

Scheme of Studies

Semester 1					
Subjects			Credit Hours		
			Theory	Lab	Total
1	BSI 173	Calculus and Analytic Geometry	3	0	3
2	MtE-104L	Engineering Drawing	0	2	2
3	MtE-110	Electric Circuits Analysis	3	1	4
4	BSI-101	Islamic Studies	2	0	2
5	BSI-133	Functional English	3	0	3
6	MtE-119	Occupational Health and Safety	1	0	1
7	MtE-120	Applications of ICT	2	1	3
		Total	14	4	18
		Cumulative Total			18

Semester 2					
Subjects			Credit Hours		
			Theory	Lab	Total
1	BSI-231	Differential Equations	3	0	3
2	MtE-115	Engineering Statics	2	0	2
3	MtE-132	Computer Programming	2	1	3
4	BSI-XXX	Applied Physics	2	1	3
5	MtE-XXX	Arts and Humanities Elective	2	0	2
6	MtE-205	Electronic Principles and Devices	3	1	4
7	MtE-113L	Workshop	0	1	1
		Total	14	4	18
		Cumulative Total			36

Semester 3					
Subjects			Credit Hours		
			Theory	Lab	Total
1	BSI-111	Linear Algebra	3	0	3
2	MtE-211	Electronic Circuits Design	3	1	4
3	MtE-201	Engineering Dynamics	3	0	3
4	MtE-207L	Solid Modelling	0	1	1
5	MtE-221	Materials & Manufacturing Processes	3	0	3
6	MtE-232	Object-Oriented Programming & Data Structures	2	1	3
		Total	14	3	17
		Cumulative Total			53

Semester 4					
Subjects			Credit Hours		
			Theory	Lab	Total
1	BSI-XXX	Multivariate Calculus and Transforms	3	0	3
2	MtE-226	Actuating Systems	3	1	4
3	MtE-222	Mechanics of Materials	2	1	3
4	MtE-231	Digital Logic Design	2	1	3
5	MtE-311	Fluid Mechanics	2	1	3
6	MtE-323	Theory of Machines	2	0	2
		Total	14	4	18
		Cumulative Total			71

Semester 5					
Subjects			Credit Hours		
			Theory	Lab	Total
1	MtE-352	Probability and Statistics for Engineers	2	0	2
2	MtE-318	Microcontrollers and Embedded Systems	2	2	4
3	MtE-342	Design of Machine Elements	3	0	3
4	MtE-317	Transducers and Instrumentation	3	1	4
5	MtE-309	Modeling and Simulation	2	1	3
6	BSI-110	Pakistan Studies	2	0	2
		Total	14	4	18
		Cumulative Total			89

Semester 6					
Subjects			Credit Hours		
			Theory	Lab	Total
1	MtE-350	Numerical Methods	2	0	2
2	MtE-325	Mechatronics System Design	2	2	4
3	MtE-354	Project Management	2	0	2
4	MtE-XXX	Technical Elective I	3	0	3
5	MtE-328	Control Systems	3	1	4
6	MtE-346	Fundamentals of Thermal Sciences	2	0	2
		Total	14	3	17
		Cumulative Total			106

Semester 7					
Subjects			Credit Hours		
			Theory	Lab	Total
1	MtE-405	Robotics	3	1	4
2	BSI-XXX	Expository Writing	3	0	3
3	MtE-XXX	Technical Elective II	3	0	3
4	MtE-XXX	Social Sciences Elective	2	0	2
5	MtE-457	Artificial Intelligence	1	1	2
6	MtE-441L	FYP	0	3	3
		Total	12	5	17
		Cumulative Total			123

Semester 8					
Subjects			Credit Hours		
			Theory	Lab	Total
1	MtE-XXX	Technical Elective III	3	0	3
2	MtE-422	Industrial Automation	2	1	3
3	MtE-355	Civics and Community Engagement	1	1	2
4	MtE-458	Entrepreneurship	2	0	2
5	MtE-441L	FYP	0	3	3
		Total	8	5	13
		Cumulative Total			136