The Public Authority for Applied Education and Training
College of Technological Studies

PROGRAM MAJOR SHEET

Current

Department : Electrical Engineering Technology

Program : Electric Machines

Major Core Courses (42 Credits)

Code	No.	Course Name	Cr.	Hrs.	Theo.	Lab.	Field	Pre-req.
52	130	DC and Synchronous Machines	3	4	2	2	0	110/70 ، 113/56
52	220	Transformers	3	4	2	2	0	115/70
52	237	Induction Machines	3	4	2	2	0	115/70
52	260	Power Electronics	3	4	2	2	0	115/70
52	270	Electrical Drives	3	4	2	2	0	260/52 ، 106/76
52	286	Electrical Machines Control	3	7	1	6	0	237/52
52	330	Programable Logic Controllers	3	4	2	2	0	237/52
52	340	Fractional HP Machines	3	4	2	2	0	115/70
52	399	Field Training	6	24	0	0	24	130/52, 162/30
70	110	Electrical Engineering Fundamentals	3	4	2	2	0	
70	115	Electrical Circuits	3	4	2	2	0	110/70
70	147	Power and Installation W–S	3	7	1	6	0	110/70
70	260	Electrical Power Systems	3	4	2	2	0	115/70
			42	78	22	32	24	

General Core Courses (19 Credits):

Code	No.	Course Name	Cr.	Hrs.	Theo.	Lab.	Field	Pre-req.
30	99	English (treatment)	0	5	5	0	0	
30	102	Technical English	3	3	3	0	0	30/99
76	105	Mathematics (1)	3	3	3	0	0	
76	106	Mathematics (2)	3	3	3	0	0	76/105
56	113	Basic Physics	3	4	2	2	0	
30	162	Technical Reports Writing	3	3	3	0	0	30/102
30	171	Comminucation Skills	3	3	3	0	0	30/102
			18	19	17	2	0	

Total	Cr.	Hrs.
	75	114

Major Elective Courses (6 Credits)

Code	No.	Course Name	Cr.	Hrs.	Theo.	Lab.	Field	Pre-req.
52	233	Electrical Measurements	3	4	2	2	0	115/70
52	250	Automatic Control	3	4	2	2	0	115/70
52	259	Digital Logic Circuits	3	4	2	2	0	
52	287	Advanced Computer Applications	3	4	2	2	0	284/70
52	297	Project	3	4	2	2	0	
70	216	Advanced Electrical Circuits	3	4	2	2	0	115/70
70	246	Electrical Installations	3	4	2	2	0	106/76
70	261	Power System Operation	3	4	2	2	0	260/70
70	284	Computer Applications	3	4	2	2	0	
70	292	Electrical Calculations	3	4	2	2	0	110/70

General Elective Courses (3 Credits)

Code	No.	Course Name	Cr.	Hrs.	Theo.	Lab.	Field	Pre-req.
3	112	Work Ethics and Loyalty	3	3	3	0	0	
7	141	Art Education (1)	1	2	0	2	0	
7	142	Art Education (2)	1	2	0	2	0	141/07
8	110	Physical Education	1	2	0	2	0	
10	104	Research and Libraries	1	2	0	2	0	
13	151	Music Education	1	2	0	2	0	
15	114	Industrial Psychology	2	2	2	0	0	
21	164	Accounting	2	2	2	0	0	
22	104	Small Projects Managment	2	2	2	0	0	
25	166	Industrial Economics	2	2	2	0	0	
30	107	French Language General (1)	2	3	3	0	0	
57	102	Introduction of Contracts and Specification	3	3	3	0	0	
64	268	Creativity and Design in Technology	2	2	2	0	0	
65	205	Automotive Mechanics	3	3	3	0	0	
66	135	Energy and Water Conservation	3	3	3	0	0	
70	112	Green Energy	3	3	3	0	0	
79	103	Oil Culture	3	3	3	0	0	

General Compulsory Courses (6 Credits)

Code	No.	Course Name	Cr.	Hrs.	Theo.	Lab.	Field	Pre-req.
1	101	Islamic Culture	2	2	2	0	0	
64	252	Industrial Management	2	2	2	0	0	
81	298	Industrial Safety	2	2	2	0	0	102/30
			6	6	6			