What Does IE Do ?

IE ACTIVITIES

Production Operations	Management Systems	Corporate Services
-Product & services -Manufacturing processes -Facilities -Work methods & standards -Production planning & control	-Information systems -Financial & cost systems -Personnel	-Comprehensive planning -Policies & procedures -Performance measurement -Analysis

Students Admissions

Since 2011, ITB agreed to participate in the Nationwide Students Admission Scheme for Public Universities, which is coordinated by the National Committee of Public University Rectors. Initially, there were 2 (two) tracks of admission in SNMPTN:

- The SBMPTN-Written Test Track (SBMPTN - Jalur Ujian Tulis). This selection test was centralized and carried out by the National Public University Admission Test Committee.
- The SNMPTN - Invitation Track (SNMPTN - Jalur Undangan). Invitations were sent nationwide to top performing high school students who are graduating in the year.

INDUSTRIAL ENGINEERING

UNDERGRADUATE PROGRAM

productivity - effectiveness - efficiency - innovation

Engineers make things

Industrial Engineers make things better

Contact us:

Undergraduate Program of Industrial Engineering

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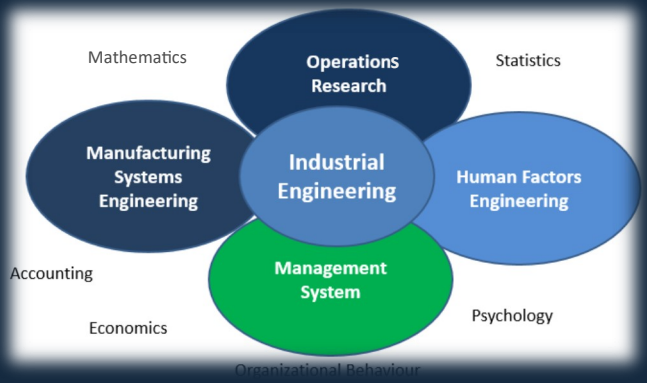
Accredited ABET Engineering Accreditation Commission

INSTITUT TEKNOLOGI BANDUNG • 1920 •

History

The history of Industrial Engineering education in Bandung Institute of Technology started in 1950s. In those years, mechanical engineers working for industries in Indonesia were mainly aiming for smooth and efficient operation of production machineries and facilities. Therefore, they focused on such activities as economical load allocation and maintenance of production facilities. The situation stimulated an idea to offer courses which were relevant with those responsibilities to the students of Mechanical Engineering Undergraduate Program in ITB. Initiative to develop Industrial Engineering as a specific undergraduate program started in 1968. On 1 January 1971 the Undergraduate Program of Industrial Engineering, Bandung Institute of Technology was officially established.

Body of Knowledge



Program Educational Objectives

Graduates will be competent to work in various industrial sectors by applying various industrial engineering techniques and knowledge

Graduates will be prepared to pursue advanced degrees in professional or academic oriented education

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

Students Outcomes

Faculty members of the Engineering Management program has agreed to adopt the ABET basic eleven engineering criteria as Student Outcomes. The Student Outcomes are listed below:

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.

c) 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 multi-disciplinary 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.

h) 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 for industrial engineering practice.

Curriculum

1st Year

Course Number	Course Name	Credits
MA1101	Mathematics IA	4
FI1101	Elementary Physics IA	4
KI1101	Basic Chemistry IA	3
KU1101	Introduction to Engineering and Design I	2
KU1011	Indonesian Language: Scientific Writing	2
KU1001	Sports	2
MA1201	Mathematics IIA	4
FI1201	Elementary Physics IIA	4
KI1201	Basic Chemistry IIA	3
KU1201	Introduction to Engineering and Design II	2
KU102X	English	2
KU1267	Engineering Drawing	2
KU1072	Introduction to Information Technology B	2

2nd Year

Course Number	Course Name	Credits
MA2021	Matrices and Vector Space	3
MS2150	Engineering Materials	2
MS2021	Engineering Mechanics	2
TI2101	Introduction to Industrial Engineering	3
TI2102	Probabilistic Theory	2
TI2103	Introduction to Economics	2
TI2104	Database Systems	2
KU2071	Pancasila and Civic Education	2
TI2001	Operational Research I	3
TI2002	Integrated System Design Practice 1	2
TI2201	Industrial Statistics	3
TI2202	Ergonomics	2
TI2203	Industrial Psychology	2
TI2204	Manufacturing Process	2
MA2031	Calculus III	3
MR2103	Industrial Electronics	2

3rd Year

Course Number	Course Name	Credits
TI3001	Production Planning and Control	2
TI3002	Work System Engineering	2
TI3003	Integrated System Design Practice 2	2
TI3101	Cost Analysis	3
TI3102	Operation Research II	3
TI3103	System Modeling	3
TI3104	Quality Assurance & Control	3
TI3105	Production Automation	2
KU206X	Religion and Ethics	2
TI3004	Engineering Economics	2
TI3005	Organization and Industrial Management	3
TI3006	Information System Analysis & Design	3
TI3007	Integrated System Design Practice 3	2
TI3201	Occupation Health Safety and Environmental	2
TI3202	Production System	2
TI3203	Computer Simulation	3

4th Year

Course Number	Course Name	Credits
TI4001	Interdisciplinary Engineering Design Project	2
TI4002	Integrated System Design Practice 4	1
TI4090	Internship Industrial Engineering	1
TI4091	Final Project I	2
TI4101	Facility Layout Design	3
TI4104	Enterpreneurship & Enterprise Development	3
TI4105	ERP System	2
TI4092	Industrial Engineering Final Project II	5