also have opportunities for laboratory and field research at state, national, and international levels. Each student's program is planned to meet individual requirements within the framework of a multidisciplinary core of coursework. Seminars are an integral part of the program.

Program Delivery

This program is available:

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

Prerequisites for Admission

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

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

Program Sub-plans

Students are required to complete one of the following sub-plans.

Students may not complete the program with more than one sub-plan.

Masters

Master's-level Minor

Take at least 6 credits, chosen in consultation with the Plant Biological Sciences director of graduate studies.

Doctoral

Doctoral-level Minor

Take at least 12 credits, chosen in consultation with the Plant Biological Sciences director of graduate studies.