

ECE 4377: Technology Startup Laboratory

Credit / Contact hours: 3 / 3 per week

Course coordinator: Tim Dallas

Textbook(s) and/or other required material: None

Catalog description: Provides a working knowledge of technology commercialization through a systematic concept refinement process. Prototypes are developed and evaluated by potential customers.

Pre-requisite(s): Senior or graduate status in engineering or physical science, or consent of instructor.

Co-requisites (if any): None

Designation: Elective

Course learning outcomes: Upon completion of this course, students should be able to

1. Know a process for commercializing new technologies Solve problems in Matlab involving simple signal processing concepts
2. Know how to identify and engage the first customers for the technology
3. Know how to gather, evaluate, and use customer feedback to develop the technology
4. Develop a working knowledge of identifying and controlling intellectual property
5. Know how to produce a business plan
6. Know how to assess early valuation of a startup company

ABET Student Outcomes addressed in course: a, b, c, d, e, g, h, and k.

Topics covered:

Business model canvas – 4 weeks

Intellectual property – 1 week

Business plan development – 1 week

Student business model presentations – 6 weeks

Entrepreneur presentations – 1 week

Starting a business – 1 week

Startup case studies – 1 week