Physics and Engineering Dual Degree

Want a degree in both physics and engineering? Want to do it all in approximately five years? UW-Eau Claire has a dual degree program that allows students to receive a physics degree in conjunction with an engineering school degree. You’ll start by taking a number of courses in physics, chemistry and computer science, as well as math, English and general education. After successfully completing the course requirements and meeting the criteria, you can choose to transfer to either UW-Madison’s College of Engineering, UW-Milwaukee’s College of Engineering and Applied Science, or UM-Twin Cities College of Science and Engineering to begin the course work for an engineering degree.

Major

- Physics and Engineering Dual Degree

Where you'll find our grads

- Graduate School, Aerospace Engineering and Mechanics, University of Minnesota-Twin Cities, Minneapolis,
- MQuality Engineer and World Wide Stop Ship Coordinator, IBM in Rochester, MN
- Industrial Engineer, Bechtel National, Frederick, MN
- Owner, Electronics Design/Consulting Firm, San Francisco, CA
- National Research Council Research Associate, NASA Johnson Space Center, Houston, TX
- Test Engineer at Medtronic, Minneapolis, MN
- Graduate School, Aerospace Engineering, Stanford University

Prepared for Success

UW-Eau Claire graduates more physics majors than most other four-year colleges in the country, according to a recent American Institute of Physics study. One of those graduates, Jonathan Watson, was a scientist at MIT Lincoln Laboratory, a federally funded research and development center. He works in the Air and Missile Defense Technology division. Watson said he was well-prepared for his graduate studies at MIT and his career. “The Physics program provided a breadth to my undergraduate studies that I would have missed in more specialized engineering programs. The program provided a level of flexibility in working on technical problems that I wouldn’t have otherwise.” Employers are particularly taken with the Dual Physics/Engineering graduates. Your enhanced breadth and depth of dual majors will set you apart from graduates with just an engineering degree. Math and physics are essential skills for anyone pursuing a career in engineering. The Physics degree curriculum at UW-Eau Claire provides a stronger foundation in math and physics than those courses required for an engineering degree alone, and most UW-Eau Claire graduates earn a minor in math, further enhancing their employability.

Why UW-Eau Claire

Faculty Experts

At UW-Eau Claire you’ll find small classes taught by talented professors who know your name. You’ll work alongside faculty outside class, conducting research projects and sharing ideas!

Suggested Freshman Curriculum

- University Physics Calculus I and II University writing requirement — depending on placement exam.
- General Chemistry I and II Note: Students planning to transfer to UW-Madison, UW-Milwaukee or UM-Twin Cities should consult with a dual degree adviser before signing up for a computer science course.

Program Options

Because the courses for the first two years of the dual degree program are the same as those for the Pre-Engineering program, students can wait until their junior year to make the decision to either pursue a dual degree in physics and engineering or transfer to an engineering school.
Physics and Engineering Dual Degree (continued)

Students must satisfy the 36-credit Liberal Arts Physics Major/Dual Degree Emphasis requirements as well as the University and College of Arts and Sciences requirements. Students must meet the course requirements for their specific engineering discipline from either UW-Madison College of Engineering, UW-Milwaukee College of Engineering and Applied Science or UM-Twin Cities College of Engineering. Each engineering school has different entrance requirements and offers different fields within the program.

Engineering school requirements and majors

GPA requirements are competitive. Please consult with your advisor for current trends.

UW-Madison College of Engineering

Principal fields within the engineering program are:

- Biomedical engineering
- Chemical engineering
- Civil engineering
- Electrical and Computer engineering
- Engineering physics and mechanics
- Industrial engineering
- Materials engineering
- Mechanical engineering
- Nuclear engineering

UW-Milwaukee College of Engineering and Applied Science

Principal fields within the engineering program are:

- Biomedical engineering
- Civil engineering
- Computer engineering
- Electrical engineering
- Industrial engineering
- Materials engineering
- Mechanical engineering

UM-Twin Cities College of Science and Engineering

Principal fields within the engineering program are:

- Aerospace engineering
- Biomedical engineering
- Civil engineering