جامعة خليفة
Khalifa University

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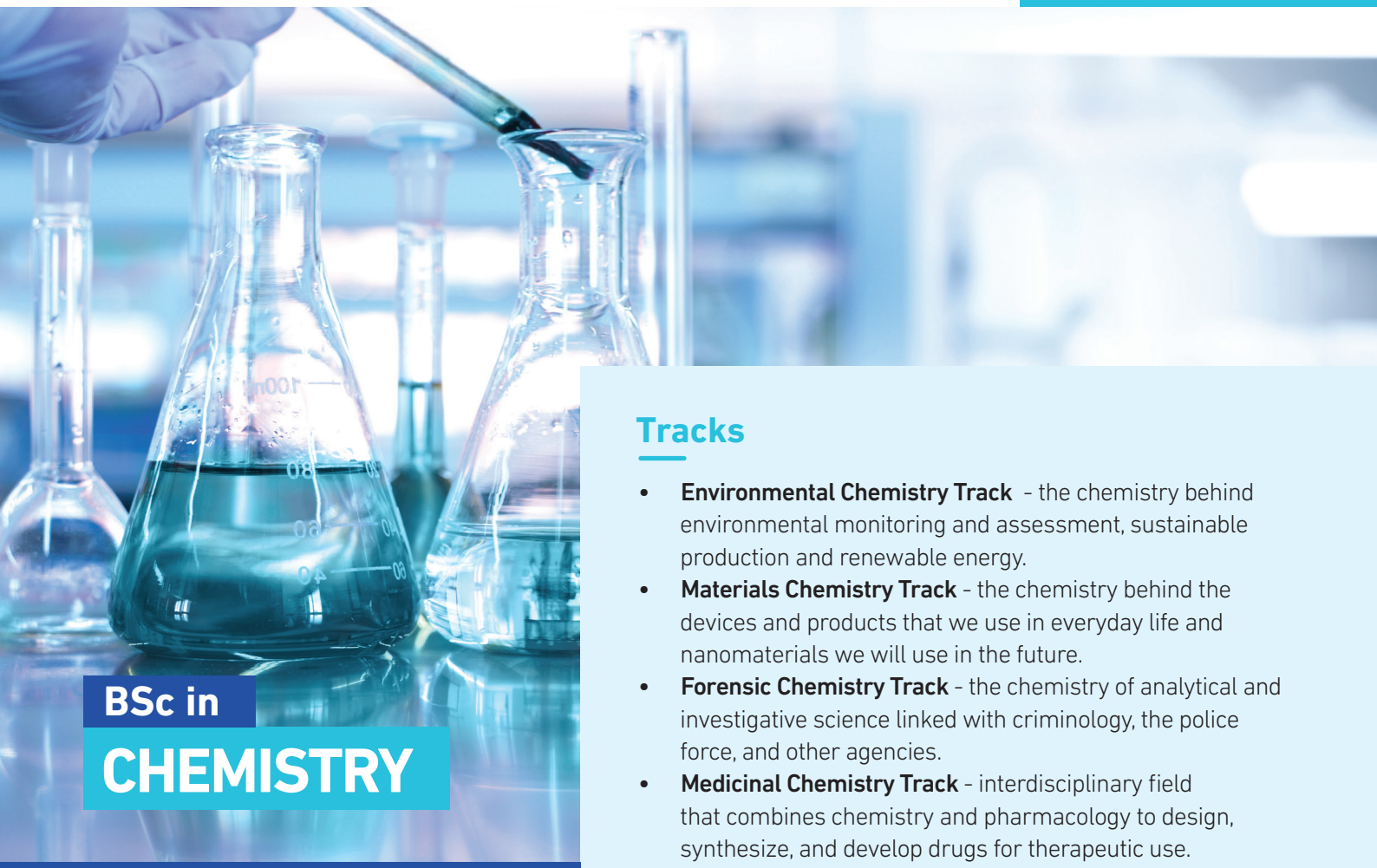

BSc in CHEMISTRY

About the program

Chemistry is key to developing new medicines, to the secure supply of food and water and to manufacture innovative materials for the 21st century. Chemists have developed batteries for electronic devices, provided clean water, discovered life-saving drugs, created aerospace polymers, formulated flavors used in food , and fertilizers used in agriculture.

The program prepares students to to design, develop, and investigate chemical processes at the fundamental level providing a comprehensive introduction to all areas of chemistry and supporting subjects to ensure a well-rounded education. Students will gain practical and theoretical skills in modern chemistry through lectures and hands-on experience in our state-of-the-art laboratories.

Tracks

- **Environmental Chemistry Track** - the chemistry behind environmental monitoring and assessment, sustainable production and renewable energy.
- **Materials Chemistry Track** - the chemistry behind the devices and products that we use in everyday life and nanomaterials we will use in the future.
- **Forensic Chemistry Track** - the chemistry of analytical and investigative science linked with criminology, the police force, and other agencies.
- **Medicinal Chemistry Track** - interdisciplinary field that combines chemistry and pharmacology to design, synthesize, and develop drugs for therapeutic use.
- **Pre-Med Track** - will support students who wish to proceed to medical school or the medical industries through additional study of biomedical applications of chemistry.

Graduates of the program will

Possess substantial technical skills and theoretical knowledge in chemistry, and will be able to apply these in a variety of professional or academic contexts. Be competent in a broad range of technical and non-technical transferable skills, needed for successful careers and leadership roles in industry, business and government.

Can pursue advanced studies in a range of disciplines, including but not limited to those related to chemical sciences. Acquire skills and knowledge needed to work in technical areas or scientific research and development in materials, polymer and petroleum products, pharmaceuticals, energy, forensics, food science and the environment, as well as in government policy. Chemistry graduates are also in high demand to teach in schools. They are well-suited to broader roles in education and teaching, journalism and scientific publishing, administration, banking and finance. Many graduates go on to postgraduate study or research, earning their MSc or PhD.

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WHY KHALIFA UNIVERSITY?

GLOBAL RECOGNITION

Khalifa University stands out as the leading institution in the UAE, with 90 of its faculty members acknowledged among the world's top 2% most-cited scientists in Stanford University's prestigious 2023 listing.

CONSISTENTLY HIGH-RANKED

Ranked top in the UAE, 2nd in the Arab world, and ranked 27th in Asia in Sustainability; and among top 250 in the world

GLOBALLY-ACCREDITED ACADEMIC PROGRAMS

Khalifa University is fully licensed and all its programs are accredited by the Commission for Academic Accreditation (CAA) of the UAE Ministry of Education.

UNIQUE AND DIVERSE RESEARCH

Including energy, water and environment, healthcare, aerospace, cybersecurity, Intelligent Systems, advanced materials, and fundamental science..

WORLD'S SAFEST CITY

Abu Dhabi, the largest emirate in the UAE, remains the world's safest city for the 8th consecutive year in 2024. Experience safety and a cosmopolitan lifestyle that enhances your learning experience, reinforcing its status as a safe and secure place to live, work, study, and invest.

EXPERT GUIDANCE

We are committed to empowering students for success, fostering collaboration in a diverse community led by world-class faculty. Experience personalized guidance and a conducive learning environment with an impressive 11:6 student-to-faculty ratio, ensuring your path to success is well-supported and rewarding.

DYNAMIC CAREER OPPORTUNITIES

Attractive graduate employment opportunities across a wide spectrum of industries with the opportunity to present research projects at major international conferences.