AEROSPACE ENGINEERING GRADUATE PROGRAM FACT SHEET

Why pursue a graduate degree in AEROSPACE ENGINEERING at The University of Texas at Arlington?

Rapid advances in aerospace systems require the successful aerospace engineer to develop new concepts and bring them into reality as reliable, competitive, and environmentally acceptable products. Housed within the Mechanical and Aerospace Engineering Department, the aerospace engineering graduate program provides advanced training to prepare students for careers in aerospace system research and development, conceptual flight vehicle design, or higher education. UTA's aerospace engineering researchers have received high levels of research funding from NSF, DOE, ONR, NASA, DOD and other federal, industrial and state sources in the areas of materials, unmanned vehicle systems, design and development of air and space vehicles, and more.

An Ideal Location

UTA is located in the heart of the Dallas/ Fort Worth area of North Texas – the fourth-largest metropolitan area in the United States. The region has one of the highest concentrations of corporate headquarters in the nation, and just minutes from campus, DFW International Airport and several interstate

highways allow easy access to global collaboration and commerce.

There's plenty to do here: the NFL's Dallas Cowboys and Major League Baseball's Texas Rangers both play about two miles from campus, and the Cowboys' AT&T Stadium regularly hosts blockbuster concerts and other major events. There's an excellent music scene in Dallas and Fort Worth, and plenty of shopping, outdoor recreation and entertainment options throughout the region. The weather's great too: on average, Arlington enjoys 235 sunny days each year, with an average July high of 95 degrees (31°C) and an average January low of 35 degrees (1°C).







Degrees

- Ph.D. in Aerospace Engineering
- M.Eng. in Aerospace Engineering
- M.S. in Aerospace Engineering

Student Composition and Diversity

U.S. News and World Report rated UTA as the 5th-most diverse university in the United States in 2017. The University is an Hispanic-serving institution and is one of the 40 most popular U.S. colleges and universities for international students, based on data from the Institute of International Education's 2014-15 Open Doors Report.

How to Apply

Apply today at:

uta.edu/admissions/graduate/apply/. Be sure to check application deadlines and include all of the required application materials and fees.

Financial Assistance

All applications for admission will be also be considered for assistantships, fellowships, and scholarships. Complete your application early to take advantage of all opportunities for financial aid.

Who Hires Our Graduates?

Graduates of the department work at many companies in the region and around the nation, including Lockheed Martin, Bell Helicopter Textron, Boeing, General Motors, and others.

Learn More

For more information, visit our website at **uta.engineering/ae** or contact the graduate advisor:

Kamesh Subbarao, Ph.D. 817-272-2500 subbarao@uta.edu

Learn On the web: uta.engineering/ae More! Email: GradEngineering@uta.edu

An impactful research university

Dramatic, measurable advancements continue to propel UTA toward its goal of becoming one of the nation's premier research institutions. The University is designated an R-1 Carnegie "highest research activity" institution, putting it in an elite group of 115 institutions, including Harvard, MIT, and Johns Hopkins. The College of Engineering accounts for nearly half of the university's research expenditures each year, with funding from the National Science Foundation, Department of Defense, National Institutes of Health, Department of Energy, and others. Since 2012, the College's research expenditures have risen from \$25.6 million to \$32.3 million. Overall, UTA's engineering-related expenditures topped \$48.8 million last year. Twelve members of the UTA faculty, including eight engineering faculty, are Fellows of the National Academy of Inventors and one is a Fellow of the National Academy of Engineering.

Current Research

Andrew Makeev received a \$900,000 grant from the Army Research Lab to address the Army's need for better structural diagnostics and life assessment in composite aircraft parts. He also received a \$600,000 grant from Boeing to test composite components that officials believe will lead to longer-lasting aircraft and identify when those components might fail.

Luca Maddalena was awarded a \$1.01 million Defense University Research Instrumentation Program grant to build the country's only universitybased, arc-heated, hypersonic-testing facility for thermal protection systems. He recently received a pair of grants totalling more than \$1.5 million to characterize the arc-jet plasma flow and to purchase a femtosecond laser system, which will be the only one of its kind to be used in an arc-heated wind tunnel in the United States.

Endel Iarve is leading research as part of a \$1 million U.S. Air Force Research Laboratory grant looking at using Discrete Damage Modeling Methodology to determine when composite materials used to build aircraft fail and to establish fatigue and durability standards for materials used in aircraft.





State-of-the-Art Research Facilities



Advanced Materials and Structures Lab

The Advanced Materials and Structures Lab features state-of-the-art facilities and equipment that enable a fundamental shift from trial-anderror experimentation loops and empiricism in the design of composite materials and structures, to efficient diagnostics and prognosis methods.





Cody Ground '17 Ph.D., B.S. '12 earned a prestigious NASA Pathways internship with the Hypersonic Air-Breathing Propulsion Branch at NASA Langley Research Center while completing his dissertation.

Aerodynamics Research Center

The ARC features five large-scale wind tunnels (arc jet, low-speed, transonic, supersonic, and hypersonic), a machine shop, an electronics room, office space for 15 students, and a separate compressor building. The building is being renovated to house the arc-heated hypersonic testing facility.