



Alfaisal University Bachelor of Industrial Engineering

Program Overview

Engineering systems may be modelled as interaction between subsystems such as machines, software and people. Such interactions are made of different flows of energy, materials and data. Industrial Engineering is about arranging subsystems and their interactions so they work more effectively and efficiently. Industrial Engineers design systems and processes and optimize existing ones in order to improve quality, productivity and worker's safety. They work to eliminate waste of time, material, energy, and make a good use of available capital like human and financial resources. While other engineers work on building systems, Industrial engineers work on making them better. Industrial engineering education is a fertile fusion between the engineering and business realms and hence it provide opportunities to work in different fields including but not limited to: supply chain and logistics, healthcare, manufacturing, banking and financial institution and Information Technology.

Professional Occupations

- Industrial Engineer
- Manufacturing Engineer
- Quality Engineer
- Human Factors Engineer
- Supply Chain Planner
- Management Engineer
- Process Engineer

**Smart, desirable, feasible,
marketable innovation to make
the world better is what we do.
IT'S WHAT YOU'LL DO.**

Competitive Edge

Highly competitive world market enforces companies to continuously adopt new management philosophies to stay in business. Globalization make the pressure even higher. The demand for industrial engineering profession is increasing rapidly where productivity and quality is the main driver to gain competitive edge. Industrial engineering term is not just about manufacturing as the term implies, it also comprises service industries such as shipping and logistics, healthcare, banks and government agencies. At Alfaisal University, our industrial engineering program offer students the latest industrial engineering practices. Our curriculum is developed and benchmarked with well-known western universities in the industrial engineering field. We continue to recruit outstanding faculty members and the majority of our staff are western graduates. We are proudly experiencing our success by having the majority of our graduates currently employed by top private companies and government agencies in the kingdom

Curriculum

Year	Term	Course-Title	CRHs
1st Year	Fall	Freshman English I Calculus I Mechanics and Waves for Engineers Mechanics and Waves for Engineers Lab. Programming for Engineers Programming for Engineers Lab. Introduction to Chemistry Introduction to Chemistry Lab. Total	3 3 1 3 1 3 1 18
	Spring	Engineering Ethics Freshman English II Calculus II Electromagnetism and Optics for Engineers Electromagnetism and Optics for Engineers Lab. Materials Science and Engineering Materials Science and Engineering Lab. Total	3 3 3 3 1 3 1 17
2nd Year	Fall	Linear Algebra Calculus III Foundations of Electrical Engineering Foundations of Electrical Engineering Lab. Differential Equations Applied Mechanics: Statics and Dynamics I Total	3 3 3 1 3 3 16
	Spring	Numerical Methods Probability and Statistics for Engineers Manufacturing and Workshop Training Manufacturing and Workshop Training Lab. Mechanics of Materials I Mechanics of Materials I Lab. Introduction to Computer Aided Design Thermal Fluids Engineering I Thermal Fluids Engineering I Lab. Total	3 3 3 1 3 1 3 3 1 21
3rd Year	Fall	Islamic Studies I Operations Research I Economic Principles Human Factors and Ergonomics Human Factors and Ergonomics Work Systems Analysis & Design Work Systems Analysis & Design Lab. Production and Service Systems Planning I Total	2 3 3 3 1 3 1 3 19
	Spring	Arabic Language I Operations Research II Advanced Manufacturing Processes Advanced Manufacturing Processes Lab. Simulation Simulation Lab. Instrumentation and Control Engineering Instrumentation and Control Engineering Lab. Production and Service Systems Planning II Total	2 3 3 1 3 1 3 1 3 20
	Summer	Industrial Engineering Summer Internship Total	0 0
4th Year	Fall	Islamic Studies II Technical Writing Network Models and Project Management Production Information Systems Engineering Safety and Risk Analysis Total	2 3 3 3 3 14
	Spring	Arabic Language II Industrial Engineering Technical Elective Management for Engineers Engineering Economy and Cost Analysis Quality Engineering Industrial Engineering Capstone Project Total	2 3 3 3 3 4 18

College Collaboration



Admissions Requirements

For admission criteria and how to apply, visit <http://admissions.alfaisal.edu>

For more information about Alfaisal's Industrial Engineering, visit http://coe.alfaisal.edu/departments/ie_home

Alumni Network

Our Alumni network spans some of the most influential national and international companies

- PWC Saudi Arabia
- SAP Saudi Arabia
- Aramex Saudi Arabia
- SMSA Express
- Saudi Mechanical Industry
- The SAUDI Fund for Development
- ERNST & Young Saudi Arabia
- McKinsey Saudi Arabia

Alfaisal University

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