

1. University Requirement Courses

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
999805	Intensive English language (1+2)	2	-	12	-	-
105115	History of the Kingdom	2	2	-	-	-
2004111	Fundamental of Islamic culture	2	2	-	-	-
999806	Intensive English Language (3+4)	2	-	12	999805	Intensive English language (1+2)
990211	Arabic language skills	2	2	-	-	-
999807	English for specific purposes (1)	2	3	3	999806	Intensive English Language (3+4)
990311	University skills	2	2	-	-	-
2004112	Islamic culture (morals and values)	2	2	-	2004111	Fundamental of Islamic culture
990511	Elective university (1)	2	2	-		
999809	Elective English language (1)	2	2	-		
2004313	Islamic sciences (3)	2	2	-	2004112	Islamic culture (morals and values)
990414	Islamic sciences (4)	2	2	-	2004313	Islamic sciences (3)
Total		24				

2. College Requirement courses

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
8031101	Intr. to computer programming	3	3	2	-	-
202110	Mathematics 1	3	3	-		
204102	General chemistry	3	2	3		
202120	Mathematics 2	3	3	-	202110	Mathematics 1
203205	Physics	4	3	2	202110	Mathematics 1
8021201	Engineering drawing	2	4	-		
2022101	Multivariable calculus	3	4	-	202120	Mathematics 2
8022101	Introduction to eng. design 1	3	4		999806	Intensive English language (3+4)
8012101	Fundamentals of engineering economy	2	3	-		
8032101	Basics of electrical circuits	3	3	2	203205	Physics
2022102	Mathematical methods	4	5	-	2022101	Multivariable calculus
2023103	Differential equations	4	4	-	2022101	Multivariable calculus
2023104	Linear algebra	2	3	-	202120	Mathematics 2
2023206	Numerical analysis	3	4	-	2023103	Differential equations
2024116	Probability and statistics	3	4	-	202120	Mathematics 2
Total		45				

3. Department requirement courses

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
8032102	Electromagnetic	3	4		203205	Physics
8032201	Electric circuit 1	3	3	2	8032101	Basics of electrical circuits
8032202	Computer programming 2	3	3	2	8031101	Introduction to computer programming
8032203	Electronics 1	3	3	2	8032101	Basics of electrical circuits
8033101	Electric circuit 2	3	3	2	8032201	Electric circuit 1
8033102	Digital logic design	3	3	2	8032201	Electric circuit 1
8033201	Electromechanical energy conversion 1	3	3	2	8032102	Electromagnetics
8033202	Computer networks	3	3	2	8033102	Digital logic design
8033203	Electronics 2	3	3	2	8032203	Electronics 1
8034101	Electrical power systems 1	3	3	2	8033101	Electric circuits 2
8034102	Signals and systems analysis	3	3	2	8032102	Electromagnetic
8034103	Electromech. energy conv. 2	3	3	2	8033201	Electromech. energy conv. 1
8034104	Electrical installations	3	3	2	8033101	Electric circuits 2
8034201	Electric power systems 2	3	3	2	8034101	Electrical power systems 1
8034202	Commun. systems 1	3	3	2	8034102	Signals and systems analysis
8034203	Power electronics	3	3	2	8033203	Electronics 2
8034204	Opto electronic and photonic	3	3	2	8033203	Electronics 2
8034205	High voltage engineering	3	3	2	8034101	Electric power systems 1
8034301	Practical summer training	2	2			
8035100	Senior Project A	2	2	4		Approval from academic advisor
8035101	Control and systems	3	4	0	2023103	Differential equations
8035102	Fiber optic eng.	3	3	2	8034102	Signals and systems analysis
8035200	Senior project B	2	2	4		Approval from academic advisor
8035201	Renewable energy	3	3	2	8034201	Electric power systems 2
8035202	Communication systems 2	3	3	2	8034202	Commun. systems 1
	Elective electrical course 1	3				Approval from academic advisor
	Elective electrical course 2	3				Approval from academic advisor
	Elective electrical course 3	3				Approval from academic advisor
	Elective electrical course 4	3				Approval from academic advisor
Total		84				

1st Year, (Prep. Year)

Level 1

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
999805	Intensive English language (1+2)	2	-	12	-	-
105115	History of the Kingdom	2	2		-	-
8031101	Intr. to computer programming	3	3	2	-	-
202110	Mathematics 1	3	4		-	-
2004111	Fundamental of Islamic culture	2	2		-	-
204102	General chemistry	3	2	3	-	-
Total		15				

Level 2

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
999806	Intensive English Language (3+4)	2		12	999805	Intensive english language (1+2)
202120	Mathematics 2	3	4		202110	Mathematics 1
203205	Physics	4	3	2	202110	Mathematics 1
990311	University skills	2			-	
990211	Arabic language skills	2	2		-	
8021201	Engineering drawing	2	4		-	
Total		15				

2nd Year

Level 3

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
2022101	Multivariable calculus	3	4		202120	Mathematics 2
8022101	Introduction to eng. design 1	3	4		999806	Intensive English language (3+4)
8012101	Fundamentals of engineering economy	2	3		-	
999807	English for specific purposes (1)	2		3	999806	Intensive English language (3+4)
8032101	Basics of electrical circuits	3	3	2	203205	Physics
2023104	Linear algebra	2	3		202120	Mathematics 2
Total		16				

Level 4

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
2022102	Mathematical methods	4	5		2022101	Multivariable calculus
8032201	Electric circuit 1	3	3	2	8032101	Basics of electrical circuits
8032202	Computer programming 2	3	3	2	8031101	Introduction to computer programming
2004112	Islamic culture (morals and values)	2	2		2004111	Fundamental of Islamic culture
8032203	Electronics 1	3	3	2	8032101	Basics of electrical circuits
Total		15				

3rd Year

Level 5

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
990511	Elective university (1)	2	2			
999809	Elective English language (1)	2	2			
2023103	Differential equations	4	4		2022101	Multi Variable calculus
8032102	Electromagnetic	3	4		203205	Physics
8033101	Electric circuit 2	3	3	2	8032201	Electric circuit 1
8033102	Digital logic design	3	3	2	8032201	Electric circuit 1
Total		16				

Level 6

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
8033201	Electromechanical energy conversion 1	3	3	2	8032102	Electromagnetics
8033202	Computer networks	3	3	2	8033102	Digital logic design
2023206	Numerical analysis	3	3		2023103	Differential equations
2004313	Islamic sciences (3)	2	2		2004112	Islamic culture (morals and values)
8033203	Electronics 2	3	3	2	8032203	Electronics 1
Total		14				

4th Year

Level 7

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
990414	Islamic sciences (4)	2	2		2004313	Islamic sciences (3)
8034101	Electrical power systems1	3	3	2	8033101	Electric circuits2
8034102	Signals and systems analysis	3	3	2	8032102	Electromagnetic
8034103	Electromech. energy conv. 2	3	3	2	8033201	Electromech. energy conv. 1
2024116	Probability and statistics	3	4		202120	Mathematics 2
8034104	Electrical installations	3	3	3	8033101	Electric circuits 2
Total		17				

Level 8

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
8034201	Electric power systems 2	3	3	2	8034101	Electrical power systems 1
8034202	Commun. systems 1	3	3	2	8034102	Signals and systems analysis
8034203	Power electronics	3	3	2	8033203	Electronics 2
8034204	Opto electronic and photonic	3	3	2	8033203	Electronics 2
8034205	High voltage engineering	3	3	2	8034101	Electric power systems 1
Total		15				

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
8034301	Practical summer training	2	2			

5th Year

Level 9

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
8035100	Senior Project A	2	2	4		Approval from academic advisor
8035101	Control and systems	3	4	0	2023103	Differential equations
8035102	Fiber optic eng.	3	3	2	8034102	Signals and systems analysis
	Elective electrical course 1	3				Approval from academic advisor
	Elective electrical course 2	3				Approval from academic advisor
Total		14				

Level 10

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
8035200	Senior project B	2	2	4	8035100	Approval from academic advisor
8035201	Renewable energy	3	3	2	8034201	Electric power systems 2
8035202	Communication systems 2	3	3	2	8034202	Commun. systems 1
	Elective electrical course 3	3				Approval from academic advisor
	Elective electrical course 4	3				Approval from academic advisor
Total		14				

Selective courses Level 9

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
8035103	Power systems protection	3	3	2	8034201	Electric power systems 2
8035104	Electromechanical energy conversion 3	3	3	2	8034103	Electromechanical energy conversion 2
8035105	Antenna theory and design	3	3	2	8034102	Signals and systems analysis
8035106	Digital signal processing	3	3	2	8034102	Signals and systems analysis
8035107	Computer architecture and organization	3	3	2	8033102	Digital Logic Design
8035108	Power system analysis	3	3	2	8034201	Electric power systems 2
8035109	Computer programming 3	3	3	2	8032202	Computer programming 2
8035110	Energy conversion and utilization	3	3	2	8034101	Electric power systems 1
8035111	Electronic circuits	3	3	2	8033203	Electronics 2
Total						

Selective courses Level 10

Course No.	Course title	Credit units	Contact Units		Prerequisite	
			Lec.	Lb/T	Course No.	Course title
8035203	Electromagnetic wave propagation	3	3	2	8032102	Electromagnetics
8035204	PLC and microcontroller	3	3	2	8033203	Electronics 2
8035205	Biomedical instrumentation	3	4		8033203	Electronics 2
8035206	Artificial intelligent	3	4			Approval from academic advisor
8035207	Satellite communication systems	3	3	2	8034202	Communication systems 1
8035208	Special topics in electrical engineering	3	4			Approval from academic advisor
8035209	Special topics in communication engineering	3	4			Approval from academic advisor
8035210	Special topics in computer engineering	3	4			Approval from academic advisor
8035211	Protection against job hazards	3	4		8032102	Electromagnetics
Total						