

The University of Dubai's, Electrical Engineering Department offer an Electrical Engineering with specialization in Communication Engineering Program which is accredited locally in the UAE by the Ministry of Higher Education and Scientific Research (MOHESR).

Message from the Electrical Engineering Chair

Electrical engineering field is essential to the infrastructure of the urban and rural societies, as we could see the need to the electricity for houses, industry, hospitals, schools, roads, vehicles, marine ships, airplanes, among others. In addition, electrical engineers with their logical and critical thinking, computing skills, and mathematical skills have been engaged in work in business, financial, and banking systems. Our first subfield of electrical engineering is the communication engineering program. The communication engineering concentration is focused on preparing engineers who are able to analyze, design, implement, and maintain communications systems. Communications engineers are able to work in various government and private sectors that provide communication services. Communications systems have become the main drive of our everyday life practice.

Our learning and research missions are thrived by collaborations with the other fields in the university, and with various interdisciplinary centers and institutes. Our vision of Sustainable learning has been implemented within the design of the engineering curricula. Our faculty have been mentored to deliver engineering knowledge through the latest teaching methods in sustainable learning. The practical experience that our graduate earn during their studies through the state of art labs and collaboration with industry qualify them to start working on real projects right after graduations.

Engineering at University of Dubai

Sustainable Learning Vision

Working on engineering projects with the industry

Ministry of Higher Education Accreditation

State of the art labs and equipment

Engagement of Students in Professional Activities

Support for graduates to pursue their postgraduate studies

Bachelor Degree in Electrical Engineering with concentration in Communication Engineering

The bachelor's degree in Electrical Engineering with concentration in Communication Engineering is administered by the College of Engineering & Information Technology (CEIT) at University of Dubai to prepare students for immediate entry into the workplace or to pursue advanced graduate study.

The BS degree is awarded upon the successful completion of a minimum of 130 semester credit hours. The program weaves 8 academic semesters with a summer blocks of Graduate Trainee (GT) / Learn Earn and Progress (LEAP) Program over a four-year period to provide the prospective engineer a rich learning environment and immediate opportunities for professional employment.

Successful candidates for an undergraduate degree must have a program cumulative grade point average of at least 2.25. Under certain circumstances, a student chooses or may be required to complete more than the minimum number of credits

The Program Layout

The program includes following category requirements:

#	Category Requirements	General	Core	Concentration	Total
1.	General Education	33			33
2.	Humanities & Social Sciences	3			3
3.	Cultural Requirement	6			6
4.	Supporting CE (EE) requirements	6			12
5.	BS-CE (EE) Core Requirements		64		64
6.	BS CE/EE Concentration Requirements			12	12
TOTAL BS CE (EE)		54	64	12	130

Freshman and sophomore year

The first two years of the curriculum are devoted to the General Undergraduate Curriculum Requirements Program (GUCR) program that consists of courses which students take at the start of their program of studies at the university. GUCR provides a foundation in English, Mathematics and physical science that is essential to the study of engineering. In addition, GUCR offers courses in natural and applied sciences, humanities and the social sciences. Students choose among these courses in order to complete their general curriculum requirements.

In the second year students also take the foundation courses in Electrical Engineering which forms the foundation of the Communication engineering program. In other courses, students learn about electrical engineering principles such as circuits and digital systems.

Junior and Senior Year

In the third and fourth years, students focus on the subjects that form the core of engineering and introduce one to Communication Engineering. In the Third Year students take courses in Electronics, Signals & Systems, and Microprocessors, Electromagnetic Theory and Communications. While CE students take courses in Probability, the EE students take courses in Power Electronics. In the Fourth Year, CE students enhance their coverage of communications with courses in Digital Communications and Communication Networks while EE students enhance their coverage of Electronics with courses in Digital Signal Processing, Renewable Energy Resources and Introduction to MEMS.

Every student must complete a Graduation Project to gain practical engineering design experience. A set of Technical Electives courses will be available to provide students with the opportunity to broaden their knowledge in related areas of engineering, or to concentrate on a deeper understanding in an area of interest.

Summer Blocks for Graduate Trainee (GT) / Learn Earn and Progress (LEAP) Program

A student enrolled in the BS in Electrical Engineering Program is expected to complete a block of Graduate Trainee (GT) / Learn Earn and Progress (LEAP) Program as part of their graduation requirements.

The program yearly plan:

* Lab Based Courses

** Students must be in good academic standing. The students must successfully finish: ENIN 100, BMNG 200, ENDD 250, ENEC 200 (ENEL 300 - desirable) before starting the first GT/LEAP

Engineering Admission Requirements

1. Satisfaction of general admission requirements of the university of Dubai
2. The average grade for high school is minimum 80% for admission or minimum 70% for Conditional Admission*
3. Successful interview

	Fall	Spring	Summer
Year 1	EMTH 100 Calculus I	EMTH 150 Calculus II	GISL 100/105 Islamic Thought (A)/E
	GPHY 100 General Physics I*	GPHY 150 General Physics II*	
	ENGL 100 English I	ENGL 105 English II	
	GECE 100 Chemistry I	HSS Requirement	
	ENIN 100 Engineering Innovation	ENAP 150 Comp Algor. & Prog*	
Year 2	EMTH 200 Calculus III	BMNG 200 Management & Organizational Behavior	GUAS 100 UAE Society
	EMTH 250 ADV MATH I	EMTH 260 ADV MATH II	
	ENMA 200 MATLAB™	GCMM 105 Communication Skills	
	ENDD 200 Digital Logic Design*	ENEL 250 Electronics I*	
	ENEC 200 Electric Circuits I*	ENEC 250 Electric Circuits II	
Year 3	ENSS 300 Signals & Systems	ENEE 300 Engineering Economics	Graduate Trainee (GT) / Learn Earn And Progress (LEAP) Program**
	ENPR 300 Probability & Random Process	BBUS 330 Business & Society	
	ENMP 300 Microprocessors*	ENCS 300 Communication Systems*	
	ENEL 300 Electronics II*	EECS 300 Control Systems	
	ENMG 300 Electromagnetics	ENDP 350 Digital Signal Processing	
Year 4	CEDC 400 Digital Communication	CEIC 400 IT & Coding	
	CECN 400 Communication Networks	CEAP 400 Antenna & Propagation	
	Technical Elective 1	Technical Elective 3	
	Technical Elective 2	Technical Elective 4	

	ENPR 401 Graduation Project -1	ENPR 402 Graduation Project -2	
	<u>Humanities and Social Science (HSS) Requirement</u>	<u>Technical Electives</u>	-
	GCEX 100 Career Exploration	CEOC 400 Optical communications	
	GEDU 100 Education & the Future	CEWC 400 Wireless Communication	
	GLAW 100 Law & Society	ENES 400 Embedded Systems	
	GPSY 100 Psychology & Society	CESC 400 Satellite Communication	
	GCII 100 Contemporary Intl Issues	ENCE 400 ST in Communication & Electronics	
	GCUS 100 Cult. & Society - Thai Society	ENAI 400 Audio & Image Processing	
	GCUS 100 Cult. & Society - Chinese Society		

Note: Conditional admission will be changed to full admission if the student gets C grade in both Physics I and Math I. The student will be given one semester to be fully admitted.