DEPARTMENT OF AEROSPACE ENGINEERING

http://engineering.tamu.edu/aerospace

Head: R.D. Bowersox

Graduate Program Director: J.L. Valasek

Graduate Advisor: Gail Rowe

The Department of Aerospace Engineering offers graduate work and research programs in aeronautical/aerospace engineering. Programs leading to the degrees of MEng, MS, and PhD are available. The department also offers courses and faculty supervision for students pursuing the Doctor of Engineering degree. The department provides educational and research opportunities in the three core discipline areas associated with aerospace engineering. These are (1) aerodynamics and propulsion, (2) dynamics and control, and (3) materials and structures. Areas of interest include aerodynamics, hypersonics, autonomous air/ground/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. A foreign language is not required for any of the aerospace degree programs.

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 & 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), Laboratory for Uncertainty Quantification, 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), Tensilescopy & Morphing Structures Laboratory, Turbulence and Advanced Computations Laboratory (TACL), Vehicle Systems & Control Laboratory (VSCL), and ZLab, as well as modern High Speed Computing Facilities.

Faculty

Alfriend III, Kyle T, Distinguished Professor
Aerospace Engineering
PHD, Virginia Polytechnic Institute and State University, 1967

Andrienko, Daniil Aleksandrovich, Assistant Professor
Aerospace Engineering
PHD, Moscow Institute of Physics and Technology, 2014
PHD, Wright State University, 2014

Benzerga, Amine A, Professor
Aerospace Engineering

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

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, Associate Professor
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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

Cruzado Garcia, Aitor, Lecturer
Aerospace Engineering
PHD, Mondragon University, 2013

Diaz Artilés, Ana, Assistant Professor
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PHD, Massachusetts Institute of Technology, 2015

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

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

Gerakis, Alexandros, Assistant Professor
Aerospace Engineering
PHD, University College London, 2014

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

Hara, Kentaro, Assistant Professor
Aerospace Engineering
PHD, University of Michigan - Ann Arbor, 2015

Hartl, Darren J, Assistant Professor
Aerospace Engineering
PHD, Texas A&M University, 2009
Hurtado, John E, Professor  
Aerospace Engineering  
PHD, Texas A&M University, 1995

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

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

Karaman, Ibrahim, Professor  
Aerospace Engineering  
PHD, University of Illinois - Urbana-Champaign, 2000

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

Kinra, Vikram K, Professor  
Aerospace Engineering  
PHD, Brown University, 1975

Kulatilaka, Waruna D, Associate Professor  
Aerospace Engineering  
DEN, Purdue University, 2006

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

Langari, Gholamreza, Professor  
Aerospace Engineering  
PHD, University of California, Berkeley, 1991

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

Limbach, Christopher M, Assistant Professor  
Aerospace Engineering  
PHD, Princeton University, 2015

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

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

Mobley, Benedict, Assistant Professor  
Aerospace Engineering  
PHD, University of Maryland, 2010

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

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

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

Pollock, Thomas C, Senior Associate Professor  
Aerospace Engineering  
PHD, University of Virginia, 1977

Poludnenko, Oleksiy Y, Associate Professor  
Aerospace Engineering  
PHD, University of Rochester, 2004

Reddy, Junuthula N, University Distinguished Professor  
Aerospace Engineering  
PHD, University of Alabama at Huntsville, 1974

Reed, Helen L, Professor  
Aerospace Engineering  
PHD, Virginia Tech, 1981

Richard, Jacques C, Senior Lecturer  
Aerospace Engineering  
PHD, Rensselaer University, 1989

Saric, William S, University Distinguished Professor  
Aerospace Engineering  
PHD, Illinois Institute of Technology, 1968

Scully, Marlan O, University Distinguished Professor  
Aerospace Engineering  
PHD, Yale University, 1966

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

Shryock, Kristi J, Associate Professor of Instruction  
Aerospace Engineering  
PHD, Texas A&M University, 2011

Skelton, Robert E, Professor  
Aerospace Engineering  
PHD, University of California, 1976

Strganac, Thomas W, Professor  
Aerospace Engineering  
PHD, Virginia Tech, 1987

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

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

Tichenor, Nathan R, Research Assistant 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, 2000
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

White, Edward B, Professor
Aerospace Engineering
PHD, Arizona State University, 2000

Wong, Zi Jing, Assistant Professor
Aerospace Engineering
PHD, University of California, Berkeley, 2015

**Masters**

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

**Doctoral**

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