

Master of Science in

MECHATRONICS ENGINEERING



**IMAGINE IT,
ACHIEVE IT**

The Master of Science in Mechatronics Engineering (MSMTR) program is committed to being an international, multidisciplinary center of excellence in synergistic applications of the latest techniques in embedded systems, precision mechanical engineering, control theory, computer science and electronics through education, research and outreach.

The MSMTR graduate program provides students with state-of-the-art knowledge in their areas of specialization with practical strategies for adapting that knowledge to serve the specific needs of the region. Multidisciplinary engineers are needed now more than ever to meet the demand for a flexible engineering workforce to deal with highly integrated engineering systems.



The graduate program at AUS is challenging but highly satisfying at the same time. The graduate courses will help you to expand your knowledge and increase your abilities to tackle real-world problems in a more expansive manner. The time you invest in AUS is bound to leave a positive mark in your life.

Danial Waleed | MSMTR Class of 2019
Doctoral student at the University of Vermont, USA



Integrating the latest in science and engineering

The MSMTR program integrates multidisciplinary engineering concepts of electrical, mechanical, control, computer and software engineering, addressing grand challenges across the ever-changing industrial landscape. Graduates of the program are highly valued by employers, equipped to contribute across the following areas:

**maintenance
diagnosis and
troubleshooting**

**computer
integrated
manufacturing
systems**

**modern
industrial
installations and
systems**

robotics

**vehicle
design and
manufacturing**

**defense
systems**

**intelligent
systems**

Faculty of distinction

In undertaking the MSMTR, 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.

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Active mechatronics research projects at AUS

AUS graduate students have the opportunity to work with faculty to publish their work in leading international engineering and scientific journals. As part of the MSMTR program at AUS, you will have the opportunity to be involved in quality research across a number of areas pertinent to the growing biomedical industry, including:

mechatronics systems and control

path planning and navigation

sensor fusion

motor drives

embedded systems

energy systems

robotics and intelligent systems

IoT

BECAUSE TOMORROW MATTERS

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).



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BECAUSE MATTERS

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 (IFEES), 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.

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.



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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.





Find out more

www.aus.edu/cen/msmtr
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connect with us



Apply now

