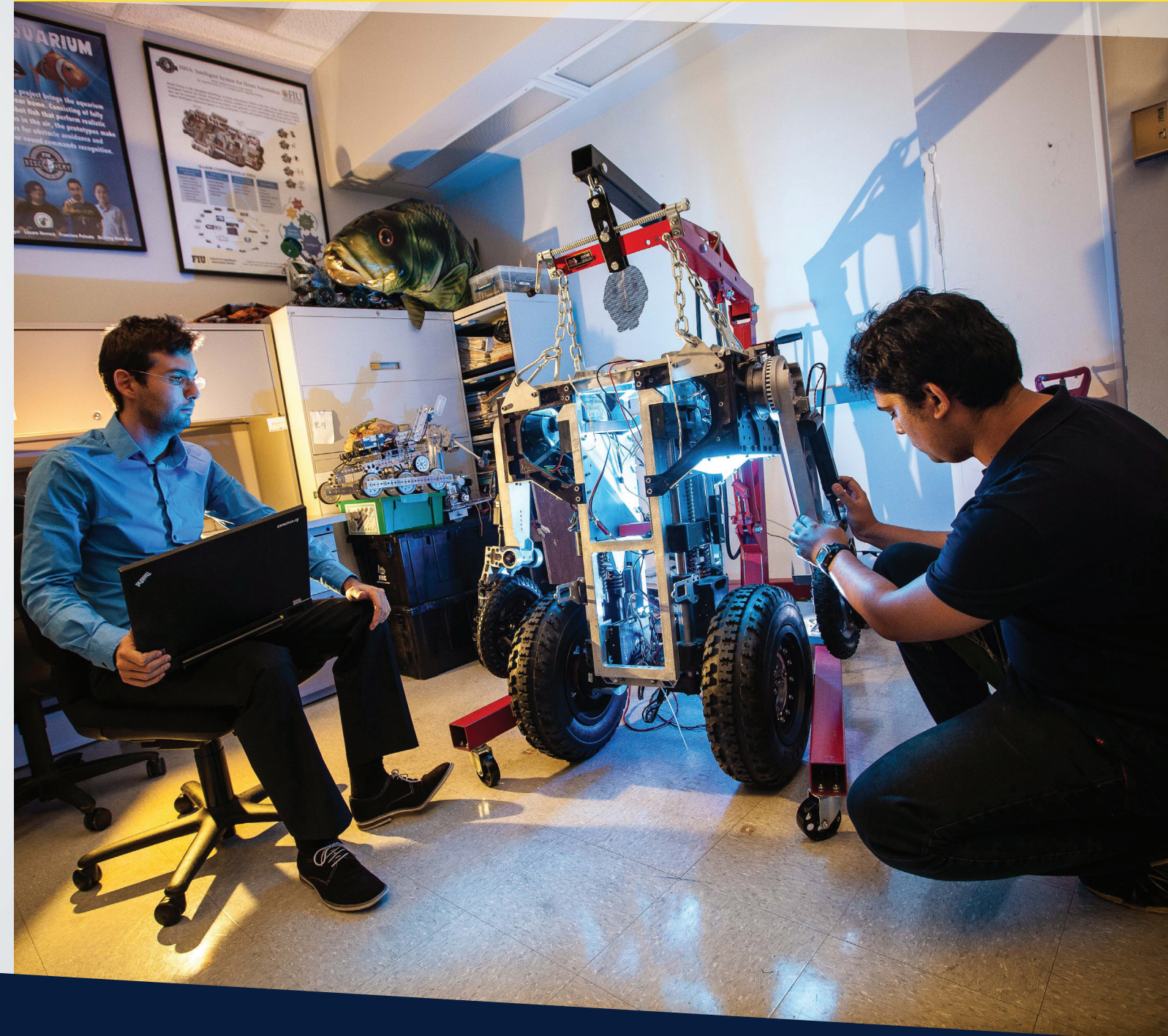


As a member of one of the country's top-tier research universities, the **College of Engineering & Computing (CEC)** is actively engaged in cutting-edge studies and education and is home to top-level research laboratories and facilities. CEC has two schools — Moss School of Construction, Infrastructure and Sustainability; and the School of Computing and Information Sciences — and four departments — Biomedical Engineering, Civil and Environmental Engineering, Electrical and Computer Engineering, and Mechanical and Materials Engineering.

By the Numbers



MECHANICAL AND MATERIALS ENGINEERING

FIU Engineering & Computing

engineering.fiu.edu
Florida International University
10555 West Flagler Street | Miami, FL 33174



FIU_CEC



FIUEngineeringAndComputing



FIU_CEC

For more information contact:
Email: iadmiss@fiu.edu
Whatsapp: 786-702-0031

FIU Engineering & Computing

FIU's Department of Mechanical and Materials Engineering (MME) gives students a thorough understanding of the basic laws of science while stimulating and developing creative thinking, a professional attitude, economic judgment and environmental consciousness.

As a part of the College of Engineering & Computing, students enjoy experiential learning opportunities and close interaction with **WorldsAhead** faculty. Through internship opportunities in the industry and hands-on research activities in cutting-edge laboratories, graduates are prepared to hit the ground running in their chosen careers.

RESEARCH

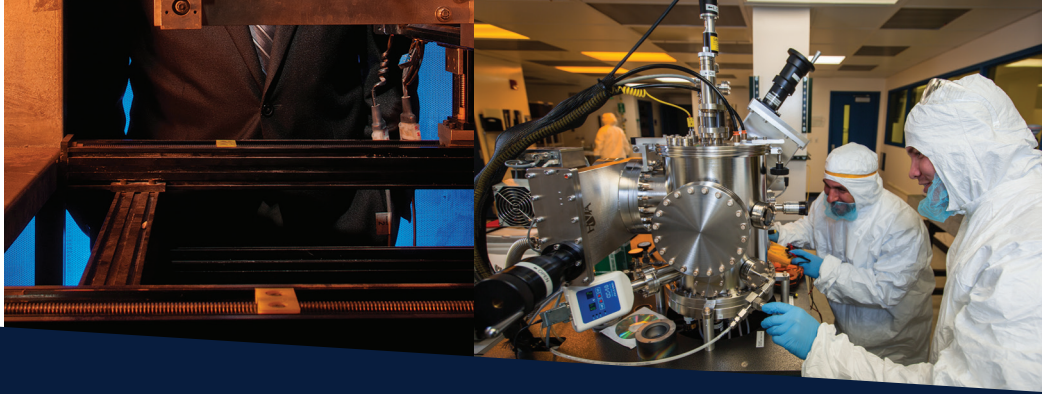
The Department of Mechanical and Materials Engineering (MME) conducts groundbreaking research in several areas – energy-based materials such as supercapacitors and batteries, high-pressure physics; nanocomposites, coatings, in-situ mechanics, and multi-objective optimization to design new alloys and for biomedical applications. The department is also engaged in research in mechatronics, manufacturing, thermo-fluids and fluid-structure interaction. The research conducted by MME faculty is supported by various federal agencies such as National Science Foundation (NSF), Department of Energy (DOE), Office of Naval Research (ONR), Air Force Office of Scientific Research (AFOSR), and Army Research Lab (ARL) as well as by private industries.

FACULTY

Several faculty members have won numerous awards, including the National Science Foundation CAREER Award, DARPA Young Faculty Award and FIU President's **WorldAhead** Faculty Award. The department also has fellows of the American Society of Mechanical Engineers (ASME), American Society of Mechanical Engineers (ASM) and American Association for the Advancement of Science (AAAS). In addition, MME faculty members have won several best paper awards. A few of the faculty are highly cited in their research areas with H- index greater than 45. MME faculty serve as editors and associate editors of several leading journals in their fields. In the last 12 months, MME faculty have been awarded three patents and several new patents have been filed.

PARTNERSHIPS

The department and its faculty have established relationships with several organizations, among them, the NSF-funded CELL-MET ERC, in partnership with Boston University and University of Michigan. Andres Tremante of MME leads the Center for Diversity, which has a partnership with several local high schools for outreach activities. The various partnerships benefit the university as well as the MME Department by providing enhanced research and education experiences for our graduate and undergraduate students. They also provide opportunities for faculty and students to communicate with peers at other institutions and learn from each other and establish constructive long-term relationships.



GRADUATE DEGREES OFFERED

- M.S. Materials Science and Engineering
- M.S. Mechanical Engineering
- Ph.D. Materials Science and Engineering
- Ph.D. Mechanical Engineering

COMBINED BACHELOR'S AND MASTER'S DEGREE (4+1) PROGRAM

The combined B.S. & M.S. Degree Program is an accelerated program designed for outstanding undergraduate students currently enrolled in the college who wish to pursue their M.S. degree while completing in the college their B.S. degree.

RESEARCH HIGHLIGHTS

- Micro and nanotechnology
- Study of materials at extreme conditions
- Electronic materials and ceramics
- Multidisciplinary computational analysis
- Thermal/fluid/energy sciences
- Computational fluid dynamics
- Nanostructured materials
- Nanofabrication and nanosensors
- Smart manufacturing

GRADUATE RESEARCH OPPORTUNITIES

The Mechanical and Materials Department's master's and Ph.D. graduate programs cover a range of disciplines including fluid/thermal sciences, energy systems, materials design and processing, nanotechnology, robotics, manufacturing, and multidisciplinary computational design and optimization with research opportunities available in each discipline under our faculty.

FACILITIES

- Advanced Materials Engineering Research Institute (AMERI)
- Center for Study of Materials at Extreme Conditions (CeSMEC)
- Multidisciplinary Analysis, Inverse Design, Robust Optimization and Control Laboratory (MAIDROC)
- Plasma Forming Laboratory (PFL)
- Energy Materials and Biological Sensors Laboratory

POINTS
OF PRIDE

Undergraduate
students have grown by **235%**
in the last five years*
*Accountability.fiu.edu

Several student chapters and clubs
**Aero Club, SAE, Mini Baja, ASME,
Materials Advantage**

Combining creativity with hands-on research, MME provides students in two dynamic fields a learning environment to foster skills needed to make a critical impact in areas such as manufacturing, high technology, energy systems and space exploration, as well as the design and development of new composite materials, alloys and coatings.