Bachelor of Science in Electrical Engineering in Electronics

Semester	Course Code		Course Title	Pre/Co Requisite	Credit Hours
Semester 1	LNG	181	English I for Engineering & Computing	None	3
	ENG	101	Digital Logic	None	4
	MTH	112	Calculus I	Pass Math Placement Test or MTH-012	3
	SHS	103	Chemistry	None	3
	SWS	110	Programming I	None	3
	ENT	141	Fundamentals in Innovation and Entrepreneurship 1	None	2
	Total				**18**
Semester 2	LNG	182	English II for Engineering & Computing	LNG-181	3
	SCI	220	Engineering Mechanics	MTH-112	3
	MTH	113	Calculus II	MTH-112	3
	NET	110	Computer Networks Fundamentals	ENG-101	3
	SWS	316	Programming II	SWS-110	3
	ENT	142	Fundamentals in Innovation and Entrepreneurship 2	ENT-141	1
	Total				**16**
Semester 3	MTH	212	Calculus III	MTH-113	3
	MTH	130	Probability and Statistics	MTH-112	3
	SCI	210	Modern Physics	MTH 113, SCI-220	3
	ENG	220	Electric Circuits I	SCI-210	4
	ENT	241	Entrepreneurship I	ENT-142	2
	Total				**15**
Semester 4	MTH	220	Ordinary Differential Equations	MTH-212	3

Semester	Course Code		Course Title	Pre/Co Requisite	Credit Hours
	ENG	210	Electronics I	ENG-220	3
	ENG	222	Engineering Electromagnetics	MTH-212, SCI-210	3
	ENG	223	Electric Circuit II	ENG-220	3
	NET	112	Computer Architecture	NET-101	4
	ENT	242	Entrepreneurship II	ENT-241	1
	Total				**17**
Semester 5	ENG	301	Electronics II	ENG-210	3
	GED	198	Islamic Culture	None	3
	ELC	412	Digital System Design	ENG-210	3
	COM	311	Signals and Systems	MTH-220	3
	BUS	311	Engineering Economy	MTH-130	3
			Humanity Elective		3
	Total				**18**
Semester 6	BUS	310	Project Management	Completion of 60 Credit Hrs	3
	ENG	314	Electric Machines	ENG-223	3
	ENG	315	Control Systems	MTH-220	3
	ELC	320	Power Electronics	ENG-301	3
	ELC	323	Instrumentation and Measurements	ENG-223	3
	COM	411	Digital Filter Design	MTH-220	3
	Total				**18**
Semester 7	ENG	410	Professional and Ethical Practice	None	3
	ELC	330	Microcontrollers and Embedded Systems	NET-112, ENG-315, SWS-316	3
	ELC	411	Communication Electronics	ENG-301	3

Semester	Course Code		Course Title	Pre/Co Requisite	Credit Hours
	ELC	422	Optoelectronics	ENG-301	3
	ENG	400	Graduation Project-1	Completed 100 Cr	2
			Major elective 1		3
	Total				**17**
Semester 8	ELC	421	VLSI Design	ELC-411	3
	ENG	401	Graduation Project-2	ENG-400	2
	ELC	425	Nanoelectronics	ENG-301	3
	ELC	427	Analog Integrated Circuits	ELC-411	3
			Major elective 2		**3**
	GED	199	UAE Society	None	3
	Total				**17**
Internship to be taken summer semester after completion of 90 Cr.H + CGPA 2.0 or more					**2**
Total Credit Hours					**138**