



# PHYSICS AND ENGINEERING DUAL DEGREE PROGRAM

## UW-EAU CLAIRE UNDERGRADUATE FACT SHEET

Students who choose to complete the physics and engineering dual degree program will receive a UW-Eau Claire physics degree in conjunction with an engineering school degree – all in approximately five years. To do this, students start out pursuing a physics degree at UW-Eau Claire. They'll take 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 a set of criteria, they can choose to transfer to either UW-Madison College of Engineering or the University of Minnesota Institute of Technology in the Twin Cities to begin the course work for an engineering degree.

### WHAT ARE THE BENEFITS OF THE DUAL DEGREE PROGRAM?

- *Increased employment marketability.* The physics and engineering dual degree program is designed to give students expanded opportunities and a competitive edge when applying for internships and employment after graduation.
- *Greater flexibility in choosing a major.* 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. In addition, upper-level UW-Eau Claire students working toward a physics degree can switch to the dual degree program and still be on track to earn both degrees.
- *Stronger foundation in math and*

*physics.* Ask any engineer – 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.

- *Dedicated faculty in a nurturing environment.* When you start your dual degree program 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, publishing scholarly articles or just sharing ideas.

### UW-EAU CLAIRE FACTS AT A GLANCE

- Location: Eau Claire, Wis.; city pop. 64,000, metro. pop. 151,000
- Average enrollment: 10,500
- Undergraduates: 10,063
- Graduate students: 503
- International students: 124
- Multicultural students: 485
- Average men-women ratio: 2-to-3
- Students who spend at least a semester studying abroad: 24%
- Students doing undergraduate research with faculty/staff: 710+
- ACT composite average: 24+
- Average high school rank: 77%
- Average class size: 28
- Faculty-student ratio: 1-to-20
- Computers-student ratio: 1-to-9
- Student organizations: 224
- Walk across campus: About 10 minutes
- Nickname: Blugolds
- Colors: Navy and old gold

### THE EAU CLAIRE ADVANTAGE

- Many students select UW-Eau Claire because of its excellent reputation, comfortable size, convenient location and lower costs.
- Our classrooms are filled with respected faculty scholars who love to teach. Since professors put students' learning first, students get individual attention in and out of the classroom.
- There are typically fewer than 10 students in an advanced course.
- The Society of Physics Students and Sigma Pi Sigma, the physics honor society, provide yet another way to connect with other students with similar interests and goals.
- The program's strong reputation attracts many top students from throughout the Midwest, which means you will share classrooms with motivated students who are ready to take on challenging projects.
- Physics students have access to outstanding facilities, such as the Casey Observatory, the L.E. Phillips Planetarium, an optics research lab, surface science research labs, thin-film research lab, electron microscopy lab, synchrotron radiation center, electronics lab, machine shop and a 24-inch computer-controlled telescope at Hobbs Observatory.
- Many UW-Eau Claire physics students have summer research experiences at prestigious sites throughout the country.
- U.S. News & World Report consistently ranks UW-Eau Claire among the best regional public universities in the Midwest and in the top tier of all regional Midwestern universities, both public and private.

## DUAL DEGREE REQUIREMENTS

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. Also, students must meet the course requirements for their specific engineering discipline from either UW-Madison College of Engineering or the University of Minnesota Institute of Technology. Each engineering school has different entrance requirements and offers different fields within the program. To learn more about UW-Eau Claire requirements for the physics degree, go to [www.uwec.edu/physics/major/dual](http://www.uwec.edu/physics/major/dual).

## ENGINEERING SCHOOL REQUIREMENTS

### UW-Madison

Students must have a 3.0 overall grade-point average to transfer into the College of Engineering at UW-Madison. Principal fields within the engineering program at UW-Madison are:

- Civil engineering
- Computer engineering
- Electrical engineering
- Engineering physics
- Industrial engineering
- Materials engineering
- Mechanical engineering
- Nuclear engineering

### University of Minnesota-Twin Cities

Students must have a 2.8 GPA to transfer into the Institute of Technology at the University of Minnesota. Principal fields within the engineering program are:

- Aerospace engineering
- Civil engineering
- Computer engineering
- Electrical engineering
- Materials engineering
- Mechanical engineering

## HIGH SCHOOL PREPARATION

- All students who enroll at UW-Eau Claire are required to have a

minimum of 17 college preparatory units including:

- 4 years of English (at least 3 composition and literature)
- 2 years of a single foreign language
- 3 years of math (algebra, geometry, 1 advanced college preparatory math)
- 3 years of natural science
- 3 years of social science (1 must be world or American history)
- 2 additional units in the areas already mentioned or other academic areas

## FRESHMAN COURSE WORK

### Sample First Year

#### FALL SEMESTER

COURSE#	TITLE	CREDITS
Phys 231	University Physics I	5
Math 114	Calculus I	4
	Wellness concepts course	1
	Health related fitness course	1
Eng 110	Introduction to College Writing	5

or

Chem 103	General Chemistry I	5
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#### SPRING SEMESTER

Phys 232	University Physics II	5
Math 215	Calculus II	4
	GE-III Elective	3
Eng 110	Introduction to College Writing	5

or

Chem 103	General Chemistry I	5
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Note: Students planning to transfer to UW-Madison should consult with a dual degree adviser before signing up for a computer science course.

## FOR MORE INFORMATION

For more information about UW-Eau Claire's dual degree program, contact:

### DR. KIM W. PIERSON

Dual Degree Advisor  
Phillips Hall 235  
Eau Claire, WI 54702-4004  
715-836-5009  
[www.uwec.edu/physics/major/dual](http://www.uwec.edu/physics/major/dual)

For more information about campus including costs, housing, admission requirements and tours:

### ADMISSIONS

Schofield Hall 112  
UW-Eau Claire  
Eau Claire, WI 54702-4004  
715-836-5415  
[admissions@uwec.edu](mailto:admissions@uwec.edu)  
[www.uwec.edu/admissions](http://www.uwec.edu/admissions)



Experience the Eau Claire Advantage.