



First Year

First Semester

Subject		Hrs./week			Units
		Theo.	Tut.	Lab.	
ME 1201	Mathematics (1)	3	1	-	3
ME 1301	Statics (1)	3	1	-	3
ME 1203	Engineering Drawing and Descriptive Geometry (1)	1	1	2	2
ME 1303	Manufacturing Process (1)	2	-	-	2
ME 1305	Electrical Engineering (1)	2	-	-	2
ME 1307	Workshop Skills (1)	-	2	2	1
ME 1101	Fundamentals of Computer Science	-	-	2	1
ME 1102	Freedom and Human rights	1	1	-	1
ME 1104	Arabic Language	1	1	-	1
Total		13	7	6	16
		26			

First Year

First Semester

Course Number: ME 1201

Course Name: Mathematics (1)

Course content:

Simple Function And Their Graphs, Simple Function And Their Graphs, Limits & Continuity, Trigonometric Functions , Conical Sections , Differentiation , Derivative Applications, Derivative Applications, Integration, Definite Integral Application, Definite Integral Application, Transcendental Functions, Transcendental Functions, Hyperbolic Functions.

Course Number: ME 1301

Course Name: Statics (1)

Course content:

Introduction And Fundamental Concepts, Newton's Laws And SI Unit, Force Vectors Analysis In 2D, Force Vectors Analysis In 2D Examples And Application, Moments Of A Force In 2D, Moments Of A Force In 2D, Examples And Application, Couple In



2D, Resultant Of Coplanar Forces In 2D, Resultant Of Coplanar Forces In 2D Examples And Application, Force Vectors Analysis In 3D, Moments Of A Force In 3D, Moments Of A Force In 2D Examples And Application, Couple In 3D, Couple In 3D Examples And Application, Resultant Of Coplanar Forces In 3D.

Course Number: ME 1203

Course Name: Engineering Drawing and Descriptive Geometry (1)

Course content:

Engineering Drawing: Introduction, Graphic Instruments And Their Use, Lettering Graphic Geometry, Multi View Orthographic Projection In First And Third Angle Projection, Dimension, Third View.

Descriptive Geometry: Introduction to Descriptive Geometry, Projection Types, Point Representation, Straight Line Representation, Couple of Straight Lines Representation, Finding the True Length of the Straight Line.

Course Number: ME 1303

Course Name: Manufacturing Process (1)

Course content:

Engineering Material, Iron Ores And Iron Production, The Furnaces Used For Steel Production, Production Of Cast Iron And Ores Concentration, Production Of Aluminum And Lead, Production Of Copper And Copper Alloys, Mechanical And Physical Properties Of Metals And Tests, Sand Casting, Other Casting Methods, Measurement And Selection Rulers.

Course Number: ME 1101

Course Name: Fundamentals of Computer Science

Course content:

Computer definition: (Computer generation, computer components, numerical systems, algorithms and charts), File, definition, types and names, operating system (MS-DOS): Explain internal and external commands, Introduction to WINDOWS, Desktop, using the mouse, My Computer, closing any open window, temporary closing, Microsoft office (Word, Excel and Power point), Computer oriented procedures, Flow charts, Introduction to programming language.

Course Number: ME 1306

Course Name: Electrical Engineering (1)

Course content:

Resistance, Connection of Resistance, Electrical Laws, D.C. Network Theorems, A.C. Fundamental, Representation AC.



Course Number: ME 1102

Course Name: Freedom and Human rights

Course content:

Fundamental of freedom ,Intellectual freedom and cultural , Freedom of politics, Economic and Social freedom , The future of public freedoms, Universal Declaration of Human Rights and Freedoms , Freedom in Islam , A brief explanation of the types of democracy, Democracy and the entrance to it, Applications of democracy, Administrative and financial corruption , Democracy in Islam.

Course Number: ME 1103

Course Name: Arabic Language

Course content:

University Requirements

Course Number: ME 1307

Course Name: Workshop Skills (1)

Course content:

Forging Workshop, Fitting Workshop, Sheet Metal Workshop.

First Year

Second Semester

Subject		Hrs./week			Units
		Theo.	Tut.	Lab.	
ME 1202	Mathematics (2)	3	1	-	3
ME 1302	Statics (2)	3	1	2	4
ME 1204	Engineering Drawing and Descriptive Geometry (٢)	1	1	2	2
ME 1304	Manufacturing Process (2)	2	-	-	2
ME 1306	Electrical Engineering (2)	2	-	2	3
ME 1308	Workshop Skills (2)	-	2	2	1
ME 1205	Computer Programming (1)	-	-	2	1
ME 1103	General Fitness	-	2		-
ME 1105	English Language (1)	1	1	-	1
Total		12	8	10	17
		30			



First Year

Second Semester

Course Number: ME 1202

Course Name: Mathematics (2)

Course content:

Hyperbolic Functions and Inverse Hyperbolic Functions, Methods of Integrations, Matrices, Complex Numbers.

Course Number: ME 1302

Course Name: Statics (2)

Course content:

Equilibrium in 2.D, Equilibrium in 3.D, Plane Trusses, Method of Joints, Method of Section, Space Trusses, Friction. Nature of Friction and Theory of Friction, Type of Frictions, Application of Friction, Centroids and Center Of Gravity, Moment Of Inertia.

Course Number: ME 1204

Course Name: Engineering Drawing and Descriptive Geometry (2)

Course content:

Engineering Drawing: Isometric Drawing & Sketching, Oblique Drawing, Cutting, Section Of Isometric Drawing, Sectional Views.

Descriptive Geometry: Plane Representation, Plane Rotation, Auxiliary Planes, Cases Of Parallelism And Intersection And Orthogonally, Sections Of Geometrical Shapes, Intersection Of Geometrical Shapes And Their Deployment, Engineering Drawing By Computer.

Course Number: ME 1304

Course Name: Manufacturing Process (2)

Course content:

Hand Tools, Metal Working, Such As Turning, Drilling, Milling And Grinding, Hot Working, Cold Working, Forming By Dragging And Extrusion, Formation By Rotating, Formation By Hot Pressing, Properties And Production Of Plastics, Methods Of Manufacture Of Plastics, Metals Welding Methods, Gas Welding, Electrical Resistance Welding, Cold Welding, Industrial Safety And Material Transfer, The Use Of Machinery And Equipment And The Workplace.



Course Number: ME 1306

Course Name: Electrical Engineering (2)

Course content:

Application of Network Theorems in A.C., Power Frequencies, Three Phase A.C. Calculations, Magnetic Circuits, Transformers Single Phase, Three Phase Transformers.

Course Number: ME 1205

Course Name: Computer Programming (1)

Course content:

Introduction To BASIC, Structure Of The Programs, Writing Simple Program Using BASIC, Writing Advanced Program Using BASIC, Writing One And Two Dimensional Matrix In BASCI, Functions In BASIC, Subroutines In BASIC, Study Different Applications In Mechanical Engineering Starting From Writing The Problem To Writing The Program.

Course Number: ME 1104

Course Name: English Language (1)

Course content:

Basic Introduction, Reading Skills, Listening Skills, Making Notes during Lectures.

Course Number: ME 1308

Course Name: Workshop Skills (2)

Course content:

Foundry Workshop, Electricity Workshop, Turning Workshop, Milling Workshop, Carpentry Work Shop.