



Index	Code	Class Name	No. of Hours	Engineering	Mathematics	Science	General Education
Fall Semester #1							
1	HEM 012	English I Language (I)	2	-	-	-	2
2	BAE 011	Mathematics (I)	3	-	3	-	-
3	BAE 007	Physics (I)	3	-	3	-	-
4	BAE 041	Engineering Chemistry	3	-	3	-	-
5	BAE 033	Mechanics	3	-	3	-	-
6	BAE 031	General Requirements (Elective -A)	2	-	1	1	2
Spring Semester #1							
7	HEM 013	English I Language (II)	2	-	-	-	2
8	BAE 012	Mathematics (II)	3	-	3	-	-
9	BAE 008	Physics (II)	3	-	3	-	-
10	HEM 011	Arabic Language	2	-	-	-	2
11	HEM 009	Computer Aided Design	2	-	-	-	2
12	MEQ 027	History of Engineering & Technology	1	-	-	-	1
13	MEQ 022	Principles of manufacturing engineering	2	-	1	-	1
14	MEQ 017	Engineering drawing & Projection	3	-	2	-	1
Fall Semester #2							
15	ELP 112	Electrical Measurements and Testes	3	3	-	-	-
16	BAE 111	Mathematics (Elective -A)	2	-	2	-	-
17	ELP 110	Electronic Material	3	1	-	-	2
18	ELP 114	Computer Programming	3	3	-	-	-
19	ELP 102	General Requirements (Elective -A)	2	-	-	-	2
20	BAE 113	Mathematics & Quality Control (Elective -A)	1	-	-	-	2
Spring Semester #2							
21	BAE 212	Applied Measurements (Elective -B)	3	2	-	-	-
22	BAE 211	Mathematics (II)	3	-	3	-	-
23	BAE 213	Electrical Circuits (II)	2	-	2	-	-
24	HEM 112	Applied Measurements (Elective -B)	3	-	-	-	3
25	HEM 182	Analysis & Research Skills	2	-	2	-	-
26	BAE 215	Statistics & Probability (Elective -B)	3	-	3	-	-
27	BAE 214	General Requirements (Elective -B)	2	-	-	-	2
Fall Semester #3							
28	ELP 114	Electrical Circuits (I)	2	2	-	-	-
29	ELP 111	Computer Organization & Architecture	3	3	-	-	-
30	ELP 211	Computer Networks	3	3	-	-	-
31	ELP 214	Modeling & Simulation of Engineering	3	2	1	-	-
32	BAE 211	Mathematics (III)	3	-	3	-	-
33	BAE 214	Technical Writing (Elective -B)	2	-	-	-	2
34	BAE 201	Principles of Navigation	2	-	-	-	2
Spring Semester #3							
35	ELP 114	Electrical Circuits (II)	3	3	-	-	-
36	ELP 212	Electronic Devices	3	3	-	-	-
37	ELP 215	Digital & Logic Circuits	3	3	-	-	-
38	ELP 211	Signal Processing	3	2	1	-	-
39	ELP 143	Electromagnetic Fields	3	2	1	-	-
40	BAE 113	Communication & Presentation Skills	2	-	-	-	2
Summer Semester #1							
41	BAE 114	Field Training 1	1	1	-	-	-
42	BAE 104	Economics Engineering	2	2	-	-	-
43	BAE 102	Historical Circuits	2	-	2	-	-
44	BAE 101	Power Electronics	3	3	-	-	-
45	BAE 103	Electromechanics & Instrumentation	3	3	-	-	-
46	BAE 101	Mechanics & Applications	3	3	-	-	-
47	BAE 102	General Requirements (Elective -A)	2	-	-	-	2
48	BAE 103	Environmental Impact of Program	1	-	-	-	1
Spring Semester #4							
49	BAE 214	Project Management	2	-	-	-	2
50	BAE 201	Professional Ethics	1	-	-	-	1
51	BAE 202	Technical Communication	2	-	-	-	2
52	BAE 203	General Requirements (Elective -A)	2	-	1	-	1
53	BAE 201	Mathematics	3	-	3	-	-
54	BAE 204	Electrical Power	3	3	-	-	-
55	BAE 201	Automatic Control Systems	3	3	-	-	-
56	BAE 201	General Requirements (Elective -B)	2	-	-	-	2
Summer Semester #2							
57	BAE 104	Field Training 2	1	1	-	-	-
58	BAE 101	Antenna & Wave Propagation	3	3	-	-	-
59	BAE 101	Digital Signal Processing	2	2	-	-	-
60	BAE 102	Digital Communication Systems	3	3	-	-	-
61	BAE 101	Signals	2	2	-	-	-
62	BAE 101	Motor Measurements (Elective -A)	3	3	-	-	-
Spring Semester #5							
63	BAE 101	Motor Relays	1	-	-	-	1
64	BAE 101	Mobile Communications	3	3	-	-	-
65	BAE 101	Motor Measurements (Elective -B)	3	3	-	-	-
66	BAE 101	Integrated Circuits Design	3	3	-	-	-
67	BAE 101	Project (I)	4	4	-	-	-
68	BAE 101	Resonance	3	3	-	-	-
Total							
			104	94	33	18	30

Department Prerequisites							
Index	Code	Class Name	No. of Hours	Engineering	Mathematics	Science	General Education
49	ELP 114	Electrical Circuits (I)	2	2	-	-	-
50	ELP 111	Computer Organization & Architecture	3	3	-	-	-
51	ELP 211	Computer Networks	3	3	-	-	-
52	BAE 211	Mathematics (III)	3	-	3	-	-
53	BAE 214	Technical Writing (Elective -B)	2	-	-	-	2
54	BAE 201	Mathematics	3	-	3	-	-
55	BAE 204	Electrical Power	3	3	-	-	-
56	BAE 201	Automatic Control Systems	3	3	-	-	-
57	BAE 104	Field Training 2	1	1	-	-	-
58	BAE 101	Antenna & Wave Propagation	3	3	-	-	-
59	BAE 101	Digital Signal Processing	2	2	-	-	-
60	BAE 102	Digital Communication Systems	3	3	-	-	-
61	BAE 101	Signals	2	2	-	-	-
62	BAE 101	Motor Measurements (Elective -A)	3	3	-	-	-
63	BAE 101	Motor Relays	1	-	-	-	1
64	BAE 101	Mobile Communications	3	3	-	-	-
65	BAE 101	Motor Measurements (Elective -B)	3	3	-	-	-
66	BAE 101	Integrated Circuits Design	3	3	-	-	-
67	BAE 101	Project (I)	4	4	-	-	-
68	BAE 101	Resonance	3	3	-	-	-

Minor Requirement (Elective -A)							
69	BAE 499	Internship & Capstone Thesis	6	6	-	-	-
70	BAE 498	Industry Co-operation	3	3	-	-	-
71	BAE 495	Digital Communication	3	3	-	-	-
72	BAE 492	Mathematical Sciences	3	3	-	-	-
73	BAE 494	Mobile System	3	3	-	-	-
74	BAE 493	Embedded Systems	3	3	-	-	-
75	BAE 492	Medical Electronics	3	3	-	-	-
76	BAE 492	Automated Electronics	3	3	-	-	-
77	BAE 493	IC (SI) Fundamentals	3	3	-	-	-
78	BAE 492	Microcontroller & Applications	3	3	-	-	-
79	BAE 492	Microsystem Electronics	3	3	-	-	-
80	BAE 495	Telephone System	3	3	-	-	-
81	BAE 491	Communications	3	3	-	-	-
82	BAE 495	Resonance	3	3	-	-	-
Institute Requirements (Elective B)							
83	ELP 111	Principles of Electrical Engineering	2	2	-	-	-
84	ELP 111	Principles of Electrical Engineering	2	2	-	-	-
85	QSE 111	Principles of Construction and Building	2	2	-	-	-
86	MEP 111	Principles of Design & Manufacturing Engineering	2	2	-	-	-
87	MEQ 111	Principles of Mechanical Power Engineering	2	2	-	-	-
88	MEQ 111	Principles of Mechanical Power Engineering	2	2	-	-	-
89	MEQ 111	Auto & Automation	2	2	-	-	-
General Requirements (Elective C)							
90	HEM 101	Minor: Applications	2	-	-	-	2
91	HEM 101	Introduction to the History of Civilization	2	-	-	-	2
92	HEM 102	Principles of Contemporary Arts	2	-	-	-	2
93	HEM 103	Recent Egypt's History	2	-	-	-	2
94	HEM 104	Methods of Economic Analysis	2	-	-	-	2
95	HEM 105	Artistic & Aesthetic Education	2	-	-	-	2
96	HEM 106	Library Applications	2	-	-	-	2
General Requirements (Elective D)							
97	HEM 121	Introduction to Accounting	2	-	-	-	2
98	HEM 121	Business Administration	2	-	-	-	2

69	BAE 499	Internship & Capstone Thesis	6	6	-	-	-
70	BAE 498	Industry Co-operation	3	3	-	-	-
71	BAE 495	Digital Communication	3	3	-	-	-
72	BAE 492	Mathematical Sciences	3	3	-	-	-
73	BAE 494	Mobile System	3	3	-	-	-
74	BAE 493	Embedded Systems	3	3	-	-	-
75	BAE 492	Medical Electronics	3	3	-	-	-
76	BAE 492	Automated Electronics	3	3	-	-	-
77	BAE 493	IC (SI) Fundamentals	3	3	-	-	-
78	BAE 492	Microcontroller & Applications	3	3	-	-	-
79	BAE 492	Microsystem Electronics	3	3	-	-	-
80	BAE 495	Telephone System	3	3	-	-	-
81	BAE 491	Communications	3	3	-	-	-
82	BAE 495	Resonance	3	3	-	-	-

Communication Program Outcomes							
1.	An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.						
2.	An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.						
3.	An ability to communicate effectively with a range of audiences.						
4.	An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.						
5.	An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.						
6.	An ability to develop and conduct appropriate experiments, analyze and interpret data, and use engineering judgment to draw conclusions.						
7.	An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.						

Communication Flight plan summary

