



Faculty of Engineering & Technology

The Faculty of Engineering and Technology (FET) is one of Indonesia's leading schools of engineering and technology recognized for the quality of its programs, faculty and facilities. We offer a premier educational experience for success in competitive careers in computer science, information technology, and engineering. Our approach, according to industry experts, makes our graduates the most competitive in Indonesia.

INDUSTRIAL ENGINEERING PROGRAM

Sarjana Teknik Sampoerna University | Bachelor of Science in Industrial Engineering University of Arizona*

Industrial engineers design, develop, improve and manage efficient systems. Industrial engineering at Sampoerna University encompasses the analysis, development, improvement and implementation of integrated processes and their components. Our graduates have the technical training and understanding of people to make improvements in efficiency and quality. They are prepared to work in almost any industry.

Competencies to achieve:

- e-Commerce Supply Chain Management
- Distributions and Logistics
- Production Planning & Control
- Inventory Control
- Manufacturing Systems
- Process Optimization
- Simulation Modeling
- Human Factors and Ergonomics

Career Pathways

Potential career pathways for graduates of Industrial Engineering include but are not limited to:

- Process integration specialist
- Operations research analyst
- Industrial engineer
- Sales engineer
- Manufacturing supervisor
- Data modeler
- Corporate value consultant
- SAP consultant
- HSE officer and ergonomics
- Associate engineer
- Management trainee
- Continuous improvement engineer



SEMESTER I		
CODES	COURSE TITLE	CREDITS
GMAT1313	Calculus I	3
GSCI1303	General Chemistry I	3
GSCI1303L	General Chemistry I Lab	1
GCOM1304	Composition I (English)	3
GENG1301	Introduction to Engineering	3
GHUM1303	World Religions	3
GHUM1207	Kewarganegaraan	2
	Total	18

SEMESTER II		
CODES	COURSE TITLE	CREDITS
GMAT1314	Calculus II	3
GSCI2304	General Chemistry II	3
GSCI2104L	General Chemistry II Lab	1
ENGR1303	Computer Programming for Engr Applications	3
GCOM1305	Composition II (English)	3
GSCI1405	General Physics with Calculus I	3
GSCI1105L	General Physics with Calculus I Lab	1
GHUM1208	Indonesian Language	2
	Total	19

SEMESTER III		
CODES	COURSE TITLE	CREDITS
IENG2301	Introduction to Systems & Industrial Engr	3
IENG2302	Object-Oriented Modeling & Design	3
GSCI2406	General Physics with Calculus II	3
GSCI2106L	General Physics with Calculus II Lab	1
GMAT2415	Calculus III	4
GSOC2303	General Psychology (GE EP-Social Scientist)	3
GHUM1301	Pancasila (GE EP-Building Connections 1)	3
HED 102A	Succeeding as a Global Wildcat I	0
	Total	20

SEMESTER IV		
CODES	COURSE TITLE	CREDITS
IENG2304	Engineering Economy	3
IENG2305	Mathematical Foundations of IE	3
IENG2103	Industrial Engineering Colloquium	1
ENGR2302	Statics	3
VCDD3345	Indonesia Art History (GE EP-Artist)	3
ENGR3303	Environmental Ethics (GE EP-Building Connections 2)	3
IENG4319	Human Side of Org. (GE EP-Building Connections 3)	3
HED 102B	Succeeding as a Global Wildcat II	0
	Total	19

SEMESTER V		
CODES	COURSE TITLE	CREDITS
IENG3306	Introduction to Engr Probability & Statistics	3
IENG3307	Deterministic Operations Research	3
IENG3308	Software for Engineers	3
IENG3309	Manufacturing Process for IE	3
IENG3109L	Manufacturing Process for IE Lab	1
IENG3310	Technical Writing	3
IENG3330	Fundamentals of Data Science for Engineering	3
	Total	19

SEMESTER VI		
CODES	COURSE TITLE	CREDITS
IENG3311	Probabilistic Models in Operations Research	3
IENG3312	Integrated Manufacturing Systems	3
IENG3313	Production System Analysis	3
IENG3314	Engineering Experimental Design	3
IENG3315	Quality Control & Six Sigma	3
IENG4321	Embedded Computer Systems	4
	Total	19

SEMESTER VII		
CODES	COURSE TITLE	CREDITS
IENG4316	Simulation Modeling & Analysis	3
IENG4317	Human Factors & Ergonomics in Design	3
IENG4318	Project Management	3
IENG4328	Cost Estimation	3
IENG4332	Internship for IE	3
IENG4331	Integrated System Design (Capstone Design)	3
	Total	18

SEMESTER VIII		
CODES	COURSE TITLE	CREDITS
IENG4320	Supply Chain Management	3
IENG4322	Technical Sales and Marketing	3
IENG4334	Product Design and Development	3
IENG4433	Final Year Project for IE	4
	Total	13

TOTAL CREDIT HOURS FOR DEGREE PROGRAM

145