DEPARTMENT OF AEROSPACE ENGINEERING

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Head: Ivett Leyva

Director, Graduate Studies Program: Raktim Bhattacharya

The Department of Aerospace Engineering offers graduate work and research programs in aeronautical/aerospace engineering, leading to the degrees of MEng, MS, and PhD. The department also offers courses and faculty supervision for students pursuing the Master of Science and Doctor of Engineering degrees. The department provides educational and research opportunities in four core discipline areas associated with aerospace engineering. These are (1) aerodynamics and propulsion, (2) dynamics and control, (3) materials and structures, and (4) systems, design, and human integration. Areas of interest include aerodynamics, fluid dynamics, hypersonics, autonomous air/ground/space systems, machine learning and artificial intelligence, lasers, optics, plasma, electromagnetics, robotics, computational fluid dynamics, fluid-structure interaction (aeroelasticity), flight mechanics, astrodynamics, aircraft/spacecraft dynamics and control, rotorcraft, computational mechanics, solid mechanics, micromechanics, multifunctional materials, high temperature materials, nanomechanics, composite materials, bio-nano materials, aging aircraft and structures, and bioastronautics.

The 28 well equipped laboratories in the department include the Advanced Vertical Flight Laboratory, Aero and Fluid Dynamics Laboratory, Aerospace Laboratory for Lasers, Electromagnetics, and Optics (ALLEMO), Aerospace Systems, Technology Research and Operations (ASTRO) Laboratory, Aerospace Vehicle Systems Institute (AVSI), AggieSat Small Satellite Program Laboratory, Center for Intelligent Multifunctional Materials and Structures, Computational Stability and Transition Laboratory, Estimation, Decision and Planning Laboratory, High Temperature Gasdynamics Laboratory, Immersive Mechanics Visualization Laboratory, Klebanoff–Saric Low-Speed Low Disturbance Wind Tunnel (KSWT), Intelligent Systems Research Laboratory (ISRL), Land, Air and Space Robotics (LASR) Laboratory, Laser Diagnostics and High-Speed Combustion Laboratory, Materials and Testing Laboratory, Multifunctional Materials and Aerospace Structures Optimization (M2AESTRO) Laboratory, Nanostructured Materials Laboratory, National Aerothermochemistry and Hypersonics Laboratory (NAL), Oran W. Nicks Low–Speed Wind Tunnel (LSWT), Plasma Dynamics Modeling Laboratory, Plasma Simulation Laboratory, Propulsion Laboratory, Systems Engineering, Architecture and Knowledge (SEAK), Tensegrity and Morphing Structures Laboratory, Turbulence and Advanced Computations Laboratory (TACL), Vehicle Systems and Control Laboratory (VSCL), and ZLab, as well as modern High Performance Computing Facilities.

Faculty

Alfriend, Terry, Professor
Aerospace Engineering
PHD, Virginia Polytechnic Institute and State University, 1967

Benedict, Moble, Professor
Aerospace Engineering
PHD, University of Maryland, 2010

Benzerga, Amine A, Professor
Aerospace Engineering
PHD, Ecole Nationale Superieure Des Mines De Paris, 2000

Bhargava, Divya, Instructional Assistant Professor
Aerospace Engineering
PHD, Purdue University, 2021

Bhattacharya, Raktim, Professor
Aerospace Engineering
PHD, University of Minnesota, 2003

Bishop, Robert H, Professor
Aerospace Engineering
PHD, Rice University, 1990

Bowersox, Rodney D, Professor
Aerospace Engineering
PHD, Virginia Tech, 1992

Boyd, James G, Associate Professor
Aerospace Engineering
PHD, Texas A&M University, 1994

Chakravorty, Suman, Professor
Aerospace Engineering
PHD, University of Michigan, 2004

Chamitoff, Gregory E, Professor of the Practice
Aerospace Engineering
PHD, Massachusetts Institute of Technology, 1992

Cizmas, Paul G, Professor
Aerospace Engineering
PHD, Duke University, 1995

Creel, James, Visiting Research Associate Professor
Aerospace Engineering
PHD, Trinity College Dublin, 2017

Cruzado Garcia, Aitor, Research Assistant Professor
Aerospace Engineering
PHD, Mondragon University, 2013

Currie-Gregg, Nancy J, Professor of the Practice
Aerospace Engineering
PHD, University of Houston, 1997

DeMars, Kyle J., Professor
Aerospace Engineering
PHD, University of Texas, 2010

Diaz Artiles, Ana, Associate Professor
Aerospace Engineering
PHD, Massachusetts Institute of Technology, 2015

Dogariu, Arthur, Associate Professor
Aerospace Engineering
PHD, University of Central Florida, 1997

Donzis, Diego, Professor
Aerospace Engineering
PHD, Georgia Institute of Technology, 2007

Dunbar, Bonnie Jeanne, Professor
Aerospace Engineering
PHD, University of Houston, 1983

Geelen, Rudy Jose Maurice, Assistant Professor
Aerospace Engineering
PHD, Duke University, 2020

Girimaji, Sharath S, Professor
Aerospace Engineering
PHD, Cornell University, 1990

Guhathakurta, Swagnik, Assistant Professor
Aerospace Engineering
PHD, University of Florida, 2021

Hartl, Darren J, Associate Professor
Aerospace Engineering
PHD, Texas A&M University, 2009

Ifti, Hassan Saad, Assistant Professor
Aerospace Engineering
PHD, University of Oxford, 2022

Jackson, Scott, Associate Professor
Aerospace Engineering
PHD, California Institute of Technology, 2005

Jameson, Antony, Professor
Aerospace Engineering
PHD, University of Cambridge, 1963

Junkins, John L, Distinguished Professor
Aerospace Engineering
PHD, University of California at Los Angeles, 1969

Karpetis, Adonios N, Associate Professor
Aerospace Engineering
PHD, Yale University, 1998

Lagoudas, Dimitris C, Professor
Aerospace Engineering
PHD, Lehigh University, 1986

Le Graverend, Jean-Briac B, Associate Professor
Aerospace Engineering
PHD, Ecole Nationale de Mécanique et d'Aérotechnique, France, 2013

Leonov, Boris S, Research Assistant Professor
Aerospace Engineering
PHD, Texas A&M University, 2023

Leyva, Ivett A, Professor
Aerospace Engineering
PHD, California Institute of Technology, 1999

Majji, Manoranjan, Professor
Aerospace Engineering
PHD, Texas A&M University, 2009

Miles, Richard B, Professor
Aerospace Engineering
PHD, Stanford University, 1972

Mortari, Daniele, Professor
Aerospace Engineering
PHD, University La Sapienza of Rome, 1980

Naraghi, Mohammad, Professor
Aerospace Engineering
PHD, University of Illinois at Urbana Champaign, 2009

Oran, Elaine, University Distinguished Professor
Aerospace Engineering
PHD, Yale University, 1972

Prabhu, Kaushik Keshav, Instructional Assistant Professor
Aerospace Engineering
PHD, Texas A&M University, 2023

Reed, Helen L, Senior Professor
Aerospace Engineering
PHD, Virginia Polytechnic Institute & State University, 1981

Selva Valero, Daniel, Associate Professor
Aerospace Engineering
PHD, Massachusetts Institute of Technology, 2012

Siddiqui, Farhan, Research Professor
Aerospace Engineering
PHD, Texas A&M University, 2021

Singh, Narendra, Assistant Professor
Aerospace Engineering
PHD, University of Minnesota, Twin Cities, 2020

Strganac, Thomas W, Senior Professor
Aerospace Engineering
PHD, Virginia Polytechnic Institute & State University, 1987

Strouboulis, Theofanis, Professor
Aerospace Engineering
PHD, University of Texas, 1986

Takachi Tomita, Jesuino, Professor of the Practice
Aerospace Engineering
PHD, Instituto Tecnológico de Aeronáutica,, 2009

Talreja, Ramesh R, Professor
Aerospace Engineering
PHD, The Technical University of Denmark, 1974

Tichenor, Nathan R, Visiting Research Associate Professor
Aerospace Engineering
PHD, Texas A&M University, 2010

Tropina, Albina, Research Professor
Aerospace Engineering
PHD, Kyiv Aviation University, 2011
PHD, V.N. Karazin Kharkiv National University, 1999

Vadali, Srinivas R, Professor
Aerospace Engineering
PHD, Virginia Tech, 1983

Valasek, John L, Professor
Aerospace Engineering
PHD, University of Kansas, 1995

Whitcomb, John D, Professor
Aerospace Engineering
PHD, Virginia Tech, 1988

Zhu, Hejian, Assistant Professor
Aerospace Engineering
PHD, Massachusetts Institute of Technology, 2023

Masters

- Master of Engineering in Aerospace Engineering (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/aerospace/meng/)
- Master of Engineering in Space Engineering (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/aerospace/space-engineering-meng/)
- Master of Science in Aerospace Engineering (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/aerospace/ms/)

Doctoral

- Doctor of Philosophy in Aerospace Engineering (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/aerospace/phd/)

Certificates

- Human Systems Integration-Bioastronautics Certificate (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/aerospace/human-systems-integration-bioastronautics-certificate/)