



**Industrial and Management Systems Engineering**

## ***Master of Science in Engineering Management***

Fully Online and also On Campus

**#1 Online Graduate Engineering Program in Florida**

(U.S. News and World Report 2015)



***Where Today's Engineers  
Become Tomorrow's Leaders!***

## Upgrade your career now with our 30 credit-hour program

The Master of Science in Engineering Management Program is geared for highly motivated, goal-oriented individuals with technical backgrounds, who desire to move into management positions. The MSEM program develops technical management skills by combining qualitative approaches and quantitative techniques. It sets our graduates apart from their peers by honing technical and managerial competence and provides them with solid foundations for successful leadership.

### Attend your classes live on campus or online

#### Curriculum

##### **Management Core** (4 required courses)

- Principles of Engineering Management (EIN 5182)
- Management of Technological Change (EIN 6386)
- Technology and Finance (EIN 5350)
- Engineering Management Policy and Strategy (EIN 6183)

##### **Quantitative Core** (Choose 1)

- Operations Research for Engineering Managers (ESI 5306)
- Engineering Analytics I (EIN 6934)
- Statistical Design Models (ESI 6247)

##### **Workforce Management Core** (Choose 1)

- Engineering Management: Human Relations (EIN 6108)
- Work Design, Motivation and Productivity (EIN 6319)

#### Elective Areas of Specialization (Choose 4 courses)

##### **Technical Management**

- Technology and Law (EIN 6106)
- Project Management (EIN 6145)
- Creativity in Technology (EIN 5201)

##### **Quality Management**

- Total Quality Mgmt Concepts (EIN 5174)
- ISO 9000/14000 (EIN 6178)
- Lean Six Sigma (EIN 6935)
- Advanced Lean Six Sigma (EIN 6936)
- Reliability Engineering (ESI 5236)

##### **Safety Management**

- Systems Safety Engineering (EIN 6215)
- Occupational Safety Engineering (EIN 6216)
- Construction Safety Engineering (EIN 6217)

##### **Systems Engineering**

- Systems Integration (EIN 6518)
- Computer Simulation (ESI 5522)
- Stoch. Decision Models (ESI 6213)
- Engr. the Supply Chain (EIN 6324)
- Linear Programming & Network Optimization (ESI 6491)

##### **Entrepreneurship**

- Technical Entrepreneurship (EIN 6154)
- Strategic Market Assessment (EIN 6935)
- New Product Development (EIN 6392)
- Technical Venture Strategies (EIN 6934)
- Venture Capital & Private Equity (EIN 6935)

##### **Regulatory Affairs for Medical Devices**

- Overview of Regulated Industries (EIN 6430)
- International Regulations for Medical Devices (EIN 6435)
- Human Error & Patient Safety (EIN 6936)

*The new breed of leader in today's high-tech driven world MUST be well-versed in all the technical alternatives available and possess the managerial skills to keep up with today's enterprises and workforce. The global marketplace demands an understanding of the new rules of technical management and constant change. Our program gives you the edge you need to ensure profitability in the challenges of today's economy and be that leader!*

## “ What our graduates are saying about the MSEM program: ”

*“The MSEM program could not have been any better suited to my needs at TECO at the time. It combined quantitative and qualitative skills with elements of industrial engineering and business processes, and was perfect for what I needed. It has served me well throughout my career.”*

- Gordon Gillette, President, **Tampa Electric and Peoples Gas**

*“I would recommend the MSEM program to anyone I know because of the great experience I had. Small class sizes, individual attention, schedule flexibility and the fact that there is a great team working behind the scenes to not only make the MSEM program better, but the IMSE department as a whole.”*

- A.J. Loring, Operations Leadership Development Program Quality Engineer, **Lockheed Martin**

*“It has helped me to be a well-rounded technical professional. If any engineers would like to advance their career to a management rank, or to start a business, the MSEM program provides a path to think beyond the technical aspects. One of the final courses in MSEM was for us to write a paper about starting a company. This assignment inspired me to write a draft of a software business which then translated into Pilgrim Software, Inc., a real company.”*

- Ami Utji, Board of Directors, Co-Founder and former CEO, **Pilgrim Software**

*“The program is designed to make participants capable of integrating different kinds of systems and optimize their outputs; not only because of the information received from the instructors, but also the sharing of practical experience and applications among the students. I was living far away from the campus, but the [interactive] technological tools made me feel like I was literally in the classroom.”*

- Raphael Suarez, Reliability Engineer, **Haldor Topsoe, Inc.**

**APPLY NOW – BE A PART OF OUR TOP RANKED PROGRAM!**

**#1 IN FLORIDA AND # 17 IN THE NATION BY U.S. NEWS & WORLD REPORT (2015) AMONG ALL ONLINE ENGINEERING GRADUATE PROGRAMS.**

**Apply today at [www.grad.usf.edu/graduate-admissions.asp](http://www.grad.usf.edu/graduate-admissions.asp)**

**Check us out online at [imse.eng.usf.edu/grad](http://imse.eng.usf.edu/grad)**

- Application Codes: College Engineering (EN)
- Degree: Master of Science in Engineering Management (MSEM)
- Program (Major): Engineering Management (EMA)

We also offer Graduate Certificates in key specialized areas, including Total Quality Management, Systems Engineering, Technology Management and Safety Management.

*Expand your horizons with the MSEM degree at the*



## **MS in Engineering Management—A Proud History of Success**

The Master of Science in Engineering Management (MSEM) program at USF was established in 1982 to offer engineering professionals a graduate program to develop leadership competencies for management positions, including technical management, process optimization, quality and continuous improvement, safety, entrepreneurship, and engineering analytics.

The MSEM program has been successful for over 30 years as an outreach program, and a pioneer in distance education in the Southeast—offering our first distance learning courses in 1985. We have more than 800 graduates who are employed in a variety of organizations across the world. Over 70% of our students are employed full-time when they enroll in the program, with companies that include Tampa Electric, Mosaic, Raytheon, Lockheed Martin, Disney, Universal Studios, Publix, Baxter, and Conmed Linvatec. Join us today and be part of the MSEM success!

For further information, please contact Dr. Patricia Anzalone at [panzalone@usf.edu](mailto:panzalone@usf.edu)  
or go to our website: <http://imse.eng.usf.edu>

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