Technical Services at Texas A&M at Qatar provides services and expertise to local industry and organizations. Employing the advanced capabilities of 13 participating laboratories, Technical Services caters to the research needs of multiple scientific disciplines by offering facilities and equipment to Texas A&M at Qatar’s partners for their use. This benefits the State of Qatar in its progress towards a knowledge-based society by supporting the research and testing needs of multiple, industry-oriented disciplines. Experienced Texas A&M at Qatar faculty and staff provide technical support and advice on associated services. All equipment, testing procedures and data recording services comply with established industry and international standards. Texas A&M at Qatar is proud to support the growth and development of the State of Qatar’s industry and academia by sharing its facilities through the Technical Services center.
technical resources

- materials
  The ISO 9001:2015 certified Central Materials Facility houses several high-end, state-of-the-art equipment employed for macro- and microstructural material characterization.

- manufacturing
  The ISO 9001:2015 certified Rapid Manufacturing Facility houses a variety of powder, plastic and metal 3-D printers to prototype and produce functional end products, including those with complex geometries.

- electronics
  The ISO 9001:2015 certified Central Electronics Shop fabricates printed circuit boards (PCBs) for electronic devices and is equipped with different types of PCB prototype milling machines that produce double-sided PCBs. The shop is also equipped with a high-quality, through-hole plating machine, pick-and-place machine and reflow oven.

- machining
  The ISO 9001:2015 certified Central Machines Shop offers prototyping and production, as well as research and development machining utilizing machines that employ a variety of materials.

- fuel characterization
  The ISO 9001:2015 certified Fuel Characterization Laboratory measures physical and chemical properties of fuels and value-added chemicals, and houses blending accessories to formulate new-generation fuels.

- water and environmental research
  The ISO 9001:2015 certified Water and Environmental Research Laboratories analyze inorganic, organic and physical parameters for samples with a variety of matrices, including water, wastewater, soils and sludge.

- chemistry instrumentation
  The ISO 9001:2015 certified Chemistry Laboratories provide analytical chemistry services employing a wide range of gas and liquid chromatography, spectrometry (FTIR, UV-Vis and FL), thermal analysis (TGA and DSC), and nuclear magnetic resonance techniques.

- research computing
  Research Computing provides high-performance computing and storage infrastructure as well as a 3D visualization and virtual reality facility. These platforms are complemented with scientific and engineering application support, and services including data visualization, programming and user training.

- wettability research
  The Wettability Research Laboratory offers services in the areas of rock characterization and fluids’ physical properties and phase behavior.

- engine research and testing
  The ISO 9001:2015 certified Engine Research and Testing Laboratory offers support in engine related activities such as engine modeling and control, development and implementation of new combustion technologies, engine performance and efficiency evaluation and emissions measurement.

- sustainability energy and clean air research
  The ISO 9001:2015 certified Sustainability Energy and Clean Air Research Laboratory provides services related to the solar energy, thermal analysis using differential scanning calorimetry and Thermogravimetric analysis, optical properties of materials, modelling, characterization and training of air quality in indoor and outdoor environments.

- thermophysical properties measurement
  The Thermophysical Properties Measurement Laboratory provides services related to the measurement, modeling, characterization and training on Modulated Digital Scanning Calorimetry and Xenon Flash Analysis. The capabilities of this laboratory include measuring the specific heat, latent heat, and thermal conductivity of materials at elevated temperatures.

- petro-physics
  The Petro-physics Laboratory is furnished with equipment for the tests related to the reservoir rock properties and can provide services in the form of core cutting and preparation, Dean stark core cleaning and rock fluid content, rock thin section, helium porosity measurement, electrical measurement and determination of Archie’s parameters (a, m and n).

For information visit www.qatar.tamu.edu/research/technical-services

“Technical Services caters to the needs of our academic partners, industrial entities, educational institutions, research centers and institutes, and government organizations by sharing its state-of-the-art research equipment and the expertise of its faculty and staff.” — Dr. Hassan S. Bazzi

Associate Dean for Research