# **Engineering (Cooperative Program with UWM)**

### Cooperative Program with University of Wisconsin-Milwaukee

Advisers — John Katers, professor; Patricia A. Terry, professor and coordinator

Website: www.uwgb.edu/nas/

Engineers are professionals who apply mathematics, chemistry, physics, and engineering sciences to the study and design of systems for human use. Specific engineering fields include aerospace, chemical, civil and environmental, electrical and computer, industrial, materials, mechanical, petroleum and nuclear.

UW-Green Bay co-sponsors two programs with the University of Wisconsin-Milwaukee for students who seek careers in engineering. Engineering students may also apply for transfer to engineering programs in the state at UW-Madison, UW-Platteville, Marquette University and Milwaukee School of Engineering or other engineering programs outside of the state. It is important for all engineering students to contact an engineering adviser at UW-Green Bay in their freshman year.

### **Engineering and NEW Program**

UW-Green Bay co-sponsors a joint program with UW-Milwaukee called the Northeastern Wisconsin (NEW) Engineering Program, which allows students to begin their engineering studies at UW-Green Bay and complete them in the College of Engineering and Applied Sciences at UW-Milwaukee. Engineering and many general education courses at UW-Green Bay are recognized as equivalent to courses at UW-Milwaukee. Students who begin in engineering at UW-Green Bay and meet eligibility requirements are considered for admission into upper-level studies at UW-Milwaukee on the same basis as students who began at UW-Milwaukee.

UW-Milwaukee offers engineering degrees in civil/environmental, electrical, industrial, materials and mechanical engineering. Information on each of the majors can be found on the UW-Milwaukee website at www.uwm.edu/CEAS/ (http://www.uwm.edu/CEAS).

#### **Dual Degree Program**

UW-Green Bay and UW-Milwaukee also offer a Dual Degree Program in environmental science and environmental engineering. Under this program a student completes three years of study in the Environmental Science major at UW-Green Bay, then transfers to UW-Milwaukee and continues for two years in the civil/environmental engineering major. Upon completion of an outlined series of courses, the student receives both a B.S. degree from UW-Green Bay in Environmental Science and a B.S. degree from UW-Milwaukee in Civil/Environmental Engineering. Students wishing to enroll in this program should see an engineering adviser prior to registration in their freshman year.

Participants in the NEW Engineering Program typically complete 60 to 72 credits at UW-Green Bay toward the degree. This includes the completion of 18 credits of general education requirements specific to this program:

- 3 credits minimum in the arts
- 6 credits minimum in the humanities
- 6 credits minimum in the social sciences
- 3 credits in cultural diversity

General education courses are required of all students. These courses complement and enhance major coursework for additional exposure to other areas of knowledge and bring an understanding of the relationship among and between subject areas. At least 9 of the 18 required credits must be from courses at the 200-level or above or from 100-level courses that require at least one prerequisite.

A grade of C or better in ENG COMP 105 Expository Writing will satisfy UW-Milwaukee's English composition requirement.

UW-Green Bay students are eligible to apply for advancement into the major at UW-Milwaukee at the point of transfer. The UW-Green Bay Academic Advising Office has forms. The filing deadlines are October 1 for spring semester, February 15 for summer session, and June 1 for fall semester.

For information on other engineering options, refer to the Preprofessional Programs of Study section of this catalog or contact one of the engineering advisers listed above.

# Requirements for the Major

## All engineering and dual degree majors must take:

### **Required Courses**

| CHEM 211 | Principles of Chemistry I            | 4 |
|----------|--------------------------------------|---|
| CHEM 212 | Principles of Chemistry II           | 4 |
| CHEM 213 | Principles of Chemistry I Laboratory | 1 |

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| CHEM 214      | Principles of Chemistry II Laboratory                  | 1  |
|---------------|--|----|
| ENG COMP 100  | College Writing  | 3  |
| ENGR 201      | Engineering Materials                                  | 4  |
| ENGR 313      | Mechanics I  | 3  |
| ENGR 314      | Mechanics II ((not required in materials engineering)) | 3  |
| MATH 202      | Calculus and Analytic Geometry I                       | 4  |
| MATH 203      | Calculus and Analytic Geometry II                      | 4  |
| MATH 209      | Multivariate Calculus                                  | 4  |
| PHYSICS 201   | Principles of Physics I                                | 5  |
| PHYSICS 202   | Principles of Physics II                               | 5  |
| Total Credits |  | 45 |

See an adviser for additional requirements in aerospace, chemical, nuclear, and petroleum engineering.