

# Dual Degree Program in Mathematics and Engineering

## Major requirements

Students who express interest in the dual degree program will be selected for entrance into the UW-Madison, UW-Milwaukee, UW-Platteville, UW-Stout, University of Minnesota Duluth, or Winona State University portion of the program based on their GPA in all course work; their GPA in the chemistry, computer science, mathematics, and physics course work required by the program; and the positive recommendation of the UW-La Crosse Mathematics and Statistics Department Chair (or designee). The dual degree engineering agreement with UW-Madison has additional requirements for eligibility, including Wisconsin resident status and that students must have enrolled in UW-La Crosse from high school (rather than transferring to UWL).

In order to receive the B.S. degree from UW-La Crosse, dual-degree students also must complete the remaining 35 credits (to total a minimum of 120 credits) in engineering at the partner institution and transfer these credits to UW-La Crosse. For the typical student, the remaining 35 credits must include at least 15 credits at the 300-level or above and at least 13 credits from the engineering college or institute. This transfer of credits and awarding of the B.S. degree by UW-La Crosse can take place as soon as the student earns the necessary credits.

Students are recommended to include the following courses in their work at UWL:

Code	Title	Credits
CHM 103	General Chemistry I	5
CHM 104	General Chemistry II	5
CS 120	Software Design I	4
ECO 110	Microeconomics and Public Policy	3
ECO 120	Global Macroeconomics	3
ECO 336	Women in the U.S. Economy	3
MTH 207	Calculus I	5
MTH 208	Calculus II	4
MTH 265	Mathematical Models in Biology	4
MTH 308	Linear Algebra with Differential Equations	4
MTH 310	Calculus III: Multivariable Calculus	4
MTH 353	Differential Equations and Dynamical Systems	3
MTH 435	Mathematics for Data Driven Modeling	3
MTH 485	Industrial Mathematics Capstone	3
PHY 203	General Physics I	4
PHY 204	General Physics II	4
PHY 321	Classical Mechanics	3
STAT 245	Probability and Statistics	4

Students interested in industrial engineering should add ACC 221 Accounting Principles I (3 cr.). Students should consult with the Mathematics and Statistics Department Chair for specific course and sequence advising for this agreement.

## Degree requirements

All students must complete the general education, college core, major/minor, and university degree requirements in order to qualify for a degree. The easiest way to track all of these requirements is to refer to the Advisement Report (AR) found in the Student Information System (WINGS) Student Center. All enrolled students have access to the AR.

- General education (<http://catalog.uwlax.edu/undergraduate/generaleducation/>)
- College core (p. 1)
- Baccalaureate degree requirements (p. 2)

## College of Science and Health (CSH) Bachelor of Science core requirements

B.S. and B.A. students graduating from the College of Science and Health are required to take two natural laboratory science courses selected from the general education laboratory science category (GE 05) and/or from BIO 203, BIO 304, BIO 210, CHM 104, GEO 221, GEO 222, PHY 104 or PHY 204, and they either must take two mathematics courses or one math course and one computer science course from the math/logical systems category of the general education requirements (GE 02). One of the two science courses must be from a department outside of the student's major department.

**Note:** Math courses can be pairs, i.e. 150 and 151; MTH/CS majors can use two science courses from same department.

**For the Bachelor of Science degree**, in addition to all other College of Science and Health core requirements, students from non-exempted programs<sup>1</sup> must complete one of the following options. It is recommended that courses are selected in consultation with students' academic advisor.

1. Complete a second major; or
2. Complete a minor outside the major; or
3. Complete two certificates outside the major with at least 12 combined credits at the 300/400 level; or
4. Complete an individualized option, consisting of 18 credits
  - a. At least 12 credits must be earned at the 300/400 level outside the major department.
  - b. The remaining six credits should come from
    - i. 100 level or higher courses outside the major (General education courses may apply provided they are not being used to fulfill minimum general education requirements.); or
    - ii. 300/400 level courses inside major not being used to fulfill major requirements.
  - c. Internship credits may not count toward the individualized option.

<sup>1</sup> The list of exempted CSH programs is below.

## Baccalaureate degree requirements

Candidates for the Bachelor of Arts or the Bachelor of Science degrees must accomplish the following:

1. Fulfill the general education requirements.
2. Complete at least one ethnic studies (diversity) course.
3. Complete the courses prescribed by the Undergraduate Curriculum Committee for the degree desired in the respective school or college.
4. Earn a minimum of 120 semester credits with at least a 2.00 cumulative GPA.<sup>1,2</sup>
5. At least 40 credits must be earned in 300/400 level courses. Transfer courses earned or transferred at the 300/400 level apply to this requirement.
6. Complete major and minor requirements with at least a 2.00 GPA<sup>1, 2</sup> in each major and minor (and concentration or emphasis, if selected).
7. A minimum of 30 semester credits in residence at UWL is required for graduation. (See undergraduate resident requirement (<http://catalog.uwlax.edu/undergraduate/academicpolicies/graduation/#undergraduate-residence-requirement>).
8. Submit an application for graduation via the "Apply for Graduation" link in the WINGS Student Center as soon as the student has registered for his or her final semester or summer term in residence. December and winter intersession graduates should apply by May 1. May and summer graduates should apply by December 1.

<sup>1</sup> Grade point average requirements for some programs will be considerably higher than 2.00. Re-entering students may be required to earn credits in excess of the 120 needed for graduation in any curriculum in order to replace credits earned in courses in which the content has changed substantially in recent years. Each case will be judged on its own merit.

<sup>2</sup> The grade point average recorded at the time the degree is awarded will not be affected by future enrollment.

**No degree will be awarded unless all requirements are fulfilled and recorded within 30 days after the official ending date of each term.**