

EM Domain(Morse & Babcock, 2007)

# **Career Opportunities**

Graduates of Engineering Management program will be prepared for a broad range of positions and careers in Technical & Management positions.

Technical & management positions include jobs in:

- New products & processes development
- Service and Product Design
- Market research & Market acquisition
- Project management & control
- Business Process Engineering
- Information System (ERP)
   Implementation



There's a way to do it better, Find it!
-Thomas A. Edison



# ENGINEERING MANAGEMENT

**UNDERGRADUATE PROGRAM** 

We make inventions become innovations

# Newer Newer 1 2 Time

Source: http://www.innovation-management.org/types-of-innovation.html

### Contact us:

# **Engineering Management Undergraduate Program**

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### Who Are We?

Manajemen Rekayasa Industri (Engineering Management) Program of ITB was established in 2010 to answer the need for strengthening Indonesian industries through excellence in management of engineering activities, in particular the upper-stream engineering activities which are critical to agility of the industries in adapting to the dynamic changes.

The seed of Engineering Management Program of ITB was developed in the Department of Industrial Engineering of the Faculty of Industrial Technology of ITB.

Innovation
Distinguishes
Between a Leader
and a Follower
-Steve Jobs-

The Engineering Management Program and Industrial Engineering Program are complementary to one another. Both disciplines have roots in engineering science and use the systems approach. The difference is in the focus within the technology life-cycle, where engineering management is more focused on the engineering stages of an innovation, while industrial engineering is more focused on the stages of production or operation of such innovations.

## **Students Outcomes**

The Engineering Management program has adopted the ABET basic eleven engineering criteria as Student Outcomes, as follows:

- a) an ability to apply knowledge of mathematics, science, and engineering to industrial engineering area
- b) an ability to design and conduct experiments, as well as to analyze and interpret data.
- an ability to design a system, component, or process which consists of people, materials, equipment, information, and energy to meet desired needs within realistic constraints
- d) an ability to function on multidisciplinary or cross-cultural team.
- e) an ability to identify, formulate, and solve engineering management problems.
- f) an understanding of professional and ethical responsibility.
- g) an ability to communicate effectively.
- the broad education necessary to understand the impact of industrial engineering solutions in a global, economic, environmental, and societal context.
- i) a recognition of the need for, and an ability to engage in life-long learning.
- j) a knowledge of contemporary issues relevant to industrial engineering.
- k) an ability to use the techniques, skills, and modern engineering tools necessary



**Engineering Management** 

# Program Educational Objectives

Graduates will be competent to work in a broad range of industrial sectors, capable to apply various Engineering Management techniques/knowledge in solving industrial problems and capable to create innovation at operational and managerial level at various industries

Graduates have readiness to pursue advanced degrees in professional or academic oriented education

Graduates will demonstrate abilities to play important roles at the operational or managerial level of various organizations

# Curriculum

The EM –ITB curriculum has been carefully structured to distinctively craft the graduate competence for meeting the program educational objectives. The curriculum prepares its graduates to understand the engineering relationships between the management tasks of planning, organization, leadership, control, and the human element in production, research, and service organizations; to understand and deal with the stochastic nature of management systems. The EM -ITB curriculum structure follows ABET criteria.

The curriculum also prepare graduates to integrate management systems into a series of different technological environments. The curriculum of engineering management contains subjects on general management, management of technology, project management, aspects on financial aspects, as well as heavy engineering aspects on product design. Design experience will be provided to students through courses, integrated practice, industrial internship, and final project.