

Tenure-track Assistant Professor, National Defense and  
Space Engineering  
Vanderbilt University

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Posted Sep. 30, 2025, set to expire Feb. 12, 2026

**Job Title** Tenure-track Assistant Professor, National Defense and  
Space Engineering

**Department** Mechanical Engineering  
<https://engineering.vanderbilt.edu/departments/mechanical-engineering/>

**Institution** Vanderbilt University  
Nashville, Tennessee

**Date Posted** Sep. 30, 2025

**Application Deadline** Open Until Filled

**Position Start Date** Aug. 16, 2026

**Job Categories** Assistant Professor  
Associate Professor

**Academic Field(s)** Mechanical Engineering  
Engineering Mechanics  
Aerospace/Aeronautical/Astronautics  
Engineering - Other  
Robotics

**Job Website** <https://apply.interfolio.com/174735>

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**Job Description**

The Department of Mechanical Engineering at Vanderbilt University invites applications for a tenure-

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track position at the Assistant Professor level, to begin in Fall 2026. We are seeking outstanding candidates whose research lies within a core area of mechanical engineering—including but not limited to dynamics and control, robotics, thermofluid sciences, materials, and manufacturing. The ideal candidate's expertise should complement and enhance existing departmental research strengths. Broadly, the candidate's work may align with one of the department's two tracks: robotics or thermofluids. Candidates should have a strong theoretical foundation and a clear vision for applying fundamental mechanical engineering principles to address major societal challenges in **national defense** and **space engineering**. Areas of particular interest include, but are not limited to, **robotics, autonomous systems, intelligent systems, aerospace propulsion, hypersonics, design and control of aerospace and space vehicles, space manufacturing, and AI/machine learning**.

The successful candidate is expected to develop a strong, externally funded research program and to pursue excellence in both scholarship and teaching. They should be capable of teaching one or more core mechanical engineering courses and contributing to the expansion of graduate-level offerings. Applicants with expertise in either experimental or computational research are encouraged to apply. Experience with the application of AI and machine-learning tools in research, and the incorporation of these technologies into teaching, will be considered a significant advantage.

Applications should include (i) a cover letter, (ii) a complete curriculum vitae, (iii) a statement of research, (iv) a statement of teaching, and (v) a minimum of three references. Application materials are to be submitted online at <https://apply.interfolio.com/174735>. Applications will be reviewed as they are received; those received by **December 1, 2025**, will be given full consideration. At the beginning of the cover letter, please indicate whether it is for the robotics or thermofluids track.

### About the Department and University

The Department of Mechanical Engineering at Vanderbilt University includes 22 primary faculty members (16 tenured/tenure-track), 8 staff members, approximately 280 undergraduate students, and 70 Ph.D. students. The department maintains a vibrant research environment with annual research expenditures of approximately \$8 million. Our faculty are internationally recognized for research excellence in areas such as surgical robotics and rehabilitation engineering, nanophotonics, nanoscale energy transport, biomaterials and biomedical microdevices, fluid-structure interaction, combustion diagnostics, and additive manufacturing.

The Department of Mechanical Engineering fosters a highly collegial environment with a strong culture of collaboration and interdisciplinary research. Faculty members play integral roles in several major research centers at Vanderbilt, including the Vanderbilt Institute of Surgery and Engineering (VISE), Vanderbilt Institute of Nanoscale Science and Engineering (VINSE), the FRIST Center for Autism and

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Innovation, and the newly established Institute for National Security, Vanderbilt Center for Sustainability, Energy, and Climate (VSEC). In addition to internal collaborations, the department has established extensive partnerships beyond the University, most notably with the Vanderbilt University Medical Center, which is co-located on the same campus.

Ranked #17 nationally according to the U.S. News and World Report, Vanderbilt University is a private, internationally recognized research university located on 330 park-like acres 1.5 miles from downtown Nashville, Tennessee. Its 11 distinct schools, including the newly established College of Connected Computing, share a single cohesive campus that values collaboration. The University enrolls over 13,700 undergraduate, graduate, and professional students, with women comprising over 50% of both the overall undergraduate student body and recent cohorts in the School of Engineering.

With over two million metro population, Nashville's top employers include trade, transportation, and utilities; education and health services; professional and business services; government; and leisure and hospitality. Other industries include manufacturing, financial activities, construction, and information. Long known as a hub for health care and music, Nashville is a technology center with a considerable pool of health care, AI, and defense-related jobs available. In recent years, the city has experienced an influx of major office openings by some of the largest global tech companies and prime Silicon Valley startups.

### **EEO/AA Policy**

Vanderbilt University has a strong institutional commitment to recruiting and retaining an academically and culturally representative community of faculty. Minorities, women, individuals with disabilities, and members of other underrepresented groups, in particular, are encouraged to apply. Vanderbilt is an Equal Opportunity/Affirmative Action employer.

### **Contact Information**

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

**Contact**      Eric Barth

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