

TABLE 2: COURSE DISTRIBUTION PER SEMESTER – BEng (Hons) Electrical and Electronic Engineering

A/ A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
Year 1								
A' Semester								
1.	Compulsory	Electrical Engineering Fundamentals	EL1801	3	1 hour	13	39	-
2.	Compulsory	Calculus and Linear Algebra for Engineers	EL1902	3	1 hour	13	39	-
3.	Compulsory	Introduction to Programming	CO1407	6	1 hour	13	78	10
4.	Compulsory	Engineering, Research and Academic Skills	EL1904	3	1 hour	13	39	-
5.	Compulsory	Electronics and Instrumentation	EL1785	3	1 hour	13	39	-
6.	Compulsory	Applied Physics	EL1802	3	1 hour	13	39	-

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
B' Semester								
7.	Compulsory	Electrical Engineering Fundamentals	EL1801	3	1 hour	13	39	10
8.	Compulsory	Calculus and Linear Algebra for Engineers	EL1902	3	1 hour	13	39	10
9.	Compulsory	Engineering, Research and Academic Skills	EL1904	3	1 hour	13	39	10
10.	Compulsory	Electronics and Instrumentation	EL1785	3	1 hour	13	39	10
11.	Compulsory	Applied Physics	EL1802	3	1 hour	13	39	10
Year 2								
A' Semester								
12.	Compulsory	Mechanics	AP1842	3	1 hour	13	39	-
13.	Optional	Free University Elective			1 hour	13		
14.	Compulsory	Electronic Engineering Practice	EL1205	3	1 hour	13	39	-



A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
15.	Compulsory	Digital Electronics	EL1242	3	1 hour	13	39	-
16.	Optional	Algorithms and Data Structures	CO1406	3	1 hour	13	39	-
17.	Compulsory	Probability Theory for Engineers	EL1901	3	1 hour	13	39	5
18.	Optional	Computer Systems and Security	CO1508	3	1 hour	13	39	-
B' Semester								
19.	Compulsory	Computational Mathematics for Engineers	EL1903	3	1 hour	13	39	5
20.	Compulsory	Mechanics	AP1842	3	1 hour	13	39	10
21.	Optional	Free University Elective			1 hour	13		10
22.	Compulsory	Electronic Engineering Practice	EL1205	3	1 hour	13	39	10
23.	Compulsory	Digital Electronics	EL1242	3	1 hour	13	39	10



A/ A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
24.	Optional	Algorithms and Data Structures	CO1406	3	1 hour	13	39	10
25.	Optional	Explorations in Computing	CO1417	6	3	13	78	10
26.	Optional	Computer Systems and Security	CO1508	3	1 hour	13	39	10
Year 3								
A' Semester								
27.	Compulsory	Digital Systems	EL2242	2.5	1 hour	13	32.5	-
28.	Compulsory	Power Engineering	EL2801	3	1 hour	13	39	-
29.	Compulsory	Signals and Control Systems	EL2100	3	1 hour	13	39	-
30.	Compulsory	Electronic Systems	EL2241	2.5	1 hour	13	32.5	-
31.	Compulsory	Data Communications	EL2006	2.5	1 hour	13	32.5	-
32.	Compulsory	Electronic System Applications	EL2205	3	1 hour	13	39	-



A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
B' Semester								
33.	Compulsory	Digital Systems	EL2242	2.5	1 hour	13	32.5	10
34.	Compulsory	Power Engineering	EL2801	3	1 hour	13	39	10
35.	Compulsory	Signals and Control Systems	EL2100	3	1 hour	13	39	10
36.	Compulsory	Electronic Systems	EL2241	2.5	1 hour	13	32.5	10
37.	Compulsory	Data Communications	EL2006	2.5	1 hour	13	32.5	10
38.	Compulsory	Electronic System Applications	EL2205	3	1 hour	13	39	10
Sandwich Year – Optional Year								
39.	Optional	Industrial Placement	MP2899	40	1 hour	38	1560	60
Year 4								
A' Semester								
40.	Compulsory	Project	EL3995	1	1 hour	13	13	-
41.	Compulsory	Engineering Professionalism	EL3996	1	1 hour	13	13	-

42.	Optional	Power Systems Operation and Control	EL3800	2	1 hour	13	26	-
A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
43.	Optional	Wireless, Mobile and Fibre Optic Communication	EL3801	2	1 hour	13	26	-
44.	Optional	Electrical Services	EL3814	2	1 hour	13	26	-
45.	Optional	Renewable Energy Systems	EL3802	2	1 hour	13	26	-
46.	Optional	Power Electronics	EL3813	2	1 hour	13	26	-
47.	Optional	Digital Communications	EL3808	2.5	1 hour	13	32.5	-
48.	Optional	Mobile Technologies	EL3807	2	1 hour	13	26	-
49.	Optional	Microcontroller Systems	EL3250	2	1 hour	13	26	-
50.	Optional	Digital Signals and Image Processing	EL3147	2	1 hour	13	26	-
B' Semester								
51.	Compulsory	Project	EL3995	1	1 hour	13	13	15
52.	Compulsory	Engineering Professionalism	EL3996	1	1 hour	13	13	5

53.	Optional	Power Systems Operation and Control	EL3800	2	1 hour	13	26	10
A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
54.	Optional	Wireless, Mobile and Fibre Optic Communication	EL3801	2	1 hour	13	26	10
55.	Optional	Renewable Energy Systems	EL3802	2	1 hour	13	26	10
56.	Optional	Electrical Services	EL3814	2	1 hour	13	26	10
57.	Optional	Power Electronics	EL3813	2	1 hour	13	26	10
58.	Optional	Digital Communications	EL3808	2.5	1 hour	13	32.5	10
59.	Optional	Mobile Technologies	EL3807	2	1 hour	13	26	10
60.	Optional	Microcontroller Systems	EL3250	2	1 hour	13	26	10
61.	Optional	Digital Signals and Image Processing	EL3147	2	1 hour	13	26	10