

# Foundations and the Field of Engineering Education

## **ENGREDU 6100**

# **Credit Hours:** 3.00 - 3.00

### **Course Levels:**

Graduate

#### **Course Components:**

Seminar

## **Course Description:**

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.

### Prerequisites and Co-requisites:

Prereq: Enrollment in EngrEdu Grad program, or permission of instructor.

#### **Course Goals / Objectives:**

- Analyze the history and foundations of the education of engineers and the discipline of engineering education in US and international contexts
- Demonstrate a mindset that values curiosity and questioning, finds and leverages connections across a wide range of ideas, and creates positive societal value
- Demonstrate empathy and cultural competence across professional interactions
- Value and demonstrate commitment to continuing education and lifelong learning

#### **Course Topics:**

- Teaching and Learning in engineering education
- Curriculum development
- research in engineering education
- change in engineering education
- engineering and society

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## **Designation:**

Required