FAII

COMSATS Institute of Information Technology

Scheme of Studies
(BS (ETE) for 2011-2012)

	Total Semesters / Credit Hours
	8 Semesters
	136-139

Course Code	Course Title	Credit Hours	Corequisite(s)	Prerequisite(s)	
Semester: 1					
HUM100	English Comprehension and Composition	3(3, 0)			
HUM110	Islamic Studies	3(3, 0)			
PHY121	Applied Physics for Engineers	4(3, 1)			
MTH101	Calculus I	3(3, 0)			
EEE113	Engineering Drawing	1(0, 1)			
EEE112	Engineering Mechanics and Thermodynamics	3(3, 0)			
Semester: 2					
HUM111	Pakistan Studies	3(3, 0)			
MTH102	Calculus II	3(3, 0)		MTH101	
MTH231	Linear Algebra	3(3, 0)			
CSC141	Introduction to Computer Programming	4(3, 1)			
EEE121	Electric Circuits Analysis I	4(3, 1)		MTH101	PHY121
Semester: 3					
MTH203	Calculus III	3(3, 0)		MTH102	
MTH242	Differential Equations	3(3, 0)		MTH102	
EEE241	Digital Logic Design	4(3, 1)			
EEE231	Electronics I	4(3, 1)		EEE121	
CSC241	Object Oriented Programming	4(3, 1)		CSC141	
Semester: 4					
EEE251	Probability Methods in Engineering	3(3, 0)		MTH102	MTH231
EEE261	Electromagnetic Theory	3(3, 0)		MTH203	
EEE222	Electric Circuits Analysis II	4(3, 1)		EEE121	MTH242
EEE223	Signals and Systems	4(3, 1)		MTH242	
EEE375	Power Distribution and Utilization	3(3, 0)			
Semester: 5					
EEE232	Electronics II	4(3, 1)		EEE222	EEE231

Course Code	Course Title	Credit Hours	Corequisite(s)	Prerequisite(s)
EEE371	Electric Machines	4(3, 1)		EEE222 EEE261
CSC112	Algorithms and Data Structures	4(3, 1)		CSC141
EEE324	Digital Signal Processing	4(3, 1)		EEE223
EEE352	Analog Communication Systems	4(3, 1)		EEE223 EEE251
Semester: 6				
ECO300	Engineering Economics	3(3, 0)		
EEE325	Control Systems	4(3, 1)		EEE223 EEE232
EEE342	Microprocessor Systems and Interfacing	4(3, 1)		EEE241
EEE314	Data Communication and Computer Networks	4(3, 1)		
EEE463	Antenna and Radio Wave Propagation	4(3, 1)		EEE261
Semester: 7				
HUM102	Report Writing Skills	3(3, 0)		HUM100
xxxxxx	Major/Specialization Elective I*	3(3, 0)		
xxxxxx	Non Engineering Elective	3(3, 0)		
EEE490	Final Year Project (Part I)	1(0, 1)		
EEE353	Digital Communication Systems	4(3, 1)		EEE352
Semester: 8				
MGT462	Project Planning and Management	3(3, 0)		
xxxxxx	Major/Specialization Elective II	3(3, 0)		
xxxxxx	EE Open/Free Elective**	3(3, 0)		
EEE490	Final Year Project (Part II)	5(0, 5)		

Bachelor of Science in Electrical Engineering (BSEE) with Major in Telecommunications Technical Electives***				
Course Code	Course Title	Credit Hours	Corequisite(s)	Prerequisite(s)
EEE354	Telecommunication Systems Engineering	3(3, 0)		EEE352
EEE362	Microwave Engineering	4(3, 1)		EEE232 EEE261
CSC341	Network Programming	4(3, 1)		CSC141 EEE314
EEE454	Transmission and Switching Systems	3(3, 0)		EEE352 EEE353
EEE455	Optical Fiber Communications	3(3, 0)		EEE232 EEE362
EEE456	Broadband Technologies	3(3, 0)		EEE314 EEE354
EEE464	Wireless Communication Systems	3(3, 0)		EEE352
EEE465	Microwave and Satellite Communication Systems	3(3, 0)		EEE353

Course Code	Course Title	Credit Hours	Corequisite(s)	Prerequisite(s)
EEE466	Radars and Navigation Aids	3(3, 0)		EEE463
EEE476	Telecommunication Policies Standards and Regulations	3(3, 0)		
EEE415	Digital Image Processing	4(3, 1)		EEE223 MTH231

Note

3 credit hours of theory is equivalent to 3 hours of lectures whereas 1 credit hour of lab is equivalent to 3 hours of lab session. All the lab sessions are graded. Students have to pass both theory and lab to earn the course credits.

Courses with prerequisites can only be allowed if all prerequisite courses have been passed.

* With the consent of Academic Advisor, Project Supervisor & Course Instructor, the students can select an elective course in their area of specialization according to their aptitudes and requirements of the final year project.

** With the consent of Academic Advisor, Project Supervisor & Course Instructor, the students can take any course of EE which he/she has not taken before (including the electives of TE, EPE, CE, EL) according to his/her aptitude/future plans and further requirement (if any) of his/her final year project.

*** The list of Electives may be revised from time to time and will be offered by the department subject to the availability of the faculty.