

# Engineering Business, Graduate Certificate

The Graduate Certificate in Engineering Business is part of the Galante Engineering Business Program. The Galante Engineering Business Program offers a progressive opportunity for engineering students to complement their technical engineering education with business skills. Galante is founded on the values of student engagement and leadership to strengthen interpersonal and professional skills.

The certificate seeks to provide students opportunities to apply the technical aspects of an engineering skill foundation in corporate settings through both academic and programmatic elements. Programmatic elements include workshops, speaker series, site visits, seminars, and other related personal and professional development activities as a connected cohort. These activities equip students to manage projects, lead people, make data-driven and market-based decisions, and advance economically sound initiatives.

The Galante Engineering Business Program can be completed alongside a Master of Science in Engineering Management, Industrial Engineering, Operations Research, Data Analytics Engineering, Civil Engineering with a Concentration in Construction Management, and Chemical Engineering. There are two possible paths to earning the Graduate Certificate in Engineering Business. The first option is to begin an eligible PlusOne program and then apply for the Galante Engineering Business Program. The second option is for those who have completed their BS in engineering in good standing and have been admitted to a master's program listed above. Please note that the BS in engineering needs to be completed at Northeastern.

The Graduate Certificate in Engineering Business involves 15 semester hours from four courses across three categories. These four courses count as the electives required for each of the master's programs above. Students need to ensure that these four courses are cross-listed with the master's program.

Refer to the Galante Engineering Business Program webpage (<http://www.coe.neu.edu/galante/>) for additional details and description.

## Program Requirements

Complete all courses and requirements listed below unless otherwise indicated.

### Core Requirements

Code	Title	Hours
Complete four courses from at least three of the following categories. Students can only take one course from outside the College of Engineering.		15
<b>Business Innovation Development</b>		
ENTR 6212	Business Planning for New Ventures	
ENTR 6218	Business Model Design and Innovation	
GE 5010	Customer-Driven Technical Innovation for Engineers	
GE 5020	Engineering Product Design Methodology	
GE 5030	Iterative Product Prototyping for Engineers	
GE 5100	Product Development for Engineers	
<b>Organizational Excellence</b>		
EMGT 5300	Engineering/Organizational Psychology	
EMGT 6600	Engineering Team Performance	
IE 5617	Lean Concepts and Applications	
SCHM 6201	Operations and Supply Chain Management	
SCHM 6223	Managing Healthcare Supply Chain Operations	
<b>Financial Analysis</b>		
ACCT 6200	Financial Reporting and Managerial Decision Making 1	
EMGT 6225	Economic Decision Making	
EMGT 6305	Financial Management for Engineers	
ENTR 6219	Financing Ventures from Early Stage to Exit	
<b>Information and Business Analysis</b>		
CS 6140	Machine Learning	
CS 6220	Data Mining Techniques	
DA 5030	Introduction to Data Mining/Machine Learning	
DAMG 6210	Data Management and Database Design	
DAMG 7290	Data Warehousing and Business Intelligence	
DS 5110	Introduction to Data Management and Processing	
IE 5640	Data Mining for Engineering Applications	

IE 6600

Computation and Visualization for Analytics

INFO 6215

Business Analysis and Information Engineering

**Program Credit/GPA Requirements**

15 total semester hours required

Minimum 3.000 GPA required