

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

Biomedical Electronics Lab

Communications Lab

Control Systems Lab/Drones Manufacturing Lab

Electric Circuits Lab

Electric Machines and Power Electronics Lab

Electric Vehicles Lab

Electronics Lab

EPIC Center and PCB Prototyping Lab

High Voltage Lab

Industrial Control Lab

Measurement and Instrumentation Lab

Microwave Imaging Lab

Power Systems Lab

Renewable Energy 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

Yahsat

Thuraya Telecommunications Company

Emirates Airlines

Dubai Police

Abu Dhabi Police

Dubai Civil Aviation Authority

Dubai International Airport

Emirates Nuclear Energy Corporation

Ministry of Energy

Road and Transportation Authority

Dubai Electricity and Water Authority (DEWA)

Sharjah Electricity and Water Authority (SEWA)

IBM, USA

Honeywell International Inc., USA

MacKenzie, USA

Huawei, USA

Tesla, USA

Samsung Electronics America, USA

Ericsson, Australia

Ericsson, Sweden

Mercedes Benz AG, Germany

Toyota, Canada

Chevron, Australia

Thales, Australia

SNC-Lavalin, Canada

Signify, Netherlands

Etisalat

DU

Schlumberger

General Electric

Schneider Electric

Siemens

Johnson Controls

Signify

Amazon

Emirates Global Aluminum

Petrofac

Dragon Oil LLC

Southern Energy Corp

Nawah Energy Company

Taq

CAFU

Baker Hughes

National Engineering Bureau (NEB)

EP&T Global

PricewaterhouseCoopers (PwC)

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)

Contact

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Learn more

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