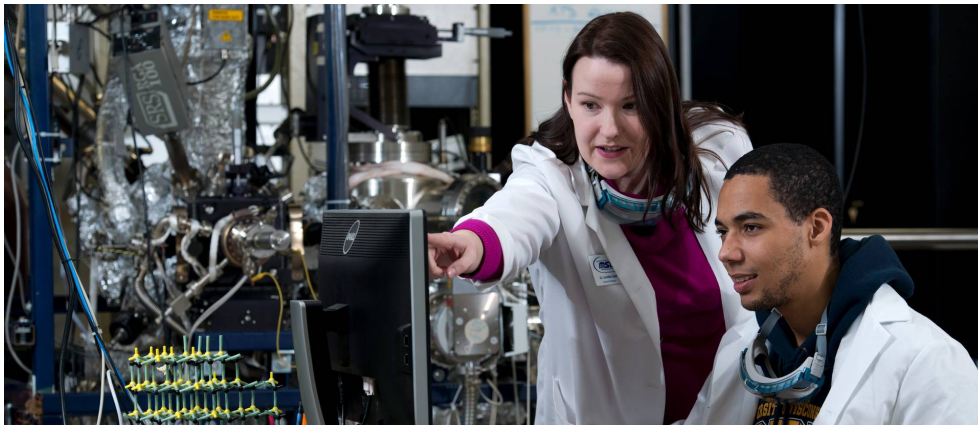


Materials Science and Engineering



Every day we come into contact with manufactured objects that are essential to modern life: vehicles, clothes, machines in our homes and offices, sport and leisure equipment, computers and phones, and medical technology. Everything we see and use is made from materials: metals, polymers, ceramics, semiconductors and composites. New materials are being developed faster today than any time in history, enabling scientists and engineers to further improve the performance of existing products and to develop innovative technologies that will enhance every aspect of our lives. Materials science and engineering is now a key discipline in the competitive global economy and discipline with some of the most exciting career opportunities. Undergraduates in materials engineering and materials science majors study structure, properties and behavior of materials, explore processes to manufacture useful products from them, and research environmentally friendly materials. Undergrads also develop required skills in communication, problem solving, critical thinking and teamwork as a part of their education. As a result, graduates are best prepared to succeed in post-baccalaureate opportunities and future careers.

Majors

Comprehensive majors (no minor required)

Contact Info:

Marc McEllistrem, Materials Science
+ Engineering
Phillips Science Hall 177
101 Roosevelt Avenue
715-836-4081 |
mcellimt@uwec.edu

“I wanted to come to a school like UW-Eau Claire because I wanted to interact with the people who have the most knowledge to share — the professors. Knowing that professors, not TA's, teach every class here was huge for me.”

— Tayo Sanders III '15 |
Materials science | Rhodes
Scholar

- **Materials Science and Engineering**
- **Materials Science - Applied Materials**
- **Materials Science - Chemistry of Materials**
- **Materials Science - Geomaterials**
- **Materials Science - Liberal Arts**
- **Materials Science - Mathematics of Materials**
- **Materials Science - Nanoscience**
- **Materials Science - Physics of Materials**
- **Materials Science - Entrepreneurship**

The Power of **AND**

University of Wisconsin
Eau Claire

Materials Science and Engineering (continued)

Where you'll find our grads

- Graduate programs at Northwestern, Purdue, Michigan, Iowa, U. Mass, Oregon, Washington State, and Oxford (England)
- Employed at 3M (St. Paul, MN), Kohler (Sheboygan, WI), Preco (Somerset, WI), Phillips Medisize (Menominee, WI), ITW (Chippewa Falls, WI), Cardinal Glass (Menominee, WI)

Prepared for Success

Blugolds who pursue materials science have different tracks to pursue based on their interests:

- **Materials Science and Engineering** is a technically-focused degree with a strong emphasis on math, science, and engineering.
- **Materials Science** is a flexible degree with more opportunity to design your own focus (one of eight emphases) and pursue a second area of interest.

Positions held by graduates include engineering (e.g. materials engineer, process engineer, quality engineer, applications engineer, design engineer), quality assurance, research and development, and continued education at the graduate level.

Why UW-Eau Claire Experiential Learning

Students enrich their study through internships. Internships established through the department can be applied towards a students' degree and are typically hosted by regional companies with connections to the program.

Students also strengthen their understanding of materials science through one-on-one research with

faculty mentors during the academic year and over the summer, as well as through national research programs across the US.

Faculty Experts

Our outstanding faculty are proud of the individual attention they give their students. You'll learn in small class settings and get lots of one-on-one attention from professors who inspire learning and truly want you to succeed. Faculty draw from several areas of expertise, including, chemistry, physics, materials science, and have experience in polymer engineering, metallurgy, industry and working with super conductors.

Innovative Facilities

Students have the opportunity to use excellent on-campus state-of-the-art materials science facilities including instrumentation housed in the Materials Science Center. Instrumentation includes: a scanning Auger nanoprobe, a transmission electron microscope, a scanning electron microscope, an x-ray photoelectron spectrometer, a scanning tunneling electron microscope, atomic force microscopes, a high resolution inductively coupled plasma mass spectrometer, x-ray diffractometer, x-ray fluorescence spectrometer and a molecular beam epitaxial growth chamber to name a few!

- Chemistry I and II
- University Physics I
- Social Science/Humanities Liberal Ed courses
- University writing requirement — depending on placement exam

First-Year Suggested Curriculum

- Introduction to Materials Science
- Precalculus or Calculus courses
- Chemical Principles of General

The Power of  AND

University of Wisconsin
Eau Claire