

# IEM-Information Engineering Management

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## **IEM 601. Introduction to IEM. 1 Hour.**

This course is an introduction to Information Engineering and Management with a focus on readiness for graduate study. Program requirements and expectations will be presented. Software and collaboration tools will be introduced. Library access and resources will be reviewed and teams will perform learning exercises to demonstrate proficiency with the available tools.

## **IEM 602. Leading Collaborative Teams. 1 Hour.**

This course will focus on building, leading, and evaluating collaborative teams. Topics will include managing geographically-dispersed teams, team communication, accountability, running effective meetings, facilitation skills, building consensus, and handling common problems.

**Prerequisites:** IEM 601 [Min Grade: C]

## **IEM 603. Communication for Technology Executives. 1 Hour.**

This course will address communication issues unique to organizational executives. Topics will include functioning as the public face of the organization, working with the media, when to seek professional advice, and effective crisis management.

**Prerequisites:** IEM 602 [Min Grade: C]

## **IEM 610. Communication for Technology Professionals. 3 Hours.**

This course focuses on recognizing, developing, and putting into practice effective communication skills. Lectures provide insights into presentation structure, style, and content. Self-evaluation exercises combined with personal coaching will help clients improve their professional speaking and presentation skills.

## **IEM 611. Leading Technical Organizations. 3 Hours.**

This course will use case studies, assigned readings, guest lecturers, research projects, and discussion of current issues in technology to develop executive-level behaviors and thought-processes as preparation for starting or leading a technology organization.

## **IEM 612. Project Leadership. 3 Hours.**

This course teaches the fundamental concepts of leading projects. The course will consider all aspects of project leadership including the use of standard methodologies. Best practices will be reviewed along with practical insights based on real-world project leadership experience.

## **IEM 620. Technical Entrepreneurship. 3 Hours.**

This course is an introduction to entrepreneurship that begins with the development of personal insights and work habits that are fundamental to success within any organization.

## **IEM 625. Technology and Innovation. 3 Hours.**

This course examines technological innovation as an element of organizational strategy. Topics include the nature and management of innovation, aligning technical teams with overall organizational strategy, and the role of innovation in launching and sustaining technology ventures.

## **IEM 630. Systems Engineering. 3 Hours.**

This course focuses on the systems engineering lifecycle and its application to the design of complex systems. Topics include systems thinking, managing complexity, problem definition, solution design, solution implementation, quality assurance, and measuring effectiveness.

## **IEM 631. Operational Decision-Making. 3 Hours.**

This course focuses on the critical role of information and analytical methods in optimizing operational decisions. A core set of analytical tools will be presented and discussed. Topics will include decision analysis, optimization, modeling, simulation, and data analysis.

## **IEM 645. Financial Concepts for Entrepreneurs. 3 Hours.**

This course introduces financial concepts including the interpretation of financial statements, managing cash flow, time value of money, capital budgeting, and investment analysis.

## **IEM 646. Strategic Planning. 3 Hours.**

This course will examine the nature of strategic thinking and the challenges of achieving strategic alignment. Topics will include the strategic planning process and methods for assessing strategic success.

## **IEM 690. Special Topics in Area. 1-3 Hour.**

Special Topics in (Area).

## **IEM 695. IEM Design Project. 3 Hours.**

This course is focused upon a final design project that incorporates the technical and entrepreneurial coursework taken previously. Projects will be assessed based on their technical design and financial justification.

## **IEM 696. IEM Internship. 1-3 Hour.**

This course is available for students needing to register for an internship course while enrolled in the IEM program.