

University of South Florida (USF)
Industrial & Management Systems Engineering (IMSE)

MASTER OF SCIENCE IN INDUSTRIAL ENGINEERING (MSIE)

DEGREE REQUIREMENTS

- A minimum of 30 credit hours, of which at least 16 hours must be at the 6000 level
- *Non-thesis option:*
 - 30 hours of formal coursework, including three core courses, five IE electives, and two general electives
- *Thesis option:*
 - At least 24 hours of formal coursework, including three core courses and five IE electives
 - A minimum of six thesis hours
 - A formal thesis proposal and a formal thesis defense
 - Acceptance of at least one refereed conference or journal paper
- A minimum GPA of 3.0/4.0 must be maintained
- No grade of C- or below will be accepted toward the degree

Core courses¹

ESI 6410 Optimization in OR
ESI 6247 Statistical Design Models
ESI 6340 Probabilistic Systems Analysis

IE electives (*select any 5 courses from the list*)

EIN 5350 Technology & Finance	EIN 6935 Nonlinear Optimization
ESI 5236 Reliability Engineering	ESI 6448 Integer Programming
ESI 5306 OR for Eng. Management	EIN 6319 Work Design & Productivity
ESI 5522 Computer Simulation	EIN 6935 Industrial Information Systems
EIN 6145 Project Management	EIN 6935 Statistical Quality Control
EIN 6935 Lean Six Sigma	EIN 6934 Engineering Analytics I
EIN 6936 Advanced Lean Six Sigma	EIN 6934 Engineering Analytics II
ESI 6324 Engineering the Supply Chain	ESI 6635 Advanced Analytics I
EIN 6336 Production Control Systems	EIN 6934 Advanced Analytics II

General electives

Any College of Engineering 5000+ level course, including IMSE courses, except for the IE elective courses above (*e.g., EIN 5182 Principles of Engineering Management, EIN 6386 Management of Technological Change, EIN 6934 Systems Integration, EIN 6178 ISO 9000/14000, EIN 6179 Advanced TQM Methods, and others*).

FREQUENTLY ASKED QUESTIONS (FAQs)

Please visit <http://www.usf.edu/engineering/imse/graduate/msie.aspx>

¹MSIE students holding the BSIE degree from IMSE/USF: please contact the graduate director for additional information.