

## MSc in APPLIED CHEMISTRY

#### About the program

The program caters to candidates with a bachelor's degree in chemistry or a related field, offering advanced knowledge and skills with a focus on practical applications. It plays a vital role in tackling modern challenges like environmental sustainability, renewable energy, and healthcare. The program offers a comprehensive curriculum covering advanced topics in chemistry, with both theoretical knowledge and practical skills.

The program emphasizes real-world applications in areas such as environmental science, materials science, and pharmaceuticals. Students engage in cutting-edge research projects, gaining handson experience with state-of-the-art analytical techniques. The program's scope extends beyond traditional classroom learning, fostering critical thinking and problem-solving abilities.



### Tracks

Gain career opportunities in industries ranging from pharmaceuticals to environmental conservation.

Take up research in areas include Analytical Chemistry, Organic Chemistry, Inorganic Chemistry, Biochemistry, Theoretical Chemistry, Medicinal Chemistry, Environmental Chemistry, and Materials Science.

Be well-positioned for diverse career opportunities in industries such as, environmental management, materials science, and research. The multidisciplinary approach equips graduates with skills applicable to roles such as analytical chemists, materials scientists, and researchers.

## Labs

Equipped with a range of instruments including High-Performance Liquid Chromatography (HPLC), UV/Vis Spectroscopy, Scanning Electron Microscopy (SEM), NMR spectrometers, UHPLC-PDA, HPLC-UV/vis, GC-FID, GC-MS, ICP-MS, Powder X-ray diffractometer, ATR-FTIR, and various spectrophotometers.

Students access a force tensiometer, bomb calorimeter, and fluorescence microscope. The facilities encompass an Analytical Instrumentation Research Facility, featuring LC-MS-MS, GC-HRMS, FT-IR Spectrophotometer, UV-Vis spectrophotometer, and Dynamic Light Scattering Spectrophotometer.



# WHY KHALIFA UNIVERSITY?



#### **UNIQUE AND DIVERSE RESEARCH**

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



#### **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.



#### 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 wellsupported 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.