



HANS VAN OOSTROM, PH.D.
FOUNDING CHAIR & ASSOCIATE
PROFESSOR, ENGINEERING
EDUCATION

Founded in 2019, the University of Florida's **Department of Engineering Education (EED)** in the Herbert Wertheim College of Engineering specializes in engineering education research and the delivery of innovative and effective instructional methods in engineering undergraduate courses, as well as assessment.

Our faculty design and teach large enrollment undergraduate engineering courses that span

multiple majors using methods that promote conceptual understanding and student retention.

We perform research into the effectiveness of learning methods, and continually strive to improve and adapt course content and delivery methods to serve students and faculty.

RESEARCH AREAS

Technology-Enhanced Education

Considers the use of any type of technology (e.g., cell phones, apps, virtual reality, artificial intelligence, serious educational games) to enhance the educational experience of students

Processes and Thinking

Focuses on how learners execute human-centered, solution-focused ways to solve a complex engineering problem. Execution can include cognitive, affective, and behavioral processes

Broadening Participation

A scientific endeavor that allows for the rigorous study of factors that impede persistence, retention, and completion in engineering. Its focus is to build capacity in academic and workplace settings

Mentoring and Support

The study of the professional and educational alliances created, formally or informally, to best support the engineering career progression

Formation of Engineers

The study of the formal and informal processes and value systems across the educational lifespan (cradle to grave) by which individuals become engineers

Research Methods and Approaches

Focuses on the development, validation, and use of inter- and multi-disciplinary research tools, approaches, and methods used to study various engineering education and workforce issues

FACTS & FIGURES

3,400

ENGINEERING STUDENTS

TAUGHT BY US DURING THE 2022-23 ACADEMIC YEAR

168

SCHOLARSHIPS
GENERATED TO
DATE

62

INNOVATIVE
COURSE
TECHNIQUES

1,200

FIRST-YEAR STUDENTS

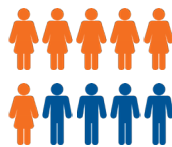
TAKING ENGINEERING DESIGN & SOCIETY COURSE EACH YEAR

34

NATIONAL &
INTERNATIONAL
AWARDS

18

COMMUNITY
PROGRAMS &
INITIATIVES



OUT OF 23 FACULTY MEMBERS, 60 PERCENT ARE WOMEN WHILE 56 PERCENT COME FROM A DIVERSE BACKGROUND

13

INNOVATIVE
COURSE TOOLS &
PROGRAMS

Ph.D. Program

LAUNCHED IN 2023, ITS GOAL IS TO PREPARE THE NEXT GENERATION OF LEADERS IN ENGINEERING EDUCATION AND RESEARCH. CURRENTLY, WE HAVE 11 STUDENTS AND ARE GROWING

IPPD

Integrated Product & Process Design

IS AN EXPERIENTIAL EDUCATION PROGRAM WHERE INTERDISCIPLINARY ENGINEERING TEAMS OF SENIOR-LEVEL UNDERGRADUATES WORK FOR TWO SEMESTERS UNDER THE GUIDANCE OF A FACULTY EXPERT IN DESIGNING, BUILDING, AND TESTING PROJECTS FOR INDUSTRIAL SPONSORS

93

STUDENTS

17

PROJECTS

15

INDUSTRY
SPONSORS

9

ENGINEERING
PROGRAMS

IPPD.UFL.EDU

*Numbers above reflect the 2023-24 academic year

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