

FIRST YEAR

First Level							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
SLM 101	Islamic Culture (1)	----	2	2	--	--	2
ENG 101	English Language (1)	----	6	12	6	--	18
MATH 101	Mathematics	----	3	3	--	--	3
CSC 101	Introduction to Computer	---	3	2	2	--	4
Sum	4 Courses		14	19	8	-	27
Second Level							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
SLM 102	Islamic Culture (2)	----	2	2	--	--	2
ENG 102	English Language (2)	ENG 101	6	12	6	--	18
MATH 211	Calculus (1)	MATH 101	3	3	--	--	3
PHYS 101	General Physics	---	4	3	2	--	5
Sum	4 Courses		15	20	8	-	28
Total	8 Courses		29	39	16	-	55

SECOND YEAR

Third Level							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
ARB 101	Language Skills		2	2	0	0	2
CHEM 106	General Chemistry	----	4	3	2	0	5
MATH 228	Calculus (2)	MATH 211	3	3	0	0	3
PHYS 203	Physics (2)	PHYS 101	3	2	2	1	5
ME 131	Engineering Drawing		2	0	5	0	5
EE 111	Fundamentals of Electrical Engineering	PHYS 101	3	2	2	1	5
Sum	6 Courses		17	12	11	2	25
Fourth Level							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
SLM 103	Islamic Culture (3)		2	2	0	0	2
CHEM 206	Chemistry (2)	CHEM 106	3	2	0	2	4
MATH 319	Calculus (3)	MATH 228	3	3	0	0	3
ME 132	Engineering Design	ME 131	3	2	2	0	4
ME 137	Engineering Mechanics	PHYS 101	2	2	0	1	3
ME 268	Materials Engineering	PHYS 101	3	2	2	1	5
IE 131	Industrial Information systems		2	2	0	0	2
Sum	7 Courses		18	15	4	4	23
Total	13 Courses		35	27	15	6	48

THIRD YEAR

Fifth Level							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
ARB 102	Arabic Editing	-----	2	2	0	0	2
MATH 336	Differential Equations	MATH 319	3	3	0	0	3
CSC 111	Programming Language	CSC 101	3	2	2	0	4
ME 211	Thermodynamics (1)	PHYS 203	3	3	0	0	3
ME 234	Mechanical Drawing	ME 131	2	1	3	0	4
ME 251	Production Engineering & Workshop	ME 131	3	2	3	0	5
Sum	6 Courses		16	13	8	0	21
Sixth Level							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
SLM 104	Islamic Culture (4)		2	2	0	0	2
IE 211	Operations Research (1)	MATH 228	3	2	2	1	5
STAT 354	Statistics and Probability	MATH 211	3	3	0	0	3
ENG357	Technical Writing	ENG 102	3	3	0	0	3
IE 232	Work Study	ME 251	3	2	2	1	5
IE 251	Manufacturing Processes (1)	ME 268	3	2	2	1	5
Sum	6 Courses		17	14	6	3	23
Total	12 Courses		33	27	14	3	44

FOURTH YEAR

Seventh Level							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
IE321	Production Planning and Control		3	2	0	2	4
IE 312	Operations Research (2)	IE 211	3	2	2	1	5
IE 322	Inventory Management		3	2	1	2	5
IE 333	Project Management		2	1	1	2	4
IE 334	Cost Analysis		2	2	0	1	3
IE 352	Manufacturing Processes (2)	IE 251	3	2	2	1	5
ME 335	Machine Design (1)	ME 234	3	2	2	1	5
Sum	7 Courses		19	13	8	10	31

Conventional Path

Eighth Level							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
MATH 410	Numerical Methods	MATH 228- CSC 11	3	3	0	0	3
IE 336	Human Factors Engineering	IE 232	3	2	2	1	5
IE 346	Engineering Economy	MATH 228	2	2	0	0	2
IE 313	Modelling and Simulation		2	1	1	2	4
IE 323	Quality Control	STAT 354	3	2	2	1	5
IE 335	Engineering Reliability and Maintenance		2	1	1	2	4
CHE 461	Environmental Engineering	CHEM 206	2	2	0	0	2
Sum	7 Courses		17	13	6	6	25
Total	14 Courses		36	26	14	16	56

Summer Term

Course Code	Course Name	Prerequisites	Credit Units
IE 496	Summer training	ENG 357 Department approval	2

FIFTH YEAR

Ninth Level							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
IE 453	Computer Aided Manufacturing	IE 352	3	2	2	1	5
IE 454	Industrial Robots	EE 111	3	2	2	1	5
IE 491	Elective course (1)	Course Dependant.	3	2	2	1	5
IE 414	Design of Experiments	STAT 354	2	2	0	1	3
IE 498	Senior Design Project (1)	ENG 357-IE131 IE322-IE 352	1	0	3	0	3
Sum	5 Courses		12	8	9	4	21
Tenth Level							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
IE 437	Computer Applications in Industrial Engineering	CSC 111	2	1	3	0	4
IE 438	Industrial Safety and Health		2	2	0	0	2
IE 439	Facilities Planning	IE 321	2	1	1	2	4
IE 492	Elective course (2)	Course Dependant.	2	1	2	1	4
IE 493	Elective course (3)	Course Dependant.	2	1	2	1	4
IE 499	Senior Design Project (2)	IE 498	3	0	7	0	7
Sum	6 Courses		13	6	15	4	25
Total	11 Courses		25	14	24	8	46

Elective Courses

Elective Courses for Engineering Management Group							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
IE 491	Elective Course (1)						
IE 441	Analysis and Design of Industrial Systems	IE 352	3	2	2	1	5
IE 492	Elective Course (2)						
IE 442	Logistic Systems and Supply Chains	IE 322, IE 441	2	1	2	1	4
IE 443	Design of Database	CSC 111, IE 441	2	1	2	1	4
IE 444	Total Quality Management	IE 323, IE 441	2	1	2	1	4
IE 493	Elective Course (3)						
IE 445	Productivity Measurements	IE 131, IE 441	2	1	2	1	4
IE 446	Human Resources Management Systems	IE 321, IE 441	2	1	2	1	4

Elective Courses for Manufacturing Engineering Group							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
IE 491	Elective Course (1)						
IE 461	Automatic Control Systems	IE 313	3	2	2	1	5
IE 492	Elective Course (2)						
IE 462	Computer Integrated Manufacturing	IE 352, IE 461	2	1	2	1	4
IE 463	Analysis and Design of Products	IE 352, IE 461	2	1	2	1	4
IE 464	Flexible Manufacturing Systems	IE 352, IE 461	2	1	2	1	4
IE 493	Elective Course (3)						
IE 465	Advanced Machining processes	IE 352, IE 461	2	1	2	1	4
IE 466	Design of Mechatronics Systems	IE 461	2	1	2	1	4

Co-op Path

Eighth Level							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
MATH 410	Numerical Methods	MATH 228-CSC 111	3	3	0	0	3
IE 336	Human Factors Engineering	IE 232	3	2	2	1	5
IE 346	Engineering Economy	MATH 228	2	2	0	0	2
IE 313	Modeling and Simulation		2	1	1	2	4
IE 323	Quality Control	STAT 354	3	2	2	1	5
IE 335	Engineering Reliability and Maintenance		2	1	1	2	4
CHE 461	Environmental Engineering	CHEM 206	2	2	0	0	2
IE 498	Senior Design Project (1)	ENG 357-IE131 IE322-IE 352	1	0	3	0	3
Sum	8 Courses		18	13	9	6	28
Total	15 Courses		37	26	17	16	59

Summer Term

Course Code	Course Name	Prerequisites	Credit Units
IE 497	Co-op	ENG 357 Department acceptance	9

FIFTH YEAR

Ninth Level		
Course Code	Course Name	Remark
IE 497	Co-op	Continuation for the Co-op Program

Tenth Level							
Course Code	Course Name	Prerequisites	Credit Units	Weekly Contact Hours			
				Lec	Lab	Tut	Sum
IE 453	Computer Aided Manufacturing	IE 352	3	2	2	1	5
IE 414	Design of Experiments	STAT 354	2	2	0	1	3
IE 437	Computer Applications in Industrial Engineering	CSC 111	2	1	3	0	4
IE 438	Industrial Safety and Health		2	2	0	0	2
IE 439	Facilities Planning	IE 321	2	1	1	2	4
IE 454	Industrial Robots	EE 111	3	2	2	1	5
IE 499	Senior Design Project (2)	IE 498	3	0	7	0	7
Sum	7 Courses		17	10	15	5	30
Total	8 Courses		26	10	15	5	39