

ENGINEERING ENTREPRENEURSHIP, CERTIFICATE

The degree and major requirements displayed are intended as a guide for students entering in the Fall of 2022 and later. Students should consult with their academic program regarding final certifications and requirements for graduation.

The Certificate in Engineering Entrepreneurship (EENT) provides a foundation of knowledge and skills for pursuing high-tech entrepreneurial opportunities, and is intended to compliment the student's graduate education and training in Penn Engineering's master's degree programs.

The Certificate is open to graduate students who are currently enrolled in any of Penn Engineering's master's degree programs. On a space available basis, and depending on a student's background and training, graduate students from other schools and programs may apply for the EENT Certificate. Non-engineering students must check with their home schools and/or programs to determine their eligibility to take the EENT Certificate. (Note that for Penn Engineering undergraduates, a Minor in Engineering Entrepreneurship (<https://eent.seas.upenn.edu/undergraduate-minor/>) is available. Students who sub-matriculate or who subsequently return for a master's may not earn both the EENT Minor and the EENT Certificate.)

Curriculum

Requirements for the EENT Certificate consist of the following:

Code	Title	Course Units
Required Courses		2
EAS 5450	Engineering Entrepreneurship I	
EAS 5460	Engineering Entrepreneurship II	
EAS 5490	Engineering Entrepreneurship Lab	
Electives		2
BE 5020	From Biomedical Science to the Marketplace	
BE 5150	Bioengineering Case Studies	
BE 6080	Medical Entrepreneurship: Commercializing Translational Science	
CBE 4000	Introduction to Product and Process Design	
CBE 4590	Product and Process Design Projects	
CBE/BE 5620	Drug Discovery and Development	
EAS 5070	Intellectual Property and Business Law for Engineers	
EAS 5120	Engineering Negotiation	
EAS 5490	Engineering Entrepreneurship Lab	
EAS 5900	Commercializing Information Technology	
EAS 5950	Foundations of Leadership	
ESE 5400	Engineering Economics	
ESE 5440	Project Management	
IPD 5090	Needfinding	
IPD 5150	Product Design	
IPD 5520	Problem Framing	
MEAM 5140	Design for Manufacturability	
Total Course Units		4