

1. First semester courses

Semester (1) Year (1)											
No	Subject	Codes	Subject Category	Number of Credits	Hours per Week				In charge Department	Prerequisite Subjects	Remarks
					Theory	Practical	Field	Total			
1	Belief System of Islam	B.EPE. 0171	Inclusive course	2	2	0	0	2	Islamic culture	Nil	
2	Recitation and Tajweed	B.EPE. 0172	Inclusive course	1	0	2	0	2	Islamic culture	Nil	
3	English Language	B.EPE. 0104	Inclusive course	2	1	2	0	3	Foreign languages	Nil	
4	Contemporary History of Afghanistan	B.EPE. 0103	Inclusive course	2	2	0	0	2	History	Nil	
5	Mathematics – I	B.EPE. 0106	Basic	3	2	2	0	4	Higher Mathematics	Nil	
6	Engineering Chemistry	B.EPE. 0108	Basic	3	2	2	0	4	Islamic culture	Nil	
7	Technical Drawing	B.EPE. 0109	Basic	2	1	2	0	3	Technical drawing	Nil	assignments
8	Fundamentals of Engineering	B.EPE. 0117	Professional	1	0	2	0	2	EPE	Nil	Site Visiting
9	Physics – I	B.EPE. 0107	Basic	3	2	2	0	4	Physics	Nil	
Total				21	14	14	0	28			

2. Second semester courses

Semester (2) Year (1)											
No	Subject	Codes	Subject Category	Number of Credits	Hours per Week				In charge Department	Prerequisite Subjects	Remarks
					Theory	Practical	Field	Total			
1	Worship System of Islam	B.EPE.0273	Inclusive course	2	2	0	0	2	Islamic culture	SL.IC.0171	
2	Biography of Prophet (P B U H)	B.EPE.0274	Inclusive course	2	2	0	0	2	Islamic culture	SL.IC.0171	
3	Professional English Language-I	B.EPE.0234	Basic	2	1	2	0	3	Foreign languages	B.EPE.0104	
4	Mathematics-II	B.EPE.0206	Basic	3	2	2	0	4	Higher Mathematics	B.EPE.0107	
5	Environmental Protection	B.EPE.0202	Inclusive course	2	1	2	0	3	ES, GE		
6	Computer	B.EPE.0205	Inclusive course	2	1	2	0	3	Computer	B.EPE.0105	
7	Technical Mechanics	B.EPE.0222	Basic	2	1	2	0	3	Technical Mechanics	B.EPE.0107	
8	Physics-II	B.EPE.0207	Basic	3	2	2	0	4	Physics	B.EPE.0108	
9	Fundamentals of renewable energy	B.EPE.0223	Professional	2	1	2	0	3	EM.PE		
10	Elective-I		Elective	1	0	2	0	2			
Elective				1	0	2	0	2			
Total				21	12	18	0	30			

Elective Courses											
No	Subjects	Codes	Subject Category	Number of Credits	Hours per Week				In charge Department	Prerequisite Subjects	Remarks
					Theory	Practical	Field	Total			
1	Descriptive Geometry	B.EPE.0210	Elective	1	0	2	0	2	Technical drawing, Civil	Nil	
2	Surveying	B.EPE.0254	Elective	1	0	2	0	2	GIS	Nil	
Total				1	0	2	0	2			

3. Third semester courses

Semester (3) Year (2)											
No	Subject	Codes	Subject Category	Number of Credits	Hours per Week				In charge Department	Prerequisite Subjects	Remarks
					Theory	Practical	Field	Total			
1	Ethnic System of Islam	B.EPE.0375	Inclusive course	2	2	0	0	2	Islamic culture	SL.IC.0273	
2	Social System of Islam	B.EPE.0376	Inclusive course	2	2	0	0	2	Islamic culture	SL.IC.0273	
3	Professional English Language-II	B.EPE.0334	Basic	2	0	2	0	4	Foreign languages	B.EPE.0104	
4	Applied Mechanics	B.EPE.0324	Basic	2	1	2	0	3	Technical Mechanics	B.EPE.0214	
5	Mathematics - III	B.EPE.0306	Basic	3	2	2	0	4	Higher Mathematics	B.EPE.0207	
6	Physics - III	B.EPE.0307	Basic	3	2	2	0	4	Physics	B.EPE.0208	
7	Circuit Analysis -I	B.EPE.0325	Professional	3	2	2	0	4	EPE	B.EPE.0215	Assignments
8	Fundamentals of Electromagnetism	B.EPE.0320	Professional	3	2	2	0	4	EPE	B.EPE.0208	
9	Elective - II		Elective	1	0	2	0	2			
Total				21	13	16	0	29			

Elective Courses											
No	Subjects	Codes	Subject Category	Number of Credits	Hours per Week				In charge Department	Prerequisite Subjects	Remarks
					Theory	Practical	Field	Total			
1	Hydraulics and hydraulic Machines	B.EPE.0326	Elective	1	0	2	0	2	Technical drawing, Civil	Nil	
2	Computer programming (C++)	B.EPE.0321	Elective	1	0	2	0	2	GIS	Nil	
Total				1	0	2	0	2			

4. Fourth semester courses

Semester (4) Year (2)											
No	Subject	Codes	Subject Category	Number of Credits	Hours per Week				In charge Department	Prerequisite Subjects	Remarks
					Theory	Practical	Field	Total			
1	Ideological Studies	B.EPE.0477	Inclusive course	2	2	0	0	2	Islamic culture	SL.IC.375	
2	Religions and Sects	B.EPE.0478	Inclusive course	1	1	0	0	1	Islamic culture	SL.IC.376	
3	Mathematics - IV	B.EPE.0406	Basic	3	2	2	0	4	Higher Mathematics	B.EPE.0307	
4	Electronics devices and circuits	B.EPE.0429	Professional	3	2	2	0	4	EPE	B.EPE.0213	
5	Circuit Analysis -II	B.EPE.0425	Professional	3	2	2	0	4	EPE	B.EPE.0215	
6	Electrical Measurements	B.EPE.0430	Professional	2	1	2	0	3	EPE	B.EPE.0215	
7	Thermodynamics - I	B.EPE.0432	Professional	3	2	2	0	4	EPE	B.EPE.0208	
8	Electrical Machines -I	B.EPE.0428	Professional	3	2	2	0	4	EPE	B.EPE.0320	
Total				20	14	12	0	26			

5. Fifth semester courses

Semester (5) Year (3)											
No	Subject	Codes	Subject Category	Number of Credits	Hours per Week				In charge Department	Prerequisite Subjects	Remarks
					Theory	Practical	Field	Total			
1	Political System of Islam	B.EPE.0579	Inclusive course	2	2	0	0	2	Islamic culture	SL.IC.0477	
2	Administrative System of Islam	B.EPE.0580	Inclusive course	2	2	0	0	2	Islamic culture	SL.IC.0478	
3	Electrical Machines - II	B.EPE.0525	Professional	4	3	2	0	5	EPE	B.EPE.0425	Transformer Design Pr.
4	Power System Analysis -I	B.EPE.0533	Professional	3	2	2	0	4	EPE	B.EPE.0425	
5	Digital Electronics	B.EPE.0534	Professional	3	2	2	0	4	EPE	B.EPE.0429	
6	Electrical Apparatus	B.EPE.0535	Professional	2	1	2	0	3	EPE	B.EPE.0533	
7	Thermodynamics - II	B.EPE.0537	Professional	3	2	2	0	4	EPE	B.EPE.0432	
Total				19	14	10	0	24			

6. Sixth semester courses

Semester (6) Year (3)											
No	Subject	Codes	Subject Category	Number of Credits	Hours per Week				In charge Department	Prerequisite Subjects	Remarks
					Theory	Practical	Field	Total			
1	Economic System of Islam	B.EPE.0681	Inclusive course	2	2	0	0	2	Islamic culture	SL.IC.0579	
2	Power System Analysis - II	B.EPE.0633	Professional	3	2	2	0	4	EPE	B.EPE.0534	
3	Power Electronics	B.EPE.0638	Professional	3	2	2	0	4	EPE	B.EPE.0526	
4	Power system protection-I	B.EPE.0639	Professional	3	2	2	0	4	EPE	B.EPE.0421	
5	Power Plants and Substation -I	B.EPE.0640	Professional	3	2	2	0	4	EPE	B.EPE.0537	
6	Electrical Power Engineering Economics	B.EPE.0641	Professional	3	2	2	0	4	EPE	B.EPE.0421, B.EPE.0627	
7	Electric Drives - I	B.EPE.0743	Professional	3	2	2	0	4	EPE	B.EPE.0528	
8	Field Work -I	B.EPE.0642		1	Two Weeks					At the end of 6 th Semester	
Total				21	14	12	0	26			

7. Seventh semester courses

Semester (7) Year (4)											
No	Subject	Codes	Subject Category	Number of Credits	Hours per Week				In charge Department	Prerequisite Subjects	Remarks
					Theory	Practical	Field	Total			
1	Quran and Contemporary Sciences	B.EPE.0782	Inclusive course	2	2	0	0	2	Islamic culture	SL.IC.0681	
2	Transients in electrical systems	B.EPE.0745	Professional	3	2	2	0	4	EPE	B.EPE.0633	
3	Power system protection -II	B.EPE.0732	Professional	3	2	2	0	4	EPE	B.EPE.0632	Assignment
4	Power Plants and Substation -II	B.EPE.0740	Professional	3	2	2	0	4	EPE	B.EPE.0640	
5	Power Distribution and Utilization - I	B.EPE.0747	Professional	3	2	2	0	4	EPE	B.EPE.0633	
6	Electric Drives - II	B.EPE.0743	Professional	2	1	2	0	3	EPE	B.EPE.0425, B.EPE.0631	
7	Project Management	B.EPE.0746	Professional	1	1	0	0	1	EPE	Nil	
8	Installation and Operation of Power System Components	B.EPE.0748	Professional	1	0	2	0	2	EPE	B.EPE.0534	
9	Control Systems	B.EPE.0749	Professional	3	2	2	0	4	EPE	B.EPE.0423	
Total				21	14	14	0	28			

8. Eighth semester courses

Semester (8) Year (4)											
No	Subject	Codes	Subject Category	Number of Credits	Hours per Week				In charge Department	Prerequisite Subjects	Remarks
					Theory	Practical	Field	Total			
1	Islamic Civilization	SL.IC.0883	Inclusive course	2	2	0	0	2	Islamic culture	SL.IC.0782	
2	Computer Application in Power engineering	B.EPE.0850	Professional	3	2	2	0	4	EPE	B.EPE.0407, B.EPE.0627	
3	Wiring Design	B.EPE.0842	Professional	2	1	2	0	3	EPE	B.EPE.0308, B.EPE.0421	
4	Power Distribution and Utilization - II	B.EPE.0847	Professional	4	2	4	0	6	EPE	B.EPE.0747	
5	Monograph	B.EPE.0842	Professional	7	2	12	0	14	EPE	All Courses	
6	Field Work - II	B.EPE.0842	Professional	2	Two Weeks					At the end of 7 th Semester	
Total				20	9	20	0	29			

