

Empowering the Entrepreneurial Electrical and Computer Engineer

ECE 5078

Credit Hours:

3.00

Course Levels:

Undergraduate (1000-5000 level) Graduate (5000-8000 level)

Course Components:

Lecture

Course Description:

This course will teach entrepreneurial minded engineers the process of value creation from their ECE relevant technology or inventions. Topics covered will include self-assessment as an entrepreneur and innovator, analysis and validation of new venture opportunities, intellectual property creation and assessment new venture planning and project management, leadership and team building.

Prerequisites and Co-requisites:

Prereq: 3010, 3020, 3030, 3040, or 3050; or Grad standing in Engr.

Course Goals / Objectives:

- Students will be able to organize, articulate and communicate their ideas, opportunities and plans
- Students will be able to understand, evaluate and create a business model and the basic financial constructs of a new venture firm
- Students will be able to?understand engineering principles that form the basis of a new product or service
- Students will be able to plan and manage a new venture from concept to exit
- Students will be able to?understand the organizational structure and legal protection for a new venture firm
- Students will develop interpersonal skills to work together in a team while respecting and caring for diversity of thoughts, abilities, culture, gender, race, class etc

Course Topics:

- Module 1: What qualities make me an entrepreneur? Self-Assessment
- Module 2: What will the engineer do? Product development/Project management
- Module 3: Where will I find the money? Financial plan and sources of capital,
- Module 4: Why do I need a lawyer? Legal constructs and intellectual property
- Module 5: What will my CEO do? Business model and strategy
- Module 6: How has my perspective changed? Me 2.0!

Designation:

Elective