Teaching & Lifelong Learning

Undergraduate degree programs accredited by the Engineering Accreditation Commission of ABET
- chemical engineering
- electrical & computer engineering
- mechanical engineering
- petroleum engineering

Master’s program in chemical engineering established in 2011

Same high standards and curricula as main campus, with classes taught in English in a co-educational setting

Emphasis on student global experiences, with strong collaborative programs with main campus

Many graduates have been accepted into elite graduate schools, including:
- Stanford
- MIT
- Georgia Tech
- Imperial College London
- Cambridge
- Caltech
- Texas A&M University

Research

$78.1 million in active project funding and $256 million in total cumulative project funding

12 patents awarded and 76 total patent applications

Collaborative partnerships with local industry, including:
- ExxonMobil
- RasGas
- ORYX GTL
- Oxy Qatar
- Ooredoo
- RasGas
- KAHARAMAA
- QAPCO
- QAFCO
- Qatar Shell
- Ashghal, Public Works Authority

Many of these companies and others use our state-of-the-art Technical Services facilities and expertise that are available nowhere else in the region

Sharing leading-edge research and knowledge through conferences, workshops and seminars/short courses, including:
- Qatar Process Safety Symposium
- QAFCO–Texas A&M University at Qatar Conference
- Materials Science & Engineering Symposium
- Liberal Arts International Conference
- Research and Industry Partnership Showcase

Centers of Excellence

- TEES Gas & Fuels Research Center
- Texas A&M at Qatar Advanced Scientific Computing Center
- TEES Smart Grid Center Extension in Qatar
- TEES Center for Remote Health Technologies and Systems Extension in Qatar
- TEES Mary Kay O’Connor Process Safety – Qatar
- Qatar Sustainable Water & Energy Utilization Initiative

More than 1,050 degrees awarded since 2007

538 degree-seeking students in fall 2019

54% Qatari & 51% female undergraduates enrolled in fall 2019

76 students cross-registered in fall 2019

26 visiting graduate students conducting master’s and doctoral research in fall 2019
Engagement

STEM engagement
Partnering with Occidental Petroleum Qatar (Oxy Qatar) to attract students to pathways in science and engineering to develop the technical workforce Qatar needs to meet its future goals
- Engineering Heroes Drone Camp & QSI: Qatar Science Investigators
- Summer Engineering Academy
- Future Engineers
- Engineering Explorers
- Qatar Invents
- App Camp
- Young Engineers & Scientists

Training STEM teachers to better prepare students for the rigors of an engineering education

Science & Engineering Road Show has reached 16,000+ students in schools across Qatar since spring 2018

Enhancing the workforce in Qatar
As Qatar’s industrial and commercial sectors adapt to rapidly shifting market forces, Texas A&M at Qatar is uniquely positioned to offer customized advanced training and professional development tailor made to meet industry needs and taught by faculty experts. Topics include:
- Process safety
- Loss prevention
- Risk assessment
- Best practices
- Power systems
- Supply chain
- Project management

Developed a new Fundamentals of Cybersecurity certificate program with Hamad Bin Khalifa University’s Executive Education Center

Organizational Excellence

18,350+ visitors during Qatar Foundation’s 2018 Qatar National Day tent

Developing customized courses for industry in Qatar, including Dolphin Energy, Nakilat, Hamad International Airport and more

Dean’s Inclusive Excellence Leadership Academy
Established in Fall 2017, the Dean’s Inclusive Excellence Leadership Academy aims to elevate staff to take leadership roles to build a more efficient, effective and resilient organization. Each fall, high-achieving staff members are selected to participate in the academy, which provides training, professional development and opportunities for high-impact contributions to organizational excellence.

Faculty members who are fellows of professional societies:
- Dr. Haitham Abu-Rub Institute for Electrical & Electronics Engineers
- Dr. Hassan S. Bazzi American Chemical Society and Royal Society of Chemistry (UK)
- Dr. Ali Ghrayeb Institute for Electrical & Electronics Engineers
- Dr. Ibrahim Hassan American Society of Mechanical Engineers
- Dr. Tingwen Huang Institute for Electrical & Electronics Engineers
- Dr. Monsour Karkoub American Society of Mechanical Engineers
- Dr. César Malavé Institute of Industrial & Systems Engineers
- Dr. Eyad Masad American Society of Civil Engineers
- Dr. Reza Sadr American Society of Mechanical Engineers
- Dr. Erchin Serpedin Institute for Electrical & Electronics Engineers
- Dr. Arun Srinivasa Society of Engineering Science
- American Society of Mechanical Engineers
- Dr. Reza Tafreshi American Society of Mechanical Engineers

Texas A&M at Qatar’s faculty members are known for excellence in education and research. Faculty excellence is a driving contributor to Texas A&M at Qatar’s efforts to cultivate a new generation of engineering leaders who will have a direct impact on the State of Qatar’s growth and development, as well as Qatar’s evolution into a knowledge-based economy.

78 total faculty in fall 2019

Updated November 2019
Notable Achievements

- Inaugural class of 29 students, 7 faculty members & 5 staff members
- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019

- First senior-level courses taught
- Opening of new Texas A&M Engineering Building
- SACS gives approval of Texas A&M at Qatar
- $12m awarded from QNRF to faculty researchers
- Engineering programs accredited by ABET
- Largest class of Qatari incoming freshman
- Enrollment totals 550
- External research funding reaches $100m
- Awarded $9.16m for two QNRF NPRP Exceptional Proposals
- More than 6,500 applications for admission received since 2008
- Nobel laureate Dr. Robert H. Grubbs named QAPCO Chair in Polymer Science & Engineering
- 1,000th degree awarded
- Second Qatari graduate joins faculty
- Re-accredited by ABET
- 100th Qatari graduate
- Graduated

- Largest-ever student body with 645 students
- Largest-ever incoming freshman class
- Signed MOUs with Qatar Armed Forces & Ashghal
- Signed MOU with Reconnaissance & Surveillance Center
- First Qatari graduate joins faculty
- First startup company established
- “Father of Green Chemistry” Dr. Paul Anastas appointed QAFCO Chair in Green Chemistry & Green Engineering
- First master’s degree awarded
- First students enroll in master’s program in chemical engineering
- 51 engineers graduate during third commencement ceremony
- Total graduates reach 100
- First commencement with 30 graduates
- Enrollment tops 350
- Two female Qatars are the first graduates
- Number of faculty reaches 28
- 200th application for admission
- Updated November 2019
Centers of Excellence

TEES Gas & Fuels Research Center
Advancing natural gas exploration, production, treatment and processing. Qatar is home to some of the most significant gas resources on the planet, including the largest liquefied natural gas and gas-to-liquids plants in the world, and to an integrated supply chain of cleaner energy sources in addition to value-added chemicals and ultra-clean fuels. The center aims to be the definitive repository of knowledge in gas and fuels research, and to incubate new technologies.

TEES Smart Grid Center Extension in Qatar
Advancing environmental development through smarter use of renewable energy in Qatar and worldwide. The center is partnering with local industry to address the grand challenge of securing Qatar’s energy future by integrating renewable energy resources such as solar and wind energy into the smart grid.

TEES Center for Remote Health Technologies & Systems Extension in Qatar
Advancing remote health care technologies and systems such as state-of-the-art informatics systems, genomics, diagnostic and micro/nanosensing technologies to make it easier to link people to health care providers and to enable patients to receive timely, personalized care no matter how remote their locations.

TEES Mary Kay O’Connor Process Safety Center – Qatar
Providing sound science-based counsel; developing and disseminating best practices through consulting and short courses; providing benchmarking for process safety management systems and practices; and conducting research—all in the name of preventing future accidents.

Qatar Sustainable Water & Energy Utilization Initiative
Addressing sustainable water, environment and energy issues relevant to the Qatar. The initiative aims to be the center of scientific and technical excellence for high-impact research and development; human capacity building; scientific and technical advising; and public awareness campaigns on environmental sustainability and sustainable water and energy utilization.

Texas A&M at Qatar Advanced Scientific Computing Center
Tackling complex problems in science, engineering and industry. Locally, TASC aims to contribute to implementation of the Qatar National Research Strategy in the field of computational science and its applications, such as materials science, computational chemistry, medical physics, system biology and high-performance computing. Internationally, TASC links with international supercomputing and computational centers.

Research collaborations with Texas A&M

| Joint projects (active projects 2018) | 65 |
| Current funding of joint projects* | $42.6m |
| Graduate students supported by joint research | 70 |
| Main campus faculty involved in Qatar projects | 69 |

*including NPRP Cycle 11 estimate

Texas A&M at Qatar research
Texas A&M at Qatar is creating cutting-edge solutions to real-world challenges with the power to revolutionize key industries and sharing expertise across industries and around the globe. Texas A&M at Qatar’s Centers of Excellence provide unique opportunities for scientific and technical exchanges, bringing world-class expertise to Qatar and sharing locally created knowledge with other parts of the world. Texas A&M at Qatar leads integrated research activities and leverages multidisciplinary expertise to solve complex challenges.

Cumulative research funding, 2008 – 2019* $256m
Total cumulative/active research projects 322/102
Total papers published in 2018 432
Total patent applications (to December 2018) 76

Texas A&M at Qatar research areas
- Energy & fuel processing, catalysis
- Process safety engineering
- Process systems engineering
- Water & environmental engineering
- Biomedical engineering
- Coding & information theory
- Power & energy systems
- Automation & controls
- Mechanics & materials
- High-performance computing
- Thermal-fluid science
- Reservoir simulation & management
- Drilling fluids
- Porous media & wettability studies
- Fundamental physics of nonlinear optics
- Chemistry of polymers, macromolecules & catalysts
- Fundamental mathematics & applied models
- Professional ethics
- Technical writing & communication
- Studies in humanities

Updated November 2019