# Industrial & Management Systems Engineering (IMSE)

## MASTER OF SCIENCE IN INDUSTRIAL ENGINEERING (MSIE)

#### DEGREE REQUIREMENTS

- · 30 graduate credit hours (at least 16 hours of 6000+ level courses)
- · Non-thesis option:
  - 30 hours of formal coursework: four core and six elective courses
- · Thesis option:
  - 24 hours of formal coursework: four core and four elective courses
  - 6 thesis hours
  - A formal thesis proposal and a formal thesis defense
  - Acceptance of at least one refereed conference or journal paper
- · Minimum GPA 3.0
- · Only courses with a C or better grade will count toward the degree<sup>1</sup>

#### Core courses

ESI 6247 Statistical Design Models

ESI 6612 Statistical Foundations of Data Intelligence

ESI 6410 Optimization Methods with Applications

ESI 6340 Probabilistic Systems Analysis

# Elective courses $^{2,3,4}$

Any 5000+ level course with the EIN or ESI prefix (e.g., EIN 5350 Technology & Finance, EIN 5182 Principles of Engineering Management, EIN 6145 Project Management, ESI 6324 Engineering the Supply Chain, EIN 6336 Production Control Systems, EIN 6319 Work Design & Productivity, ESI 6602 Design of Industrial Data Systems, EIN 6458 Applied Lean Six Sigma, ESI 6613 Applied Data Intelligence).

### FREQUENTLY ASKED QUESTIONS (FAQs)

http://www.usf.edu/engineering/imse/graduate/msie.aspx

## RCL, OPT, GRADUATION, ETC. INFORMATION

Check the "MSIE students" organization course on Canvas.

<sup>&</sup>lt;sup>1</sup> for INTO pathway: only transferred courses with a B or better grade will count toward the degree.

<sup>&</sup>lt;sup>2</sup>courses open only to PhD students: ESI 6491 Linear Programming & Network Optimization, ESI 6213 Stochastic Decision Models, ESI 6635 Advanced Analytics I, EIN 6936 Data-driven Modeling for Complex Systems.

<sup>&</sup>lt;sup>3</sup>courses open only to MSEM students: EIN 6386 Management of Tech Change, EIN 6183 Engineering Management Policy & Strategy.

<sup>&</sup>lt;sup>4</sup>EIN 6936 Leadership in Engineering is not considered an elective.