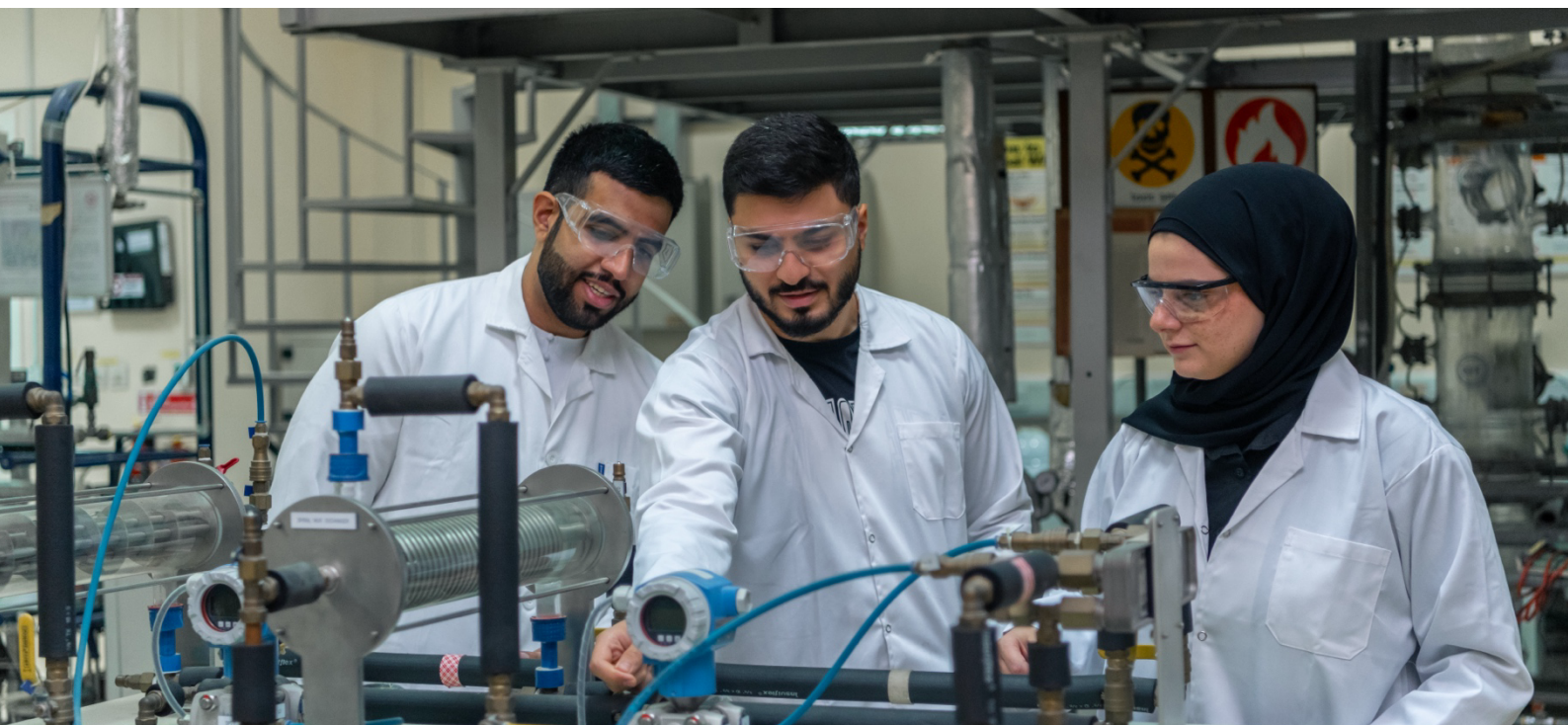


Chemical and Biological Engineering

Because tomorrow matters



Are you interested in studying the correlation between fundamental life sciences and engineering? Discover the transformation of materials through chemical, physical and biological processes with our cutting-edge **Bachelor of Science in Chemical and Biological Engineering** at AUS!

By bridging the fields of chemistry, biology and other engineering disciplines, chemical and biological engineers play a vital role in implementing large-scale processes to modify materials, such as synthesis, developed by chemists and biologists. This requires a comprehensive understanding of the sciences (chemistry, biology, physics and mathematics) as well as engineering principles.

The program is designed to equip students with the essential skills needed to pursue a wide range of career opportunities in local and regional industries. These include biotechnology, food and beverage production, manufacturing and processing, quality assurance, environmental protection, biomedical, pharmaceuticals, research and development, and many more. With a degree in chemical and biological engineering, you can unlock doors to positions in medicine, as well as the chemical and biological engineering sectors.

Why Chemical and Biological Engineering at AUS?

Students choose to study chemical and biological engineering with us because of our outstanding faculty and the opportunity to gain a well-rounded education that opens doors to exciting career prospects. Additionally, we offer world-class facilities that provide students with hands-on learning experiences. Our state-of-the-art laboratories and research facilities are equipped with the latest technology and equipment, allowing students to engage in cutting-edge research and practical experiments. This immersive learning environment enables students to apply theoretical concepts to real-world scenarios, enhancing their understanding and skill development.

Renowned faculty. Our faculty come from some of the world's best chemical engineering schools including University of Michigan-Ann Arbor (USA), University of Ottawa (Canada), Colorado School of Mines (USA), Oklahoma State University (USA), Brigham Young University (USA), Auburn University (USA), Heriot-Watt University (UK), Queen's University Belfast (UK), University of Western Ontario (Canada), New Jersey Institute of Technology (USA) and Indian Institute of Technology (India).

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

- Analytical Instrumentation Laboratory
- Chemical and Biological Reaction Engineering Laboratory
- Corrosion Laboratory
- Drug Delivery Laboratory
- Environmental Research Laboratory
- Fluid Mechanics Laboratory
- Heat Transfer Laboratory
- Instrumentation and Control Laboratory
- Material Science Laboratory
- Thermochemical Conversion Laboratory
- Unit Operations Laboratory
- Water Technology Laboratory

Accreditation programs. Our degree programs are recognized both 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 new Bachelor of Science in Chemical and Biological Engineering program has been approved by the Commission for Academic Accreditation of the UAE Ministry of Education's Higher Education Affairs Division.

Board curriculum. Students can choose from a wide and diverse selection of electives including:

- Pharmaceutical Manufacturing
- Nanomaterials for Biological Applications
- Biotechnology for Air Pollution Control
- Biomass and Bioenergy
- Microbiology

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 100 student clubs and 26 sports teams. They can join the American Institute of Chemical Engineers, the Society of Petroleum Engineers and the Chemical Engineering Honor Society. Many engineering students have broadened their experience by studying abroad at well-known universities in the USA and around the world. In addition, the Department of Chemical and Biological Engineering organizes educational trips for students to universities and organizations abroad.

Our students also challenge themselves by taking part in competitions such as the UAE Undergraduate Student Research Awards, Abu Dhabi University Students' Competition, SIB Student Research Awards, Middle East Electricity Award, Sharjah Sustainability Award and AIChE Student Chapter Award.

Potential job opportunities. Many opportunities await our students upon graduation. Our graduates can go on to pursue careers in various industries such as food and beverage, chemical and biotechnology, biomedical firms, petroleum and gas, pharmaceutical, agricultural, and quality assurance, among many others.

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

- Among the **top 10 Arab universities** every year for the past nine consecutive years (QS Arab Region University Rankings 2024)
- Among the **top 50 universities** in the world under the age of 50 years (QS World University Rankings 2021)
- Graduates across all engineering majors are the **top choice for employers in the UAE** (QS World University Subject Rankings 2023)
- Among the **top five universities in the UAE** and among the **top 600 globally** for engineering studies (THE World University Subject Rankings 2024)
- Among the **top five universities globally** with the highest percentage of international students (THE World University Rankings 2023)

Contact

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