



Department of Engineering Education

Graduate Courses

Check out our course offerings for Autumn semester!

ENGREDU 6100: FOUNDATIONS AND THE FIELD OF ENGINEERING EDUCATION

Instructor: David Delaine
Wednesdays, 2:15-5:00pm
Bolz Hall 128

This course is designed to prepare students for future courses, and careers in engineering education. Students will engage with literature focusing on theories and frameworks which highlight fundamental issues, questions, and approaches in engineering education.

ENGREDU 6200: LEARNING THEORY, PEDAGOGY, AND ASSESSMENT

Instructor: Jeff Froyd
Thursdays, 1:15-4:00pm
Smith Lab 3101

This course is designed to provide foundational understandings of educational learning theory, pedagogy and assessment methods within engineering education. The processes learned will inform research and instructional practice decisions, approaches and analysis.

ENGREDU 7900: CAREER EXPLORATION AND PROFESSIONAL DEVELOPMENT

Instructor: Ann Christy
Tuesdays and Thursdays, 12:45-2:05pm
Smith Lab 2186

This course is designed to prepare students for future careers and professional advancement in academia, government agencies, private industry, corporate training organizations, high schools, and the non-profit sector.

ENGREDU 7881: SEMINAR

Instructor: David Delaine
Fridays, 10:20-11:15am
Bolz Hall 316

This course is designed to provide students with the ability to maintain contemporary knowledge of the field of engineering education, understand how to communicate within the field, provide exposure to different stakeholders, and build communities among engineering educators.

ENGREDU 7189.01

Instructor: Rachel Kajfez
Mondays, 5:15-7:05pm
Bolz Hall 120

This course exposes teachers to instructional pedagogies. It is a practical introduction to engineering education for instructors. Topics include using assessment for learning, best practices in instructional methods, techniques for self-reflection, etc. This version of the course is designed for new instructors and is only open to students who will be teaching concurrently.

ENGR 6850S: TRANSLATING ENGINEERING RESEARCH TO K-8 (TEK8)

Instructors: Rachel Kajfez & Deb Grzybowski
Tuesdays: 4:30-6:20pm
Thursdays: 4:30-7:00pm
Department consent required

Guides graduate students through the development of design challenges inspired by prior research. Develops the skills to teach engineering in under-resourced schools & recognize how to relay engineering skills to diverse populations. Design challenges are created to be age-appropriate for middle school, low cost, & facilitated by someone with little technical background in <90 minutes.