Master of Science in

ELECTRICAL ENGINEERING

CHARGE YOUR FUTURE
Rapid technological change and the global economy’s reliance on energy and innovation is seeing growing demand for electrical engineers with the highest skill and knowledge sets. These engineers will be at the forefront of future shaping, and play an important role in the way humans will all live and work in the coming decades.

AUS’ Master of Science in Electrical Engineering (MSEE) is renowned for its rigorous training and dynamic approach. The program combines electrical engineering practice with cutting-edge technical research, preparing students for further educational achievement, such as doctoral studies, or an advanced career in the field of electrical engineering.

"With no doubt, I can say that AUS has definitely improved my technical and software skills and helped me to define the path I want to follow in the various fields of electrical engineering."

Mohammad Sahoon | Electrical engineering graduate

Objectives of the MSEE program

With a MSEE from AUS, you will be able to:

- apply advanced mathematics and engineering knowledge in identifying, formulating and solving engineering problems
- perform research emphasizing creativity, independent learning and scientific methods
- select and use techniques, skills and tools necessary for research or professional practice
- communicate effectively
- attend to professional and ethical responsibilities
- be at the helm of industry developments
  The much sought-after MSEE program helps support local and regional industry needs, graduating qualified electrical engineers able to solve complex problems and lead others in the field. Graduates are equipped with the skills necessary to serve an expanding industrial base, making them highly sought-after by employers. Strongly connected to today’s industry environment, the MSEE program allows graduates to employ their knowledge along with their analytical and design skills, advancing the frontiers of science and technology.
- faculty of distinction
  In undertaking the MSEE, you will work under the supervision of faculty who have received their doctoral degrees from renowned universities, including some of the best engineering institutions in North America and Europe. These faculty are recognized experts in their fields, with extensive teaching and research experience.
- built-in flexibility
  Our graduate programs are flexible, ensuring that students are able to pursue their careers alongside their graduate degree. Students can choose between a full-time schedule and a part-time schedule, with classes offered at times suitable for those in the workforce."
Graduate assistantships and employment

AUS offers graduate students assistantships and work-study opportunities. These are awarded on a competitive basis, coming in the form of a Graduate Research Assistantship or Graduate Teaching Assistantship. This offers not only financial assistance but also hands-on experience in teaching and research helpful to students interested in pursuing a career in academia.

As a graduate student, you will have the opportunity to work with faculty to publish work in leading international engineering and scientific journals.

Engage in hands-on research

MSEE students will contribute to the growing body of electrical engineering knowledge, research and development, in topics related to:

- Power systems
- Renewable energy
- Microelectronics
- Microwaves
- Satellite systems
- Communications and signal processing
- Control systems
- Internet of Things and smart cities
- Artificial intelligence
- Radars and imaging systems
- Electronics and wearable electronics
- Robotics and autonomous systems
Sustainability is CEN’s priority and focus

The AUS College of Engineering (CEN) is seeking to build a more sustainable future for its students and the global communities of which they are a part. Throughout its research, teaching and other scholarly activities, the college seeks to uphold the widely accepted vision of the global engineering community for the 21st century: to ensure the continuation of life on the planet, making the world more sustainable, secure, healthy and joyful.

CEN practices the values of this vision every day, by housing itself within one of the region’s most sustainably advanced buildings. The AUS Engineering and Sciences Building has achieved the highly sought-after “2 Pearl” rating by Estidama, a sustainable development initiative of the Abu Dhabi Urban Planning Council. The rating evidences the building’s highly efficient use of resources and minimization of waste. It also complements AUS’ position as the first university in the MENA region to have a Sustainability Tracking, Assessment and Rating System (STARS) classification for sustainability in higher education, awarded by the Association for the Advancement of Sustainability in Higher Education (AASHE).
The work of CEN’s faculty and students helps progress international sustainability efforts. By advancing design and innovation in engineering that impacts many facets of sustainability, CEN is contributing to the global collaboration needed to find solutions to some of the world’s most pressing challenges: climate change, population growth and disease, among others. Our faculty and students are at the helm of sustainability-related efforts in the fields of supply chain, materials science, renewable energy, urban planning, water and environment, energy, construction, Artificial Intelligence, data science and more—all areas that will play a role in securing a sustainable tomorrow for populations across the world.

Together, we are committed to working with the global engineering community to safeguard our tomorrow, in the Middle East and beyond.

The college is also a leader in “peace engineering,” a global effort to promote international peace and achieve the United Nation’s Sustainable Development Goals through science and technology. Peace engineering works directly towards a world where prosperity, sustainability, social equity, entrepreneurship, transparency, community voice and engagement, ethics and a culture of quality thrive.

CEN’s Dean, Dr. Sirin Tekinay, is also the Chair of the Global Engineering Deans’ Council (GEDC), and an ex-officio member of the Executive Committee of International Federation of Engineering Education Societies (IFESS), two organizations at the heart of global peace engineering efforts. The college is therefore front and center of this important initiative, and central to the engineering outcomes that will make a difference to all.
Reasons to choose a graduate program at the AUS College of Engineering

All graduate programs offered by the AUS College of Engineering are accredited by the Commission for Academic Accreditation of the Ministry of Education’s Higher Education Affairs Division in the United Arab Emirates. AUS is also accredited in the United States of America by the Middle States Commission on Higher Education (3624 Market Street, Philadelphia, PA 19104, USA, Tel +1 215 662 5606).

The College of Engineering boasts the very best in resources and facilities, including nearly 60 world-class laboratories.

The college offers flexible study arrangements for busy professionals, including part-time options.

AUS offers financial assistance to qualified students, including competitive full and partial graduate assistantships.

Hailing from some of the world’s leading engineering universities, College of Engineering faculty are accomplished researchers working at the cutting edge of their areas of research.

AUS has a proud tradition of multiculturalism, with a higher percentage of international students than any other university in the world (Times Higher Education, 2019).

The AUS campus features one of the finest libraries in the region, a health center and recreational programs, along with a full calendar of cultural events.

Why AUS?

AUS was founded in 1997 by His Highness Sheikh Dr. Sultan Bin Muhammad Al Qasimi, Member of the Supreme Council of the United Arab Emirates and Ruler of Sharjah. Sheikh Sultan articulated his vision of a distinctive institution against the backdrop of Islamic history and in the context of the aspirations and needs of contemporary society in the UAE and the Gulf region.

Firmly grounded in principles of meritocracy and with a strong reputation for academic excellence, AUS has come to represent the very best in teaching and research, accredited internationally and recognized by employers the world over for creating graduates equipped with the knowledge, skills and drive to lead in the 21st century.

AUS values learners not driven only by academic success, but by those that embrace our dynamic campus life and embody our ideals of openness, tolerance and respect. This combination of academic excellence and community spirit ensures AUS is filled with world-class faculty and students, poised to become the innovators, thinkers, contributors and leaders of tomorrow.