

Graduate Program in Industrial Engineering

The graduates of Industrial Engineering Program have competency as a leader in supply chain engineering and industrial management which able to control the function of man, material, machine, money, method and information technology in order to reach the vision and mission of companies. In addition, he/she able to act as industrial engineering consultant for organization in solving the problems, including evaluation to effectiveness and efficiency of the system in industry.

Vision

The most prestigious and dynamic Industrial Engineering School in Indonesia by producing globally competitive graduates

Mission

1. Preparing outstanding visionary supply chain and industrial management leader who are capable in facing the challenge of the future in industrial engineering.
2. Providing an excellent advanced education/research and professional services in industry, by attracting and retaining talented and creative student body and faculty.

Program Objective

1. Recognize problem context and apply appropriate engineering design methods and tools to represent, integrate, and solve problems to work productively within their professions.
2. Possess effective communication and leadership strategy and commit to the highest standard of profession and ethical practice
3. Understand the integrated and broad nature of the Industrial Engineering with appreciation of the depth of the field and able to find and utilize the up-to-date information and tools as needed

Graduate Competency

1. Graduates will be able to apply mathematics, science, and engineering to the Industrial Engineering domain
2. Graduates will be able to collect, analyze, and interpret the data used in designing and conducting experiments
3. Graduates will be able to apply to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
4. Graduates will be able to apply to identify, formulate, and solve problems through Industrial Engineering approaches
5. Graduates will be able to apply to function in multi-disciplinary teams
6. Graduates will be able to understanding of professional and ethical responsibilities
7. Graduates will be able to communicate effectively
8. Graduates will be able to determine impact of Industrial Engineering in a global, economic, environmental, and societal context
9. Graduates will be able to recognition of the need to engage in life-long learning
10. Graduates will be able to updated knowledge of contemporary Industrial Engineering related issues
11. Graduates will be able to use the techniques, skills, and modern engineering tools necessary for industrial engineering practice

Prospective Career of the graduates

Master of Industrial Engineering graduates have the opportunity to fill the positions at prestigious firms such as the Industrial Engineering Function Division Top Management, Supply Chain Engineer, Engineering Consultant, Project Manager, Quality Engineer, Manufacturing Engineer, Production Engineer, Human Resources Management, Lecturer, and Researcher.

Course Structure

Semester 1

Mata Kuliah	SKS
STAT8001 – Statistical Analysis & Research Methodology	3
ISYE8001 – Engineering Optimization	3
ISYE8002 – Quality Assurance & TQM	3
Stream: Industrial Management	
ISYE8003 – Risk and Industrial Management	3
Stream: Supply Chain Engineering	
ISYE8004 – Global Supply Chain	3

Semester 2

Mata Kuliah	SKS
MGMT8005 – Operation Management	3
ISYE8006 – Human-Integrated System	3
ISYE8007 – Human Performance Technology	3
RSCH8010 – Thesis Proposal	0
Stream: Industrial Management	
ISYE8008 – Service Engineering	3
ISYE8009 – Industrial System Design	3
Stream: Supply Chain Engineering	
ISYE8010 – Logistics	3
ISYE8011 – Supply Chain Modelling	3

Semester 3

Mata Kuliah	SKS
ISYE8012 – System Simulation And Modeling	3
ISYE8013 – Occupational Safety & Health Management	3
MGMT8006 – Human Capital Management	3

Semester 4

Mata Kuliah	SKS
RSCH8011 – Thesis	6