

Degree and Study Plan

College	Engineering
Department	Electrical Engineering and Computer Science
Program	Electronics and Communication Engineering
Degree Level	Bachelor of Engineering
Total Credit Hours	137
Cohort	2018 and after

Summary of Credits	
University Requirements (UR)	12
College Requirements (CR)	42
Program Requirements (PR)	74
Program Electives (PE)	9
Total	137

For more information contact: Dr. Adnan Kabbani, HoD.

HoD:



Dean:



Date: 30/09/2024

Year One	Semester 1 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ISLM101	Islamic Civilization	3		UR
	ENGL101	English Communication Skills 1	3		UR
	ENGR111	Computer Applications	3		CR
	MATH101	Calculus I	3		CR
	PHYS101	Physics I	3		CR
	Total Credits		15		
	Semester 2 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CHEM101	Chemistry	3		CR
	ENGL102	English Communication Skills 2	3	ENGL101	UR
	MATH102	Calculus II	3	MATH101	CR
	PHYS102	Physics II	3	PHYS101	CR
	ECEN211	Digital Systems	3	MATH101	PR
	ECEN281	Digital Systems Lab	1	ECEN211*	PR
	Total Credits		16		

Year Two	Semester 3 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ECEN221	Circuits Theory I	3	MATH101	PR
	ECEN341	Signals and Systems	3	MATH102	PR
	ENGR201	Engineering Drawing	3	-	CR
	ENGR202	Technical Writing and Presentation	3	ENGL102	CR
	MATH215	Linear Algebra	3	MATH101	CR
	Total Credits		15		
	Semester 4 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ECEN344	Renewable Energy	3	ECEN221	PR
	ECEN223	Communication Lab I	1	ECEN342*	PR
	ECEN331	Electronics I	3	ECEN221	PR
	ECEN222	Instrumentation and Measurement Techniques	3	ECEN221	PR
	ECEN342	Analog Communication Systems	3	ECEN341	PR
	ECEN382	Electronics Lab I	1	ECEN331*	PR
	Total Credits		14		

Year Three	Semester 5 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ECEN311	Optical Communications	3	ECEN342	PR
	ECEN322	Circuit Theory II	3	ECEN221	PR
	ECEN332	Electronics II	3	ECEN331	PR
	ECEN481	Electronics Lab II	1	ECEN332*	PR
	ECEN381	Circuits Lab	1	ECEN322*	PR
	ECEN316	Integrating Group Project	3	60CH	PR
	MNGT 313	Entrepreneurship	3	60CH	UR
	Total Credits		17		
	Semester 6 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	MATH305	Numerical Methods	3	MATH102 & ENGR111	CR
	ECEN351	Electromagnetic Theory I	3	ECEN221	PR
	MATH204	Probability and Statistics	3	MATH102	CR
	ECEN441	Digital Communication Systems	3	ECEN342	PR
	MATH203	Differential Equations	3	MATH102	CR
	ECEN323	Communication Lab II	1	ECEN441*	PR
	Total Credits		16		

Year Four	Semester 7 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ECEN312	Microcontrollers	3	ENGR111& ECEN211	PR
	MATH406	Calculus III	3	MATH102	CR
	ECEN533	Power Electronics	3	ECEN322	PR
	ENGR404	Engineering Economics	3	-	CR
	ECEN452	Electromagnetic Theory II	3	ECEN351	PR
	Total Credits		15		
	Semester 8 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ECEN591	Capstone Design Project I	3	90CH	PR
	ECEN541	Digital Signal Processing	3	ECEN341	PR
	ECEN431	Communication Electronics	3	ECEN332 & ECEN342	PR
		Electronics and Communication Engineering Elective	3	-	PE
	ECEN432	Communication Electronics Lab	1	ECEN431*	PR
	Total Credits		13		
	Summer				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ENGR322	Summer Internship	0	105 credits	CR

Year Five	Semester 9 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ECEN592	Capstone Design Project II	3	ECEN591	PR
	ECEN543	Wireless Communications	3	ECEN441	PR
	ECEN532	Digital Electronics	3	ECEN332	PR
		Electronics and Communication Engineering Elective	3		PE
		Electronics and Communication Engineering Elective	3		PE
	ECEN534	Digital Electronics Lab	1	ECEN532*	PR
	Total Credits		16		

List of Program Elective Courses:

A student must register in 3 courses with total of 9 credits hours following the program study plan:			
Course Code	Course Title	Credits	Pre-Request/ Co-Request*
ECEN461	Control Systems	3	ECEN341
ECEN515	Communication Networks	3	ECEN441
ECEN535	CMOS Circuits Design	3	ECEN332
ECEN552	Antenna Theory and Design	3	ECEN452
ECEN555	Selected Topics in Communication Engineering	3	ECEN441
ECEN556	Selected Topics in Electronics Engineering	3	ECEN332
EETE427	Neural Networks and Fuzzy Logic	3	MATH406 & ENGR111
EETE515	Optimization Techniques in Engineering	3	MATH305 & ENGR111
EETE419	Automated Control Systems	3	ECEN461
ECEN553	Satellite Communications	3	ECEN441
ECEN554	Advanced Digital System Design	3	ECEN532
ECEN551	Microwave Engineering	3	ECEN452
OJTR406	Industrial Internship I	0	90 Credits
OJTR407	Industrial Internship II	0	OJTR406