INDUSTRIAL ENGINEERING

www.mie.neu.edu/graduate/ieeng.html

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The Department of Mechanical and Industrial Engineering offers MS and PhD degree programs in industrial engineering. To be eligible for admission to any of the master's degree programs, a prospective student must hold a Bachelor of Science degree in engineering, science, mathematics, or equivalent field. Students may pursue any program either on a full- or part-time basis; however, restrictions may apply, as described below. Students who receive financial support from the university in the form of a research, teaching, or tuition assistantship must complete an 8-semester-hour thesis. Other students may choose to complete a thesis or pursue their degree on a course-work-only basis. Students who complete the thesis option must make a presentation at a thesis defense before approval by the department.

MSIE—Master of Science in Industrial Engineering, Course Work Option

GENERAL REQUIREMENTS

IE 6200 Engineering Probability and Statistics	4 SH
OR 6205 Deterministics Operations Research	4 SH
Two of the following courses:	
IE 7210 Production System	4 SH
IE 7215 Simulation Analysis	4 SH
IE 7315 Human Factors Engineering	4 SH
Approved electives	16 SH

MSIE—Master of Science in Industrial Engineering, Project Option

GENERAL REQUIREMENTS

IE 6200 Engineering Probability and Statistics	4 SH
OR 6205 Deterministics Operations Research	4 SH
Two of the following courses:	
IE 7210 Production System	4 SH
IE 7215 Simulation Analysis	4 SH
IE 7315 Human Factors Engineering	4 SH
IE 7945 Master's Project	4 SH
Three approved electives	12 SH

MSIE—Master of Science in Industrial Engineering, Thesis Option

GENERAL REQUIREMENTS

IE 6200 Engineering Probability and Statistics	4 SH
OR 6205 Deterministics Operations Research	4 SH
Two of the following courses:	
IE 7210 Production System	4 SH
IE 7215 Simulation Analysis	4 SH
IE 7315 Human Factors Engineering	4 SH
MS Thesis	8 SH
Two approved electives	8 SH

MSIE—Master of Science in Industrial Engineering with Graduate Certificate in Engineering Leadership

GENERAL REQUIREMENTS

ENLR 5121 Engineering Leadership 1	2 SH
ENLR 5122 Engineering Leadership 2	2 SH
ENLR 5131 Scientific Foundations of Engineering 1	2 SH
ENLR 5132 Scientific Foundations of Engineering 2	2 SH
IE 6200 Engineering Probability and Statistics	4 SH
ME 7440 Mechanical Engineering Leadership Challenge Project 1	4 SH
ME 7442 Mechanical Engineering Leadership Challenge Project 2	4 SH
OR 6205 Deterministics Operations Research	4 SH
Two of the following courses: IE 7210, IE 7215, IE 7315	8 SH

PhD in Industrial Engineering—Advanced Degree Entrance

GENERAL REQUIREMENTS

Approved course work	24 SH
IE 9990 Dissertation	0 SH

PhD in Industrial Engineering—Bachelor's Degree Entrance

GENERAL REQUIREMENTS

Approved course work	48 SH
IE 9990 Dissertation	0 SH