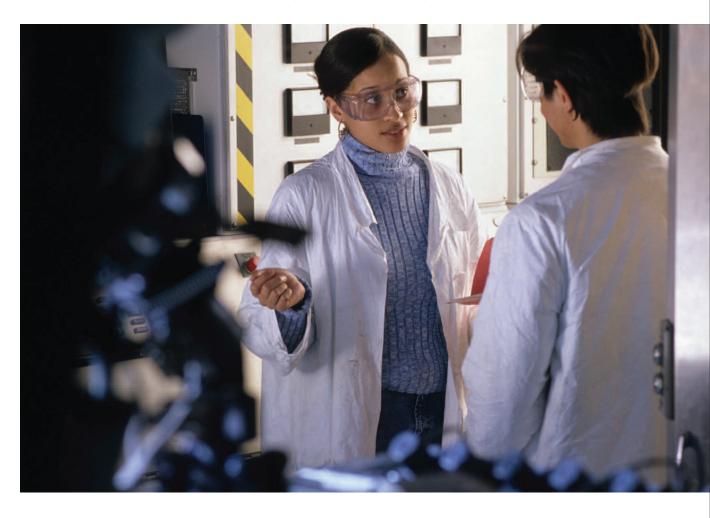


THE EDGE IN KNOWLEDGE

# The Master of Science Program in Engineering Management



Department of Industrial and Manufacturing Engineering

Newark College of Engineering

**New Jersey Institute of Technology** 

# WHY PURSUE A MASTER'S DEGREE IN ENGINEERING MANAGEMENT? A recent study of leadership

at Standard and Poors 500 companies shows that the most common educational background for corporate Chief Executive Officers is engineering. Some 22 percent of the CEOs at the nation's largest companies earned engineering degrees, with far higher percentages in fields such as the chemical and pharmaceutical industries, transportation, and electronics manufacturing. According to the American Association of Engineering Societies, more than half of engineers find themselves in management roles within ten years of the start of their careers, often without the benefit of formal training in management. A graduate program in engineering management provides a technically-educated individual with skills in such areas as project management and control, cost estimating, financial analysis, total quality management and human resources management that are needed to make a successful transition into a managerial role.

WHY STUDY ENGINEERING MANAGEMENT AT NJIT? One of the first such programs in the nation, NJIT's MS in Engineering Management combines the unique capabilities of Newark College of Engineering and the School of Management in a course of study that prepares engineers and other technically trained individuals for leadership roles in a technologically-based, project-oriented enterprise. Although the program has been awarding degrees since 1950, the curriculum evolves continuously to fulfill the current needs of its students and the industries that employ them. The program prepares students with an advanced background in both the theoretical and practical aspects of managing technical/engineering projects and programs via case studies, role playing, and course work. The participation of students from diverse industries affords everyone the opportunity to learn from the experiences gained in industries other than their own. The engineering management program faculty bring to the classroom a critical blend of practical and academic experience.

#### WHAT DO THE GRADUATES SAY?

- "...the material has been so relevant to my work experience I am very impressed"
- "I wanted to let you know how pleased I am with the NJIT Distance Learning program"
- "I never thought I would get so much from any one course"
- "I will be able to strategically and effectively operate in a facilities services based industry"

#### WHO TEACHES THE COURSES?

Distinguished faculty of the Department of Industrial and Manufacturing Engineering and PMI-certified practicing professionals current in the dynamically changing industry trends. http://industrial.njit.edu/people/faculty\_2.php

#### WHO SHOULD APPLY?

The program is particularly valuable to individuals who have a number of years of experience in industry, government, and service organizations, or those who have been entrepreneurs. It provides these professionals with broad-based knowledge and skills to succeed as organizational managers and project managers, from conceptualization through implementation.

### IS PART TIME STUDY AVAILABLE?

Evening and weekend course offerings accommodate working professionals, who may pursue the degree part time.

## WHERE IS THE PROGRAM OFFERED?

- · NJIT's campus in Newark, NJ
- Extension sites in Cherry Hill, NJ as well as at several corporate sites
- · Via distance learning mode

In addition, 12-credit graduate certificates in Construction Management, Operations Productivity, Pharmaceutical Management or Project Management, are available as a step toward this degree.

#### **PROGRAM SUMMARY**

Degree Awarded: Master of Science in Engineering Management Credits Required: 30

Program Objective: To develop engineers and other technicallytrained individuals for leadership roles in a technologicallybased, project-oriented enterprise.

## **ADMISSIONS REQUIREMENTS**

BS in engineering, the sciences or other closely-related areas GPA of 2.8 on a 4.0 scale required.

## Core Courses (18 Credits):

Acct 615 Management Accounting (3 credits)
EM 602 Management Science (3 credits)
EM 636 Project Management (3 credits)
HRM 601 Organizational Behavior (3 credits)
IE 673 Total Quality Management (3 credits)

MIS 648 Decision Support Systems for Managers (3 credits)

Project or thesis optional

## **Specializations**

The range of possible specializations is broad, including:

- Project Management
- Cost Engineering
- Technical Marketing
- Technological Entrepreneurship
- Quality
- Facility Management
- · Manufacturing Systems Management
- · Management Information Systems
- Engineering Management
- Supply Chain Engineering

For program and course details, please see http://catalog.njit.edu/graduate/programs/engineeringmgmt.php

## FOR FURTHER INFORMATION, CONTACT:

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