

Study Plan of the Program of Mechanical Engineering (1438 H)

Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
First Year: First Term				
11030116	English (1)	3	18	-
11010101	Islamic Culture (1)	2	2	-
32000200	Introduction to Engineering	2	2	-
32000300	Calculus (1)	3	3	-
31022210	General Chemistry	4	5	-
32040222	Engineering Drawing (1)	2	4	-
11010113	Voluntary Service (1)	.	.	-
First Year: Second Term				
11030216	English (2)	3	18	English (1)
31031201	General Physics (1)	4	5	-
32000303	Calculus (2)	3	3	Calculus (1)
11020107	Quran	2	2	-
11010111	Islamic Culture (2)	2	2	-
32030231	Architectural drawing	1	2	-
11010123	Voluntary Service (2)			-
Second Year: First Term				
32050301	Fundamentals of Electrical Engineering	3	4	General Physics(1)
32021201	Computer Programming (1)	3	4	-
32000202	Engineering Math. (1)	3	3	Calculus (2)
32000100	Special English Language	2	2	English (2)
32000206	Engineering Economics	2	2	-
32000102	Fundamentals of Workshop Engineering	1	2	-
11020204	Healthy culture	1	1	-
Second Year: Second Term				
32000301	Engineering Math. (2)	3	3	Calculus (2)
32021202	Computer Programming (2)	3	4	Computer Programming (1)
32011202	Statics	3	3	-

32000204	Engineering Statistics	3	3	Calculus (2)
32000404	Engineering Management	2	2	Engineering Economics
32000101	Research and article writing skills	2	2	-
Third Year: First Term				
32000302	Engineering Math. (3)	3	3	Engineering Math. (1)
32042301	Production Technology	3	4	Fundamentals of Workshop Engineering
32042303	Dynamics	3	3	Statics
32041301	Thermodynamics (1)	3	3	General physics (1)
32041305	Fluid Mechanics (1)	3	4	Engineering Math. 2
32042305	Strength of Materials	3	4	Statics
Third Year: Second Term				
32041409	Numerical Analysis	3	3	Engineering Math. 2
32042302	Computer Aided Mech. Drawing	3	5	Engineering drawing (1)
32042304	Engineering Materials 1	3	3	Strength of Materials
32041302	Thermodynamics (2)	3	3	Thermodynamics (1)
32041304	Heat Transfer (1)	3	3	Fluid Mechanics (1)
32041310	Meas. Instruments and Calib.	3	4	Fundamentals of Electrical Engineering
32000400	Summer training (1)	2	-	
Fourth Year: First Term				
32041401	Heat Transfer 2	3	4	Heat Transfer (1)
32042407	Vibrations and Automation	3	4	Dynamics
32042409	Machining and Forming Technology	2	2	Production Technology
32042405	Machine Design 1	3	3	Computer Aided Mech. Drawing
32042402	Operations Research	3	3	Engineering Management
32041523	Renewable Energy	3	3	Heat Transfer (1)
Fourth Year: Second Term				
32041529	Fluid Machinery	3	3	Heat Transfer (1)

32042503	Quality Control	2	2	Engineering Statistics
32042404	Machine Design 2	3	3	Machine Design 1
32042516	Num. Cont. Operating Machines	2	2	and Machining Forming Technology
32041412	Energy Management	2	2	Heat Transfer (1)
32041408	Internal Combustion Engine	3	4	Heat Transfer (1)
32000500	Summer training (2)	2	-	
Fifth Year: First Term				
32041501	Air Cond. and Refrigeration 1	3	4	Heat Transfer 2
32042515	Automatic Control	3	4	Vibrations and Automation
-	elective courses (1)	3	3	
-	elective courses (2)	3	3	
32041533	Graduation Project - Part (1)	2	2	Passing 123 credit hours
Fifth Year: Second Term				
32041502	Power Plants	3	3	Heat Transfer 2
32042528	Robots	3	3	Automatic Control
32041534	Graduation Project- Part (2)	2	2	Graduation project-part (1)
-	elective courses (3)	3	3	
-	elective courses (4)	3	3	
Electives				
32041519	Air Conditioning and Refrigeration (2)	3	3	Air Cond. and Refrigeration 1
32041520	Fluid Mechanics (2)	3	3	Fluid Mechanics (1)
32041536	Aerodynamics	3	3	Fluid Mechanics (1)
32041522	Gas Dynamics	3	3	Fluid Mechanics (1)
32041537	Solar Energy	3	3	Heat Transfer 2
32041525	Heat Exchanger Design	3	3	Heat Transfer 2
32041527	Internal Combustion Engine (2)	3	3	Heat Transfer 2
32041404	Energy Conversion Systems	3	3	Thermodynamics 2
32041538	Water Desalination	3	3	Heat Transfer (2)

32042520	Nontraditional Machining	3	3	and Machining Forming Tech.
32042521	Non Destructive Testing	3	3	and Machining Forming Tech.
32042522	Dies Design	3	3	Machine Design 2
32042523	Engineering Materials (2)	3	3	Engineering Materials 1
32042524	Powder Forming Technology	3	3	Machining and Forming Technology
32042525	Machine Tool Design	3	3	Machine Design 2
32042526	Nontraditional Measurements	3	3	Meas. Instruments and Calib.
32042527	Production Planning	3	3	Engineering Management
32041407	Metrology	3	3	Meas. Instruments and Calib.