

Table No. (14)
Study Plan - First Year - Electrical Power and Machines Department

First Semester											
Course Code	Course Name	Weekly Hours				Marks Distribution			Written Exam Hours	Total Course Grade	Credit Hours
		Lecture	Applications		Total	Year Work	Oral/ Practical	Written Exam			
			Tutorial	Lab							
GEN 1501	Mathematics (3)	2	2	-	4	50	-	100	3	150	3
POW 1502	Electromagnetic	3	2	-	5	60	-	140	3	200	4
GEN 1503	Engineering Materials	2	2	-	4	30	-	70	3	100	3
ELC 1504	Programming Language	2	-	2	4	30	30	90	3	150	3
GEN 1505	Professional Legislations	1	1	-	2	10	-	40	2	50	1
GEN 1506	Engineering Commerce	2	1	-	3	30	-	70	3	100	2
Total Weekly Hours		12	8	2	22	Total Credit Hours					16
Second Semester											
Course Code	Course Name	Weekly Hours				Marks Distribution			Written Exam Hours	Total Course Grade	Credit Hours
		Lecture	Applications		Total	Year Work	Oral/ Practical	Written Exam			
			Tutorial	Lab							
GEN 1507	Mathematics (4)	2	2	-	4	50	-	100	3	150	3
POW 1508	Electrical Circuit (1)	2	2	-	4	50	-	100	3	150	3
GEN 1509	Thermodynamic	2	1	-	3	30	-	70	3	100	2
GEN 1510	Civil Engineering	1	1	-	2	30	-	70	3	100	1
POW 1511	Electric Technology and Workshop	3	-	3	6	30	50	120	3	200	4
GEN 1512	Technical Reports	2	-	-	2	10	-	40	2	50	2
Total Weekly Hours		12	6	3	21	Total Credit Hours					15
						Total Marks				1500	

Workshop training at the faculty for 30 hours per week for four weeks after the second semester exams for the first year.

Table No. (15)
Study Plan - Second Year - Electrical Power and Machines Department

First Semester											
Course Code	Course Name	Weekly Hours				Marks Distribution			Written Exam Hours	Total Course Grade	Credit Hours
		Lecture	Applications		Total	Year Work	Oral/ Practical	Written Exam			
			Tutorial	Lab							
POW 2501	Electrical Circuit (2)	3	2	-	5	60	-	140	3	200	4
ELC 2502	Electronic Circuit	2	2	1	5	40	40	120	3	200	3
POW 2503	Energy Conversion	2	2	-	4	50	-	100	3	150	3
GEN 2504	Numerical Analysis & Statistics	2	2	-	4	50	-	100	3	150	3
GEN 2505	Project Management	2	-	-	2	10	-	40	2	50	2
Total Weekly Hours		11	8	1	20	Total Credit Hours					15
Second Semester											
Course Code	Course Name	Weekly Hours				Marks Distribution			Written Exam Hours	Total Course Grade	Credit Hours
		Lecture	Applications		Total	Year Work	Oral/ Practical	Written Exam			
			Tutorial	Lab							
POW 1506	Electrical Instrumentation	2	2	2	6	40	40	20	3	200	4
POW 1507	Electrical Machine (1)	2	2	2	6	50	50	150	3	250	4
POW 1508	Power Stations	2	1	-	3	30	-	70	3	100	2
ELC 1509	Information Technology	2	-	1	3	20	20	60	3	100	2
GEN 1510	Communication Skill	2	-	-	2	10	-	40	2	50	2
GEN 1511	Environmental Study	2	-	-	2	10	-	40	2	50	2
Total Weekly Hours		12	5	5	22	Total Credit Hours					16
						Total Marks				1500	

Field training at specialized sites outside the faculty for four weeks after the second semester examinations for the second year.

Table No. (16)
Study Plan - Third Year - Electrical Power and Machines Department

First Semester											
Course Code	Course Name	Weekly Hours				Marks Distribution			Written Exam Hours	Total Course Grade	Credit Hours
		Lecture	Applications		Total	Year Work	Oral/ Practical	Written Exam			
			Tutorial	Lab							
POW 3501	Power Electronics (1)	2	1	2	5	30	30	90	3	150	3
POW 3502	Electrical Power (1)	2	1	2	5	30	30	90	3	150	3
POW 3503	Electrical Machine (2)	3	2	2	7	40	40	120	3	200	5
POW 3504	Electrical Safety	2	-	-	2	10	-	40	2	50	2
---	Elective Course (1)	2	2	-	4	30	-	70	3	100	3
	Field Training									100	
Total Weekly Hours		11	6	6	23	Total Credit Hours				16	
Second Semester											
Course Code	Course Name	Weekly Hours				Marks Distribution			Written Exam Hours	Total Course Grade	Credit Hours
		Lecture	Applications		Total	Year Work	Oral/ Practical	Written Exam			
			Tutorial	Lab							
POW 3508	Power Electronics (2)	2	1	2	5	30	30	90	3	150	3
POW 3509	Electrical Power (2)	2	1	2	5	30	30	90	3	150	3
POW 3510	Automatic Control Engineering	2	1	2	5	40	40	120	3	200	3
POW 3511	High Voltage	2	-	2	4	30	30	90	3	150	3
---	Elective Course (2)	2	2	-	4	30	-	70	3	100	3
Total Weekly Hours		10	5	8	23	Total Credit Hours				15	
						Total Marks				1500	

- Summer field training at specialized sites outside the faculty for four weeks after the second semester examinations for the third year.

Elective Course List (1):

- COM 3505: Communication System
- POW 3506: Electrical Power Quality
- POW 3507: Selected Subjects

Elective Course List (2):

- POW 3512: Renewable Energy
- POW 3513: Electrical Distribution System
- POW 3514: Selected Subjects

Table No. (17)

Study Plan - Fourth Year - Electrical Power and Machines Department

First Semester											
Course Code	Course Name	Weekly Hours				Marks Distribution			Written Exam Hours	Total Course Grade	Credit Hours
		Lecture	Applications		Total	Year Work	Oral/ Practical	Written Exam			
			Tutorial	Lab							
POW 4501	Energy Management	2	-	-	2	10	-	40	2	50	2
POW 4502	Electrical Power System Analysis	2	1	2	5	40	40	120	3	200	3
POW 4503	Digital Control	2	1	1	4	40	40	120	3	200	2
POW 4504	Electrical Drive (1)	2	1	2	5	20	20	60	3	100	3
---	Elective Course (3)	2	2	-	4	30	-	70	3	100	3
	Field Training									100	
---	Graduation Project	-	4	-	4	50	Continuous				2
Total Weekly Hours		10	9	5	24	Total Credit Hours					15
Second Semester											
Course Code	Course Name	Weekly Hours				Marks Distribution			Written Exam Hours	Total Course Grade	Credit Hours
		Lecture	Applications		Total	Year Work	Oral/ Practical	Written Exam			
			Tutorial	Lab							
POW 4508	Electrical Drive (2)	2	1	2	5	30	30	90	3	150	3
POW 4509	Power System Protection	2	1	2	5	40	40	120	3	200	3
POW 4510	Power System Control	3	1	-	4	30	-	70	3	100	3
---	Elective Course (4)	2	2	-	4	30	-	70	3	100	3
POW 4514	Graduation Project	-	4	-	4	50	Discussion 100			200	2
Total Weekly Hours		9	9	4	22	Total Credit Hours					14
						Total Marks				1500	

Elective Course List (3):

- POW 4505: High Voltage Techniques
- POW 4506: Automatic Control Techniques
- POW 4507: Selected Subjects

Elective Course List (4):

- POW 4511: Security of Electrical Power Systems
- POW 4512: Electrical Power Systems Planning
- POW 4513: Selected Subjects

- Graduation project preparation continues for fourth-year students at a rate of 36 hours per week for four weeks after the second semester examinations.

قسم هندسة القوى والآلات الكهربائية

