

Industrial Engineering

Year 1 Fall			Year 1 Spring			
Code	Course Name	Credit	Code	Course Name	Credit	
	English Language Elective I	(3-0) 3	PHL 110	Ethics	(3-0) 3	
MAT 111	Calculus I	(3-1) 4		English Language Elective II	(3-0) 3	
PHY 105	Mechanics, Thermodynamics and	(3-1) 4	MAT	Calculus II	(3-1) 4	
GE 201	Programming for Engineers	(3-1) 4	PHY 110	Electromagnetism and Waves	(3-1) 4	
CHM 105	Chemistry for Engineers	(3-1) 4	ME 201	Materials Science and Engineering	(3-1) 4	
		19			18	
Year 2 Fall			Year 2 Spring			
MAT 231	Linear Algebra	(3-0) 3	MAT	Numerical Methods	(3-0) 3	
MAT 211	Applied Mathematics	(3-0) 3	MAT	Probability and Statistics	(3-0) 3	
EE 207	Foundations of Electrical Engineering	(3-1) 4	ME 305	Manufacturing and Workshop Training	(3-1) 4	
MAT 213	Differential Equations	(3-0) 3	ME 208	Mechanics of Materials I	(3-1) 4	
ME 203	Applied Mechanics: Statics and	(3-0) 3	ME 205	Introduction to Computer Aided Design	(3-0) 3	
		17			17	
Year 3 Fall			Year 3 Spring			
HM 301	Islamic Studies I	(2-0) 2	HM 302	Arabic Language and Literature I	(2-0) 2	
IE 301	Operations Research I	(3-1)3	IE 302	Operations Research II	(3-1) 3	
ECO 311	Introduction to Micro and Macro	(3-0) 3	ME 308	Advanced Manufacturing Processes	(3-1) 4	
IE 309	Human Factors and Ergonomics	(3-1) 4	IE 330	Simulation	(3-0) 3	
IE 307	Work System Analysis & Design	(3-1) 4	ME 306	Instrumentation and Control Engineering	(3-1) 4	
IE 304	Production and Service Systems	(3-0) 3	IE 305	Production and Service Systems Planning	(3-0) 3	
		19			19	
Summer Internship						
Year 4 Fall			Year 4 Spring			
HM 401	Islamic Studies II	(2-0) 2	HM 402	Arabic Language and Literature II	(2-0) 2	
ENG 407	Oral Communication	(2-0) 2		Technical Elective	(3-0) 3	
IE 401	Network Models and Project	(3-0) 3	MAN	Management for Engineers	(3-0) 3	
IE 415	Production Information Systems	(3-0) 3	IE 315	Engineering Economy and Cost Analysis	(3-0) 3	
ME 405	Engineering Safety and Risk Analysis	(3-1) 4	IE 406	Quality Engineering	(3-0) 3	
			Capstone Project			(4-0) 4
		16			16	

Mechanical Engineering

Year 1 Fall			Year 1 Spring		
Code	Course Name	Credit	Code	Course Name	Credit
	English Language Elective I	(3-0) 3	PHL 110	Ethics	(3-0) 3
MAT	Calculus I	(3-1) 4		English Language Elective II	(3-0) 3
PHY	Mechanics, Thermodynamics and Waves	(3-1) 4	MAT	Calculus II	(3-1) 4
GE 201	Programming for Engineers	(3-1) 4	PHY 110	Electromagnetism and Waves	(3-1) 4
CHM	Chemistry for Engineers	(3-1) 4	ME 201	Materials Science and Engineering	(3-1) 4
		19			18
Year 2 Fall			Year 2 Spring		
MAT	Linear Algebra	(3-0) 3	MAT	Numerical Methods	(3-0) 3
MAT	Applied Mathematics	(3-0)3	ME 305	Manufacturing and Workshop Training	(3-1) 4
EE 207	Foundations of Electrical Engineering	(3-1) 4	ME 206	Thermal Fluids Engineering I	(3-1) 4
MAT	Differential Equations	(3-0) 3	ME 208	Mechanics of Materials I	(3-1) 4
ME 203	Applied Mechanics: Statics and Dynamics	(3-1) 4	ME 205	Introduction to Computer Aided Design	(2-1) 3
		17			18
Year 3 Fall			Year 3 Spring		
HM 301	Islamic Studies I	(2-0) 2	HM 302	Arabic Language and Literature I	(2-0) 2
ME 311	Applied Mechanics: Statics and Dynamics	(3-1) 4	MAT	Probability and Statistics	(3-0) 3
ME 315	Machine Design	(3-0) 3	ME 308	Advanced Manufacturing Processes	(3-1) 4
ME 309	Mechanics of Materials II /Aircraft Structures	(3-1) 4	ME 306	Instrumentation and Control Engineering	(3-1) 4
ME 307	Thermal Fluids Engineering II	(3-1) 4	ME 310	Aircraft /Machine Design with Project	(3-1) 4
		17			17
Summer Internship					
Year 4 Fall			Year 4 Spring		
HM 401	Islamic Studies II	(2-0) 2	HM 402	Arabic Language and Literature II	(2-0) 2
ENG 407	Oral Communication	(2-0) 2	ME 407	Heating, Ventilation, and Air-Conditioning	(3-0) 3
ME 314	Vibration and Damping	(3-0) 3	GE 203	Economics and Management for Engineers	(3-0) 3
ME 403	Finite Element Modelling for Dynamic and Structural Analysis (FEA Modelling)	(3-1) 4	ME 406	Mechatronics	(3-0) 3
ME 405	Engineering Safety and Risk Analysis	(3-1) 4	ME 4xx	Technical Elective	4
			Capstone Project		(4-0) 4
		18			17

Electrical Engineering

Year 1 Fall			Year 1 Spring		
Code	Course Name	Credit	Code	Course Name	Credit
	English Language Elective I	(3-0) 3	PHL	Ethics	(3-0) 3
MAT 111	Calculus I	(3-1) 4		English Language Elective II	(3-0) 3
PHY 105	Mechanics and Waves	(3-1) 4	MAT	Calculus II	(3-1) 4
GE 201	Programming for Engineers	(3-1) 4	PHY	Electromagnetism and Waves	(3-1) 4
CHM 105	Chemistry for Engineers	(3-1) 4	ME 201	Materials Science and Engineering	(3-1) 4
		19			18
Year 2 Fall			Year 2 Spring		
MAT 231	Linear Algebra	(3-0) 3	MAT	Numerical Methods	(3-0) 3
MAT 211	Applied Mathematics	(3-0) 3	MAT	Probability and Statistics	(3-0) 3
EE 207	Foundations of Electrical Engineering	(3-1) 4	EE 210	Digital Logic Systems	(3-1) 4
MAT 213	Differential Equations	(3-0) 3	EE 208	Electric Circuits	(3-1) 4
HM 301	Islamic Studies I	(2-0) 2	EE 202	Introduction to Electronics	(3-1) 4
		15			18
Year 3 Fall			Year 3 Spring		
HM 401	Islamic Studies II	(2-0) 2	HM 302	Arabic Language and Literature I	(2-0) 2
EE 301	Signals and Systems	(3-0) 3	EE 302	Communications Theory	(3-1) 4
EE 305	Computer Networks	(3-1) 4	EE 304	Solid State Circuits	(3-1) 4
EE 307	Computer Architecture	(3-1) 4	EE 306	Control and Feedback System Design	(3-1) 4
EE 309	Applied Electromagnetics	(3-0) 3	EE 308	Electrical Energy Conversion	(3-1) 4
		16			18
Summer Internship					
Year 4 Fall			Year 4 Spring		
***TE	Taken from the list below	(3-0) 3	HM 402	Arabic Language and Literature II	(2-0) 2
ENG 407	Oral Communication	(2-0) 2	GE 203	Economics and Management for Engineers	(3-0) 3
EE 403	Wireless Communications	(3-0) 3	***TE	Taken from the list below	(3-1) 4
EE 405	Electric Power Systems	(3-1) 4	***TE	Taken from the list below	(3-0) 3
***TE	Taken from the list below	(3-1) 4	***TE	Taken from the list below	(3-0) 3
	Capstone Project				(4-0) 4
		18			17

Software Engineering*

Year 1 Fall			Year 1 Spring		
Code	Course Name	Credit	Code	Course Name	Credit
	English Language Elective I	(3-0) 3	MAT	Linear Algebra	(3-0) 3
MAT 111	Calculus I	(3-1) 4		English Language Elective II	(3-0) 3
PHY 105	Mechanics and Waves	(3-1) 4	MAT	Calculus II	(3-1) 4
GE 201	Programming for Engineers	(3-1) 4	PHY	Electromagnetism and Waves	(3-1) 4
PHL 110	Ethics	(3-0)3	SE 120	Introduction to Software Engineering	(3-1)4
		18			18
Year 2 Fall			Year 2 Spring		
SE 210	Software Construction	(3-1)4	SE 221	Software Design	(2-1)3
SE 212	Discrete Structures for Software	(3-0)3	MAT	Probability and Statistics	(3-0) 3
SE 214	Algorithms and Data Structures	(3-1) 4	SE 223	Computer Architecture for SE	(3-1) 4
MAT 213	Differential Equations	(3-0) 3	HM 401	Islamic Studies I	(2-0) 2
EE 305	Computer Networks	(3-1) 4	SE 225	Web Technologies	(3-1)4
		18			16
Year 3 Fall			Year 3 Spring		
HM 301	Islamic Studies II	(2-0) 2	HM 302	Arabic Language and Literature I	(2-0) 2
SE 318	Introduction to e-Commerce	(3-0) 3	SE 323	Software Requirements and Analysis	(3-1)4
SE 316	Software Project and Process Management	(3-0) 3	SE 325	Advanced Computer Networks Applications	(3-1) 4
SE 312	Database Management Systems	(3-1) 4	SE 327	Embedded Systems	(3-0) 3
SE 314	Operating Systems	(3-1) 4	SE 329	Theoretical Foundations of Software	(3-0)3
SE 310 - Software Engineering Design I					(4-0)4
		18			18
Summer Internship					
Year 4 Fall			Year 4 Spring		
***TE	Taken from the list below	(3-0) 3	HM 402	Arabic Language and Literature II	(2-0) 2
ENG 407	Oral Communication	(2-0) 2	HM 4xx	Global /Cultural Awareness Course	(3-0) 3
GE 203	Economics and Management for	(3-0) 3	SE 421	Software Quality, Reliability and Maintenance	(2-1) 4
SE 410	Information Security	(3-1) 4	SE 422	Data Mining	(3-0) 3
SE 412	Software Verification and Validations	(3-1) 4	***TE	Taken from the list below	(3-0) 3
Software Engineering Capstone Project					(4-0) 4
		18			17

*Under Approval

Architectural Engineering*

Year 1 Fall			Year 1 Spring		
Code	Course Name	Credit	Code	Course Name	Credit
ENG121	English Language Elective I	(3-0) 3	AE 110	Architectural History	(3-0) 3
MAT 111	Calculus I	(3-1) 4	ENG122	English Language Elective II	(3-0) 3
PHY 105	Mechanics and Waves	(3-1) 4	MAT	Calculus II	(3-1) 4
GE 201	Programming for Engineers	(3-1) 4	PHY 110	Electromagnetism and Waves	(3-1) 4
CHM105	General Chemistry	(3-1) 4	ME 201	Materials Science and Engineering	(3-1) 4
			AE120	Drawing and Drafting	(4-0) 4
		19			22
Year 2 Fall			Year 2 Spring		
	Ethics	(3-0) 3	MAT	Differential Equations	(3-0) 3
MAT 211	Calculus III	(3-0)3	ME 206	Thermal Fluids Engineering I	(3-1) 4
EE 207	Foundations of Electrical Engineering	(3-1) 4	IC297	Architecture and Buildings	(3-0) 3
AE201	Architectural Design I	(3-0) 3	AE2311	Construction Materials and Structural Mechanics	(3-1) 4
ME 203	Applied Mechanics: Statics and Dynamics I	(3-0) 3	AE202	Architectural Design II	(3-0) 3
AE220	Construction Drawing (CAD)	(3-1) 4	HM 302	Arabic Language and Literature I	(2-0) 2
		20			19
Year 3 Fall			Year 3 Spring		
AE332	Fire Services Engineering	(3-0) 3	AE 302	Indoor air quality Engineering	(3-1) 4
AE341	Built Environment	(3-0) 3	AE303	Interior design	(3-1)3
AE312	Environment, Economics and Policy	(3-0) 3	AE315	Lighting Systems and Applications	(3-0) 3
HM 301	Islamic Studies I	(2-0) 2	AE311	Building Acoustics	(3-0) 3
ME 407	Heating, Ventilation, and Air-	(3-1) 4	AE313	Electrical Installations	(3-0) 3
		19			16
Summer Internship					
Year 4 Fall			Year 4 Spring		
AE 409	Project Management and Economics	(3-0) 3	AE 410	Contracts, Liability and Ethics	(3-0) 3
	Elective I*	(3-0) 3	AE450	Introduction to Geotechnical Engineering	(3-0) 3
	Elective II*	(3-0) 3		Elective III*	(3-0) 3
AE 405	Structural Analysis	(3-0) 3	AE455	Sustainable Buildings	(3-0) 3
AE 415	Senior Design Project I	(3-0) 3	AE 416	Senior Design Project II	(3-0) 3
HM 401	Islamic Architecture	(2-0) 2	HM 402	Arabic Language and Literature II	(2-0) 2
ENG 407	Oral Communication	(2-0) 2			
		19			17

*Under Approval