



Professional Engineering Management

Master of Science in
Engineering Management

COLLEGE OF ENGINEERING AND COMPUTER SCIENCE



UCF



What is the UCF MSEM, Professional Engineering Management offering?

The MSEM, Professional Engineering Management offering is a cohort based program where specific cohorts are established based on the needs of industry. The program is designed to be lock-step and to be completed in under 2 years. This program will enable you to deliver and manage complex systems, improve on-the-job performance and your ability to maximize your organization's success. You will integrate project delivery processes through leadership, including new product development, systems engineering, and project management.

Who should attend?

The Professional Engineering Management offering focuses on working professionals who want to strengthen their management skills and is suitable for:

- Managers at all levels
- Engineers
- Computer scientists
- Scientists in other fields
- Business executives
- Other high performers

A learning environment designed for the working professional

- Senior faculty who have made significant contributions to the success of project-based technical organizations
- Industrial scholars (senior level working professionals) will participate in the courses to offer their perspectives to the discussions
- Course work with real world applications for the working professional
- Complete the program in 2 years or less
- Class sessions meet every two weeks for 8 hours
- Convenient location close to your home or workplace
- Online course presentations and assignments accessible anytime
- Opportunities to participate in social events of the campus life
- Cohort based for strong peer support

What will you learn?

You will learn how to organize scarce resources, work under tight deadlines, control project change and increase team performance as you respond to real-world scenarios.

- Lead a project team through the change effort
- Overcome the challenges of a project-based organization
- Navigate the processes to deliver a strategically important project
- Conduct business analytics to make decisions
- Design and develop new products
- Make trade-offs in the systems engineering process
- Define and manage requirements
- Communicate with project stakeholders
- Manage the life-cycle cost of a project
- Connect the entire process together

Class Sequence

- **Technology Strategy**
The challenge and core process for delivering projects
- **Technical Communication**
Communicate the solution
- **Engineering Statistics**
Conduct business analytics to make decisions
- **Innovation in Engineering Design**
Design and develop new products
- **Decision Analysis**
Make trades in the systems engineering process
- **Systems Engineering**
Define and manage requirements and risks
- **Advanced Engineering Economic Analysis**
Manage the life-cycle cost of a project and product
- **Project Engineering**
Project manage the effort
- **Environment of Technical Organizations**
Lead the project team
- **Engineering Management**
Close the loop with the strategy process
- **Capstone**
Apply what you have learned in your work setting



How do I apply?

Admissions criteria can be found by visiting the UCF Graduate Catalog. Enrollment is limited to 30 students. Personal interviews may also be required to support your application.

Contact

Dr. Tim Kotnour, MSEM Program Director
Timothy.Kotnour@ucf.edu
407-823-5645

Deadline to apply is March 30th.



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