



Bachelor of
Industrial Engineering

Y	Course Code	Course Title	Pre-requisites	Credit Hours	Course Code	Course Title	Pre-requisites	Credit Hours	
FIRST YEAR	Semester 1				Semester 2				
	CP 101	Introduction to Computing		3	MATH102	Calculus II	MATH101	4	
	MATH 101	Calculus I	MATH 001	4	IE 201	Introduction to Engineering Design I	COMM 101	3	
	CHEM101	General Chemistry		4	PHYS 102	Physics II	PHYS 101	4	
	COMM101	Communication Skills		2	STAT 101	General Statistics 1		3	
	PHYS 101	General Physics		4	ARAB 101	Arab 1		3	
	<i>Total Credit Hours</i>				17	<i>Total Credit Hours</i>			
SECOND YEAR	Semester 3				Semester 4				
	MATH 207	Calculus III for Engineering	MATH 102	4	MATH204	Differential Equations I	MATH207	3	
	STAT 102	Probability Theory	STAT 101 MATH 102	3	IE 321	Fundamentals of Computer Systems	IE 261	3	
	IE 202	Introduction to Engineering Design II	IE 201	2	IE 256	Engineering Management	IE 255	2	
	IE 261	Structured Computer Programming	CP 101	3	IE 262	Basic Electrical Engineering	PHYS 102	4	
	IE 260	Engineering Graphics	CP 101	3	MATH241	Linear Algebra	MATH207	3	
	IE 255	Engineering Economics	MATH 101	3	STAT 250	Applied Probability and Random Processes	STAT 102	3	
<i>Total Credit Hours</i>				18	<i>Total Credit Hours</i>				18
THIRD YEAR	Semester 5				Semester 6				
	IE 311	Operations Research I	MATH 241	3	IE 342	Human Factors Engineering	IE 341	3	
	IE 263	Basic Workshop	IE 260	2	IE 352	System Analysis and Design	IE 351	3	
	IE 322	Computer Applications in Industrial Engineering I	IE 261	3	IE 411	Operations Research II	IE 311	3	
	ISLS 101	Islamic Studies I		3	IE 422	Industrial System Simulations	IE 322 STAT 250	3	
	IE 341	Work Study	STAT 102	3	IE 323	Computer Applications in Industrial Engineering II	IE 322	3	
	IE 351	Industrial Management	IE 256	3	IE 432	Design of Industrial Experiments	STAT 250	3	
<i>Total Credit Hours</i>				17	<i>Total Credit Hours</i>				18
	IE 390	Summer Training	Department Approval	2					
FORTH YEAR	Semester 7				Semester 8				
	IE 431	Industrial Quality Control	IE 351	3	IE 441	Industrial Safety Engineering	IE 342	3	
	IE 451	Production Planning and Control	IE 351	3	IE 453	Facilities Planning	IE 342 IE 352	3	
	IE 499	Senior Project	IE 422 IE 432	4	GEE XXX	General Education Elective		3	
	IE 395	IE Seminar	IE 351	1	IE XXX	Major Elective		3	
	IE XXX	Major Elective		3	IE XXX	Major Elective		3	
	IE XXX	Major Elective		3	<i>Total Credit Hours</i>				15
<i>Total Credit Hours</i>				17					

Major Electives

Course Code	Course Title	Credit Hours
IE 412	Decision Analysis	3
IE 413	Network Analysis	3
IE 433	Reliability Engineering	3
IE 434	Industrial Stochastic Systems	3
IE 435	Queuing Systems	3
IE 436	Dynamic forecasting	3
IE 442	Industrial Hygiene Engineering	3
IE 444	Occupational Biomechanics	3
IE 450	Marketing Management and Research	3
IE 452	Maintenance and Replacement Policies	3
IE 454	Engineering Cost Analysis	3
IE 455	Material Handling and Packaging	3
IE 456	Feasibility Studies	3
IE 457	Supply Chain Management	3
IE 458	Strategic Management in Industry	3
IE 459	Introduction to Entrepreneurship	3
IE 415	Project Management	3
IE 443	Industrial Environmental Engineering	3

General Education Electives (Free Electives)

Course Code	Course Title	Credit Hours
PSY 101	Introduction to Psychology	3
SCO 101	Introduction to Sociology	3
EI 101	Emotional Intelligence	3
ENG 204	Critical Thinking	3
ETH 101	Social Ethics	3
MKT 333	Public Relations	3
GD 286	Photography I	3
NPS 101	Negotiation and Problem solving	3
BUS 101	Essentials of Business	3
SPD 101	Soft skills and Personality Development	3