

# Curriculum

Project Option	Courses	Credit Hours
Program Core	10	30
Project	1	3
Total	11	33

COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE
ECE 500	Integrated Circuit Design	ECE 501	Advanced Embedded System Design	MEM 501	Project Management
ECE 510	Advanced Communication Systems	ECE 512	Smart Grids and Renewable Energy	ECE 520	Advanced Power System Analysis
ECE 611	Advanced Mixed-Mode Integrated Circuit Design	MEM501	Advanced Engineering Economics	MEM510	Innovation and Entrepreneurship
ECE 621	Computer and Machine Vision	ECE 690	Electrical and Computer Engineering Management-based Project		



## MASTER OF ENGINEERING IN **ELECTRICAL AND COMPUTER ENGINEERING**

## Program Overview

The College of Engineering (CoE) offers the Master of Engineering in Electrical and Computer Engineering (MEngECE) program at Abu Dhabi University. The college also offers a Master of Science in Electrical and Computer Engineering program (MSECE). The MEngECE responds to regional and international market demand for engineers with a unique blend of advanced Electrical and Computer Engineering and Engineering Management backgrounds, thus preparing the ECE project managers and industrial leaders of tomorrow. The MEngECE program has seven technical courses and three engineering management courses. Students are also expected to complete a capstone project in the area of Electrical and Computer Engineering project management. The program accepts students with bachelor's degrees in Electrical Engineering, Computer Engineering, or related fields. Students who lack the necessary background in certain topics, as per their undergraduate transcript, may be admitted conditionally. Such students will need to take some undergraduate-level courses as remedial courses or pass challenge exams as determined by the Program Director.

The Master's degree in Electrical and Computer Engineering paves the way for advancement in professional practice. Graduates of the program are ready to tackle complex problems in the areas of microelectronics, communications and networking, power and renewable energy, embedded systems, robotics, the Internet of Things, machine learning, signal processing, and Electrical and Computer Engineering management. The graduates achieve the breadth and depth of knowledge and skills needed to innovate in today and tomorrow's world where innovation, technology, communication, and energy are the driving forces for economic growth and prosperity. Moreover, they also receive the advanced business training required to successfully manage the large scale and complex projects of today. The program is designed with a schedule that minimizes disruption of work commitments.

## Student's Testimonial

### Ala'a Harb - Senior Master's student in Electrical & Computer Engineering

As an ADU graduate, I was able to land my first job as soon as I graduated. Moreover, the quality of education and the rich knowledge I obtained allowed me to maximize my performance at work and grow faster. Therefore, when I decided to take my masters, I chose ADU once again. The quality I like most about the program is how fundamentally they have prepared me for my next step in life, regardless of whether I choose employment or graduate studies. Besides, the faculty willingness to help us, not only in the areas pertinent to their class but also our endeavors outside of the classroom, makes the department unique. Throughout my study at Abu Dhabi University, Electrical & Computer Engineering Department, I gained an intensive knowledge in different cutting-edge technologies such as computer vision, machine learning and artificial intelligence.



## Career Prospects

- Electrical Engineering project managers working in the area of smart, sustainable, and renewable energy systems for the government or private sector
- Power engineering project managers working on the generation, transmission, and the distribution of electrical power for consultants, contractors, power plants, factories, airports, or the oil and gas industry
- Microelectronics project managers who deal with design and micro-fabrication of tiny electronic circuit components
- Telecommunications project managers for international communication companies such as Etisalat, DU, Atlas, ... etc
- Project managers in high-tech telecommunication, oil companies, or the government

