Electrical Engineering

Because tomorrow matters

Are you interested in the workings of electrical-powered innovations such as computer systems, electronics, telecommunications and the Internet of Things? Electrical engineers understand how to harness electricity to power our modern-day world. AUS offers a **Bachelor of Science in Electrical Engineering** that will help set you up for a bright future as an electrical engineer. Students benefit from our continuously updated curriculum covering emerging aspects of electrical engineering such as Artificial Intelligence, data science, electric vehicles, robotics, satellite systems, renewable energy and more.

Why Electrical Engineering at AUS?

From outstanding faculty to world-class facilities, here is a snapshot of why students chose to study electrical engineering with us.

Renowned faculty. Our faculty come from some of the world's best electrical engineering schools including University of Calgary, Colorado State University, Carleton University, University of Kent, University of Minnesota, University of Arizona, University of Leeds, Ohio State University, University of Washington, University of Mississippi, University of Manitoba, Georgia Institute of Technology, University of Illinois, University of Waterloo and University of South Australia.

State-of-the-art facilities. Our students sharpen their new-found skills and knowledge in our diverse range of labs, including:

Advanced Radio Technology Lab	EPIC Center and PCB Prototyping Lab
Biomedical Electronics Lab	High Voltage Lab
Communications Lab	Industrial Control Lab
Control Systems Lab/Drones Manufacturing Lab	Measurement and Instrumentation Lab
Electric Circuits Lab	Microwave Imagining Lab
Electric Machines and Power Electronics Lab	Power Systems Lab
Electric Vehicles Lab	Renewable Energy Lab
Electronics Lab	RF Microelectronics Lab
	Satellites Teaching and Research Lab

A top choice among employers. Many opportunities await our students upon graduation. Our graduates are employed by organizations including:

Mohammed Bin Rashid Space Centre	Thales, Australia
Yahsat	SNC-Lavalin, Canada
Thuraya Telecommunications Company	Signify, Netherlands
Emirates Airlines	Etisalat
Dubai Police	DU
Abu Dhabi Police	Schlumberger
Dubai Civil Aviation Authority	General Electric
Dubai International Airport	Schneider Electric
Emirates Nuclear Energy Corporation	Siemens
Ministry of Energy	Johnson Controls
Road and Transportation Authority	Signify
Dubai Electricity and Water Authority (DEWA)	Amazon
Sharjah Electricity and Water Authority (SEWA)	Emirates Global Aluminum
IBM, USA	Petrofac
Honeywell International Inc., USA	Dragon Oil LLC
MacKenzie, USA	Southern Energy Corp
Huawei, USA	Nawah Energy Company
Tesla, USA	Taqa
Samsung Electronics America, USA	CAFU
Ericsson, Australia	Baker Hughes
Ericsson, Sweden	National Engineering Bureau (NEB)
Mercedes Benz AG, Germany	EP&T Global
Toyota, Canada	PricewaterhouseCoopers (PwC)
Chevron, Australia	Jacobs Engineering Group Inc.
	Exponent Technology Services

Accredited programs. Our degree programs are accredited in the UAE and USA.

- AUS is licensed and its programs are accredited by the Commission for Academic Accreditation of the UAE Ministry of Education's Higher Education Affairs Division.
- AUS is accredited in the USA by the Middle States Commission on Higher Education.
- The electrical engineering (BS) program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and Similarly Named Engineering Programs.

Preparation for top graduate programs. Our alumni have also gone onto pursue master's and doctoral degrees at universities including University of Illinois at Urbana-Champaign, Iowa State University, Georgia Institute of Technology, University of California-Berkeley, University of California-Los Angeles, Texas A&M, University of Wisconsin-Milwaukee, Syracuse University, University of Chicago, Queen's University, Middlesex University, Kingston University London, Technical University of Munich, University of Western Australia, University of Melbourne and many others.

Broad curriculum. Our students can choose from a wide and diverse selection of courses, including:

Artificial Intelligence and Data Analytics	Multimedia Communication and Networking
Deep Networks in Machine Learning	Satellite Communications
Pattern Recognition	Wireless Communications
Digital Signal Processing	Radio Transceivers Design and Analysis
Autonomous Robotic Systems	Antennas and Wave Propagation
Advanced Control Systems	Microwave Engineering
Electric Drives and Vehicles	Introduction to Radar Systems
Power Electronics	Medical Instrumentation
Renewable Energy Systems	Microelectronic Devices
Power Systems Protection and Distribution	Fundamentals in Nanoelectronics
Utilization of Electrical Energy	

Variety of scholarships and grants. Eligible students have access to a wide range of scholarships and other financial support, with approximately two-thirds of all AUS students benefitting.

Opportunities beyond the classroom. Our students enjoy an active and diverse extracurricular experience, with more than 80 interest-oriented clubs and 26 sports teams. Electrical engineering students typically partake in groups such as IEEE Special Interest Group on Humanitarian Technology, IEEE Student Branch, IEEE Solid State Circuits Society and IEEE Eta Kappa Nu (Electrical Engineering Honor Society). Popular activities for electrical engineering students include IEEE Student Day, Drone Design Academy and Drone Piloting Academy. Electrical engineering students also enjoy field trips abroad and exchanges with highly respected universities in the United States.

International recognition. AUS has an impressive list of rankings to its name:

- Among the **top 10 Arab universities** every year for the past eight consecutive years (QS Arab Region University Rankings 2023)
- Among the **top 50 universities** in the world under the age of 50 years (QS World University Rankings 2021)
- Among the **top three (tied) in the UAE and top 300 universities globally** for electrical and electronic engineering (QS World University Subject Rankings 2023)
- Graduates who have studied electrical and electronic engineering at AUS are the **top choice for employers in the UAE** (QS World University Subject Rankings 2023)
- Among the **top four universities** in the UAE and among the **top 600 globally** for engineering studies (THE World University Subject Rankings 2023)
- Among the **top five universities** globally with the highest percentage of international students (THE World University Rankings 2023)

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Learn more
www.aus.edu/cen/department-of-electrical-engineering

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