

TECHNOLOGY INNOVATION AND ENTREPRENEURIAL ENGINEERING, M.S.

The goal of the program is to inspire and nurture the culture of innovation among students of engineering and computing. The program includes an integrated curriculum, new venture creation projects and an innovation immersion module, and is taught by a blend of academic faculty as well as experienced entrepreneurs and investors from private sector. Students learn about innovation theories as well as real-world examples. It is expected that the graduates of this program will demonstrate knowledge in technology ideation, prototyping, business plan development, venture creation, legal protection, corporate innovation strategies and entrepreneurial practices.

Program Requirements

The admission criteria will generally conform to those currently required by the USC Graduate School. Individuals with the following qualifications will be considered for admission into the program:

- Must hold a B.S. degree from an accredited program (or equivalent if from an international university) in engineering, computing, technology disciplines, or science, and must provide transcripts from the institution where the degree was obtained.
- A minimum undergraduate grade point average (GPA) of 3.0.
- International students are required to submit qualifying TOEFL or equivalent test score.
- Individuals may request a waiver of some of the above requirements (e.g., undergraduate GPA less than 3.0, or undergraduate degree not in engineering) and admission to the program if they provide sufficient evidence to the graduate program director that they have had compensatory industrial experience to warrant an exception.

Learning Outcomes

1. The student learning outcomes for the program is that students demonstrate knowledge in navigating through the entrepreneurial process including ideation feasibility analysis prototyping legal protection business model development and capital raise.

Degree Requirements (30 Hours)

Requirements	Credit Hours
Required Courses	24
Business Electives	6

At least half of the credit hours satisfying Degree Requirements must be earned in courses numbered 700 and above.

Required Courses (24 Hours)

Course	Title	Credits
ECIV 707	Management of Engineering Projects	3
EMCH 522 or ENCP 734	Design for Manufacture and Assembly Prototype Design & Manufacturing	3
ENCP 530	Cases in Technology Feasibility Analysis	3
ENCP 535	Developing and Launching New Ventures in Science and Technology	3

ENCP 737	Entrepreneurial Laboratory	6
COSM 701 or ENCP 533	Business and Legal Issues for Science Managers Legal Aspects of Engineering & Innovation	3
MGMT 777 or ENCP 536	Innovation and New Venture Analysis Innovation and New Venture Analysis	3

Total Credit Hours 24

Business Electives (6 Hours)

Select two approved business courses (500-level or above). Students should consult with the program director prior to enrolling in elective courses.

Comprehensive Assessment

Upon the completion of 24 credit hours of coursework, students are required to complete successfully a comprehensive exam. The exam will include a case study report that synthesizes and integrates knowledge gained from the core courses of the program.