



Twin Cities Campus

Microbial Engineering Minor

BioTechnology Institute

College of Biological Sciences

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

Contact Information:

M.S. Program in Microbial Engineering, University of Minnesota, 1479 Gortner Avenue, Suite 140, Saint Paul, MN 55108 (612-624-6774; fax 612-625-5780)

Email: mice@umn.edu

Website: <http://www.bti.umn.edu/MicE>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2016
- Length of program in credits (Masters): 10
- 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.

Microbial engineering is an interdisciplinary program that combines an understanding of basic principles in microbiology, biochemistry, molecular biology, chemical engineering, and related sciences. Students are trained in the industrial application of microorganisms, cultured cells, and immunologic agents. Students learn both modern basic microbiology and biological engineering. Courses may be chosen from specific fields including biochemistry, microbiology, food science, genetics and cell biology, or pharmacognosy. The program is coordinated by the BioTechnology Institute (BTI) and involves faculty from 10 departments and 5 institutes of the University.

Note: The minor in microbial engineering is offered at the doctoral level only.

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 towards program requirements is not permitted.

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 10 credits, chosen in consultation with the Microbial Engineering director of graduate studies.

Doctoral

Doctoral-level Minor

Take at least 12 credits, chosen in consultation with the Microbial Engineering director of graduate studies.