ENGINEERING AND APPLIED SCIENCE (COLLEGE OF)

UWM’s College of Engineering & Applied Science is a dynamic research institution with award-winning faculty, state-of-the-art facilities and established business connections that provide context for our work.

One of only two doctorate-granting institutions in the state of Wisconsin, UW-Milwaukee is recognized by the Carnegie Classification of Institutions of Higher Education as one of the nation’s top research institutions. UWM’s location offers unique benefits to engineering students and faculty alike. Seven Fortune 500 companies’ international headquarters are located within easy driving distance of the university – as are many leading manufacturers’ facilities.

This has real and lasting impact on the UWM engineering community. Collaborative research, corporate partnerships, and real-world work experience are an integral part of the UWM experience.

We invite you to learn more about our research as well as our undergraduate and graduate programs. You’ll see why UWM is the right choice when you are ready to build your future and change the world.

Mission
To educate students to become creative problem solvers, conduct leading-edge research with global impacts, and act as a catalyst for improved economic development and quality of life in Wisconsin.

Vision
To become a globally prominent engineering education and research institution.

Our location in the major industrial center of the state of Wisconsin offers engineering and computer science students several advantages. Professional engineers and computer scientists from the industrial community share their expertise with the College in the classroom, research laboratory, and on the College’s advisory committees. Our very successful co-op and internship programs give students work experience in their field of study before graduation. Many of the projects that students work on in the classroom are real projects brought to us by local companies. In short, Milwaukee-area companies offer our students a real-world laboratory to gain valuable insights and skills in their major field.

Accreditation
UWM is accredited by the Higher Learning Commission. In addition, the College’s bachelor’s programs in civil engineering, computer engineering, electrical engineering, industrial engineering, materials engineering, and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET. The computer science program is accredited by the Computing Accreditation Commission of ABET. The biomedical engineering program will be reviewed for accreditation during the 2020-21 academic year.

Departments and Programs

- Biomedical and Health Informatics (http://catalog.uwm.edu/engineering-applied-science/biomedical-health-informatics/)
  - Biomedical and Health Informatics, PhD (http://catalog.uwm.edu/engineering-applied-science/biomedical-health-informatics/biomedical-health-informatics-phd/)
- Biomedical Engineering (http://catalog.uwm.edu/engineering-applied-science/biomedical-engineering/)
  - Biomedical Engineering, BSE (http://catalog.uwm.edu/engineering-applied-science/biomedical-engineering/biomedical-engineering-bse/)
- Civil and Environmental Engineering (http://catalog.uwm.edu/engineering-applied-science/civil-environmental-engineering/)
  - Civil Engineering, BSE (http://catalog.uwm.edu/engineering-applied-science/civil-environmental-engineering/civil-engineering-bse/)
  - Environmental Engineering, BSE (http://catalog.uwm.edu/engineering-applied-science/civil-environmental-engineering/environmental-engineering-bse/)
  - Structural Engineering, Minor (http://catalog.uwm.edu/engineering-applied-science/civil-environmental-engineering/structural-engineering-minor/)
- Computer Engineering, BS (http://catalog.uwm.edu/engineering-applied-science/computer-engineering-bs/)
- Computer Science (http://catalog.uwm.edu/engineering-applied-science/computer-science/)
  - Applied Computing, BS (http://catalog.uwm.edu/engineering-applied-science/computer-science/applied-computing-bs/)
  - Applied Math and Computer Science, BS (College of Engineering and Applied Science, Department of Computer Science) (http://catalog.uwm.edu/engineering-applied-science/computer-science/applied-math-computer-science-bs/)
  - Computer Science, BA (http://catalog.uwm.edu/engineering-applied-science/computer-science/computer-science-ba/)
  - Computer Science, BS (http://catalog.uwm.edu/engineering-applied-science/computer-science/computer-science-bs/)
  - Computer Science, Minor (http://catalog.uwm.edu/engineering-applied-science/computer-science/computer-science-minor/)
  - Computer Science, MS (http://catalog.uwm.edu/engineering-applied-science/computer-science/computer-science-ms/)
  - Data Science, BS (College of Engineering and Applied Science, Department of Computer Science) (http://catalog.uwm.edu/engineering-applied-science/computer-science/data-science-bs/)
  - Web Development, Undergraduate Certificate (http://catalog.uwm.edu/engineering-applied-science/computer-science/web-development-undergraduate-certificate/)
- Electrical Engineering (http://catalog.uwm.edu/engineering-applied-science/electrical-engineering/)
  - Electrical Engineering, BSE (http://catalog.uwm.edu/engineering-applied-science/electrical-engineering/electrical-engineering-bse/)
  - Electrical Engineering, Minor (http://catalog.uwm.edu/engineering-applied-science/electrical-engineering/electrical-engineering-minor/)
  - Electrical Engineering, PhD (http://catalog.uwm.edu/engineering-applied-science/electrical-engineering/electrical-engineering-phd/)

WEB DEVELOPMENT, UNDERGRADUATE CERTIFICATE

The Department of Computer Science offers an undergraduate certificate in Web Development. This program provides students with the skills and knowledge to create and manage websites.

This program is designed for students interested in developing websites for personal use or for businesses and organizations. The curriculum covers the fundamentals of web development, including HTML, CSS, JavaScript, and server-side scripting languages.

The program consists of four courses, each worth 3-4 credits. Students will learn how to create and manage websites, including designing and developing web pages, creating interactive elements, and managing content.

For more information, please visit the Department of Computer Science at http://catalog.uwm.edu/engineering-applied-science/computer-science/web-development-undergraduate-certificate/
• Engineering and Applied Science (Graduate Programs) (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/)
  - Advanced Computational Imaging, Graduate Certificate (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/advanced-computational-imaging-graduate-certificate/)
  - Energy Engineering, Graduate Certificate (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/energy-engineering-graduate-certificate/)
  - Engineering, MS (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-ms/)
  - Engineering, MS/Urban Planning, MUP (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-ms-urban-planning-mup/)
  - Engineering, MS: Biomedical Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-biomedical-ms/)
  - Engineering, MS: Civil Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-civil-engineering-ms/)
  - Engineering, MS: Electrical and Computer Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-electrical-and-computer-ms/)
  - Engineering, MS: Energy Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-energy-ms/)
  - Engineering, MS: Engineering Management (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-management-ms/)
  - Engineering, MS: Engineering Mechanics (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-engineering-mechanics-ms/)
  - Engineering, MS: Industrial and Systems Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-industrial-systems-engineering-ms/)
  - Engineering, MS: Manufacturing Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-manufacturing-ms/)
  - Engineering, MS: Materials Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-materials-ms/)
  - Engineering, MS: Mechanical Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-mechanical-ms/)
  - Engineering, MS: Occupational Biomechanics/Ergonomics (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-occupational-biomechanics-ergonomics-ms/)
  - Engineering, PhD (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-phd/)
  - Engineering, PhD: Biomedical Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-biomedical-phd/)
  - Engineering, PhD: Civil Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-civil-engineering-phd/)
  - Engineering, PhD: Computer Science (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-computer-phd/)
  - Engineering, PhD: Electrical Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-electrical-phd/)
  - Engineering, PhD: Industrial Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-industrial-phd/)
  - Engineering, PhD: Materials Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-materials-phd/)
  - Engineering, PhD: Mechanical Engineering (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/engineering-mechanical-phd/)
  - Ergonomics, Graduate Certificate (http://catalog.uwm.edu/engineering-applied-science/engineering-applied-science/ergonomics-graduate-certificate/)
  - Integrated BS-MS Degree (http://catalog.uwm.edu/engineering-applied-science/integrated-bs-ms-degree/)
  - Materials Engineering (http://catalog.uwm.edu/engineering-applied-science/materials-engineering/)
  - Materials Engineering, BSE (http://catalog.uwm.edu/engineering-applied-science/materials-engineering/materials-engineering-bse/)
  - Materials Engineering, Minor (http://catalog.uwm.edu/engineering-applied-science/materials-engineering/materials-engineering-minor/)
  - Mechanical Engineering (http://catalog.uwm.edu/engineering-applied-science/mechanical-engineering/)
  - Mechanical Engineering, BSE (http://catalog.uwm.edu/engineering-applied-science/mechanical-engineering/mechanical-engineering-bse/)
  - Mechanical Engineering, Minor (http://catalog.uwm.edu/engineering-applied-science/mechanical-engineering/mechanical-engineering-minor/)

Requirements for Employment, Licensing, or Professional Organizations

Students should be aware that some professions, occupations, and employers are subject to licensing and/or bonding requirements. When a course of study includes clinical or field training, practice teaching, internships, or the like, students may be subjected to a check of criminal conviction records prior to acceptance of a student by the placement site. Students are responsible for obtaining the necessary information about these requirements and for planning their studies accordingly. Please contact the appropriate department or program office for further information.
Administration

Brett Peters
Dean

Ethan Munson
Associate Dean, Academic and Administrative Affairs

Andrew Graettinger
Associate Dean for Research

Student Services

Todd R. Johnson
Assistant Dean of Student Services

Julianne Pickering
Co-op Program Coordinator

Tina Current
Senior Academic Advisor

Sharon Kaempfer
Senior Academic Advisor

Jennifer Klumpp
Senior Academic Advisor

Steven Anderson
Academic Support & Retention Coordinator

Graduate Programs and Research

Betty Warras
Graduate Program Specialist

Student Organizations

In addition to the wide variety of activities that are available for all UWM students, CEAS students have the opportunity to participate in many organizations relating to their professional interests. Involvement in these organizations is recognized as a valuable component of their professional education.

Organizations

AAO - Aeronautics and Aerospace Organization
AFS - American Foundrymen’s Society
ASCE - American Society of Civil Engineers
ASM/TMS - Materials Engineering Society
ASME - American Society of Mechanical Engineers
IEEE - Institute of Electrical and Electronic Engineers
IEEE-CS - Institute of Electrical and Electronic Engineers Computer Society
IIE - Institute of Industrial Engineers
ITE - Institute of Transportation Engineers
NSBE - National Society of Black Engineers
RC - Rocket Club
ROV - Remotely Operated Vehicle Team

SAE - Society of Automotive Engineers
SHPE - Society of Hispanic Professional Engineers
SME - Society of Manufacturing Engineers
SWE - Society of Women Engineers

Professional Fraternity

Triangle

Honor Societies

Pi Tau Sigma

Co-ops and Internship Program

In today’s competitive job market, it takes more than a college degree to find employment upon graduation. The Career Services Office in the College provides the link between your education and the real world. This office is dedicated to helping all CEAS students secure engineering or computer science-related work experience before graduation, because related work experience in combination with good academics are the criteria most employers use to select new hires.

The College offers students two ways to gain that experience: internships and co-ops. The principal goals of the programs are to provide career orientation to students and enhance their professional development. All internships and co-ops are paid at a rate commensurate with educational background and experience. For more information, contact the Career Services Office at (414) 229-6960 or ceascareers@uwm.edu.

Contact Information

Office of Student Services
Engineering and Mathematical Sciences Building, E386
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ceas-adv@uwm.edu