# SUPPORTING ACADEMIC DIVISION

The Texas A&M Core Curriculum, in compliance with the Texas Core Curriculum, provides students with a foundation of knowledge of human cultures and the physical and natural world, develops principles of personal and social responsibility for living in a diverse world, and advances intellectual and practical skills that are essential for all learning. In support of the Core Curriculum, the Division of Arts and Sciences enhances the individual degree programs and university graduation requirements.

The core curriculum focuses on the development of six skills that have been shown to be effective in preparing students for the job market and their role in a diverse world and democratic society.

- *Critical Thinking Skills* – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
- *Communication Skills* – to include effective development, interpretation and expression of ideas through written, oral and visual communication.
- *Empirical and Quantitative Skills* – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
- *Teamwork* – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.
- *Personal Responsibility* – to include the ability to connect choices, actions and consequences to ethical decision-making.
- *Social Responsibility* – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.

For additional information, please reference http://core.tamu.edu.

## Faculty

Abbas, Naqaa, Instructional Assistant Professor
Division of Arts and Sciences-Qatar Campus
PHD, The University of Western Ontario, 2016

Al-Hashimi, Mohammed, Research Associate Professor
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PHD, Queen Mary Westfield College, University of London, 2007

Alonso, Ricardo, Instructional Associate Professor
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PHD, The University of Texas at Austin, 2008

Bazzi, Hassan, Professor
Division of Arts and Sciences-Qatar Campus
PHD, McGill University, 2003

Belic, Milivoj, Professor
Division of Arts and Sciences-Qatar Campus
PHD, The City University of New York, 1980

Bengali, Ashfaq, Professor
Division of Arts and Sciences-Qatar Campus
PHD, University of Minnesota, 1992

Bouhali, Othmane, Research Professor
Division of Arts and Sciences-Qatar Campus
PHD, Universite Libre de Bruxelles, Faculte des Sciences, 1999

Bounds, Brittany, Instructional Assistant Professor
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PHD, Texas A&M University, 2015

Carson, Robert, Instructional Assistant Professor
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PHD, Johns Hopkins University, 2015

Elsheikh, Aymen, Instructional Assistant Professor
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PHD, Indiana University at Bloomington, 2012

Hillman, Sara, Instructional Assistant Professor
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PHD, Michigan State University, 2011

Huang, Tingwen, Professor
Division of Arts and Sciences-Qatar Campus
PHD, Texas A&M University, 2002

Johnson, Violet, Professor
Division of Arts and Sciences-Qatar Campus
PHD, Boston College, 1992

Kim, Joung Dong, Instructional Associate Professor
Division of Arts and Sciences-Qatar Campus
PHD, State University of New York at Stony Brook, 2012

Krolikowski, Wieslaw, Professor
Division of Arts and Sciences-Qatar Campus
PHD, Institute of Physics, Polish Academy of Sciences, 1988

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PHD, University of California, San Diego, 2000

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PHD, University of Illinois, 2012

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PHD, University of Rouen, France, 1998

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PHD, Seoul National University, 2002

Pirzada, Tehmina, Instructional Assistant Professor
Division of Arts and Sciences-Qatar Campus
PHD, Purdue University, 2017

Queen, Mary Teresa, Instructional Assistant Professor
Division of Arts and Sciences-Qatar Campus
PHD, SYRACUSE UNIVERSITY, 2005

Schmalstig, Anne, Instructional Assistant Professor
Division of Arts and Sciences-Qatar Campus
PHD, University of Miami, 2020

Scott, Bryant Louis, Instructional Assistant Professor
Division of Arts and Sciences-Qatar Campus
PHD, University of Miami, 2020

Soukiassian, Yeran, Senior Lecturer
Division of Arts and Sciences-Qatar Campus
MS, American University of Beirut, 2007

Trabelsi, Saber, Instructional Assistant Professor
Division of Arts and Sciences-Qatar Campus
PHD, Universidade Estadual de Campinas, 2010

Ura, Joseph, Professor
Division of Arts and Sciences-Qatar Campus
PHD, University of North Carolina Chapel Hill, 2006

Van De Logt, Martinus, Associate Professor
Division of Arts and Sciences-Qatar Campus
PHD, Oklahoma State University, 2002

## Liberal Arts

# Liberal Arts

Examples of history show us that a liberal arts education is the foundation of a strong and progressive society. The Division of Arts and Sciences offers students an opportunity to explore the intellectual achievements of humankind through a disciplined and responsible study of issues that have been of enduring importance to people. Thus, courses in liberal arts help students develop sensitivity to the questions and values that confront them in their daily lives. At the same time, skills are built that can be put to use in solving complex problems. One of the division's principal objectives is to achieve the hallmark of an educated person: a fundamental knowledge of the forces that have shaped and continue to direct our cultural identities.

## Sciences

# Sciences

### Chemistry

An understanding of chemistry is critical to an understanding of life and its associated activities. Chemistry and chemical principles profoundly influence the way we live, communicate and interact with one another, so it is little wonder that a strong background in chemistry provides a solid foundation for a variety of careers of major importance in the 21st century. Chemistry is uniquely positioned at the crossroads between the biological and physical sciences. By exploiting their understanding of both realms, chemists and other professionals with strong backgrounds in chemistry have made, and continue to make, major contributions to improve the human condition. Major technological and biological discoveries almost always depend on a fundamental understanding of chemistry, and the pursuit of these discoveries, as a way to improve the world in which we live, drives those who seek to be part of the process.

The Division of Arts and Sciences at Texas A&M at Qatar offers coursework and research in various areas of chemistry, organized into a program leading to a minor in chemistry.

### Mathematics

A comprehensive understanding of mathematics is a key foundation to engineering. The Texas A&M at Qatar mathematics curriculum is structured to teach mathematical concepts that enhance students' analytical abilities and to use quantitative mathematical tools and apply them to problems in engineering. Students will learn coordinate systems, vectors, analytical geometry, functions, differentiation and integration techniques, computer algebra systems (Maple and Matlab), multiple integration techniques, gradients, line and surface integrals, Stokes' theorems, differential equations, matrices, determinants, and topics in applied mathematics, such as Fourier series and wavelets with application to data compression and signal processing.

### Physics

Physics is the science that investigates and tries to understand the basic laws of nature. In this pursuit, it deals with the entire range of natural phenomena, from the smallest domain of subnuclear particles to the largest domain of distant objects in the universe.

This breadth of interests is reflected in the type of work pursued by physicists. Some physicists are interested in research on problems that are at the frontiers of knowledge. Some apply this newly acquired knowledge to make practical advances. Still others use knowledge of physics as a basis for careers in teaching or administration.