Background

The Tuskegee University (TU) DOD-AERIC will provide a unique, exciting, and engaging environment for the training/education of future DOD aerospace engineers, as well as engineers from aerospace-related areas. The Center will build on the strong research capabilities and track record of the TU College of Engineering to tackle basic and applied research relevant to the DOD and aerospace industry. The TU College of Engineering will develop and leverage partnerships among Defense Laboratories, aerospace industries, and academic engineering programs to enrich the DOD-AERIC’s activities. These include providing research projects, teaming on joint proposals, providing student internships and employment opportunities, joint advising of student research projects, sponsoring seminars and workshops, and establishing the TU DOD-AERIC External Advisory Committee.

U.S. citizens from underrepresented populations are sought particularly, and highly encouraged to apply.

Lisa Pitts, Business Manager
lpitts@tuskegee.edu
334-727-8096
or
Heshmat Aglan, Dean
P/I: DOD-AERIC
haglan@tuskegee.edu
334-727-8081

College of Engineering
Tuskegee University
200 Luther Foster Hall
1200 W Montgomery Road
Tuskegee, Alabama 36088
Recruitment

- Upperclassmen who are interested in the DOD-AERIC, with a major in Aerospace Science Engineering, Mechanical Engineering or Physics, are invited to participate in the activities of the Center.

- Graduating seniors, receiving degrees in Aerospace Science Engineering, Mechanical Engineering or Physics, are also invited to join the DOD-AERIC to pursue a Master’s degree in Aerospace or Mechanical Engineering.

Contact Us
Lisa Pitts, Business Manager
lpitts@tuskegee.edu
334-727-8096

or

Heshmat Aglan, Dean
PI: DOD-AERIC
haglan@tuskegee.edu
334-727-8081

College of Engineering
Tuskegee University
200 Luther Foster Hall
1200 W Montgomery Road
Tuskegee, Alabama 36088

www.tuskegee.edu/engineering

Components of DOD-AERIC

The Education Component of the Center will develop courseware materials on contemporary aerospace and other engineering topics, technical elective courses, and course modules for both graduate and undergraduate students. Undergraduate students will gain expertise preparing them for the multidisciplinary master’s degree that will be offered, as well as other aerospace programs in the United States.

The Research Component will enhance basic and applied research in the areas of characterization of aerospace and DOD-related materials and components exposed to extreme environmental conditions, experimental aerodynamics, additive manufacturing, fracture behavior and damage tolerance of Ceramic Matrix Composites, etc. The products from this effort will enable transition of knowledge and understanding to DOD laboratories via publications, graduate theses, conferences, and undergraduate research reports.

The Innovation Component will provide students with the environment and resources (materials, faculty, guest speakers, inventors/role models) for exploration. The products of this environment will be documentation of the development of pathways to commercialization and entrepreneurship.

The Outreach Component of the Center will expose high and middle school students, mostly from underrepresented populations, and their teachers in the research and educational elements of the DOD-AERIC activities. Specifically, a summer program (Mentoring Introduction to Aviation Science, MITAS) and a Saturday program (Aviation Career Exploration, ACE) will capture in these students and teachers an awareness, interest, excitement, and confidence in the potential of a career in DOD, aerospace, and other engineering disciplines.

“The Power of Excellence is Overwhelming. It is Always in Demand, and Nobody Cares About Its Color” - Gen. Daniel “Chappie” James
(Tuskegee graduate and the first African American to reach the rank of four-star general in the armed forces)