

# DEPARTMENT OF AEROSPACE AND MECHANICAL ENGINEERING

Design aircraft or explore the universe by studying aerospace engineering at Saint Louis University. Prepare for a career in a highly multidisciplinary field at SLU, working with all facets of machines and designs in mechanical engineering.

## Aerospace Engineering

From super-efficient subsonic jetliners to transatmospheric aircraft that can fly into orbit, aerospace engineers create new technologies in commercial aviation, defense systems, space exploration and unmanned aerial systems. SLU provides aerospace engineering students with a challenging technical education emphasizing the understanding of complex systems. It launches your career with easy access to a sophisticated computer-aided design laboratory, wind tunnels, a structures laboratory, and unmanned aerial systems labs. In addition, design skills are carefully integrated into engineering courses. The design experience culminates in a sequence of two capstone design courses during the senior year.

## Mechanical Engineering

Mechanical engineering is a broad and challenging engineering discipline. Mechanical engineers create products and systems ranging from consumer products to automated processes that are essential to our society. SLU provides a unique, intellectually challenging, hands-on curriculum that integrates broad-based technical knowledge with tangible skills. Students learn the principles of solid modeling during the first two semesters. From there, they study creative problem-solving, design and product realization. Hands-on lab experiences in fluid dynamics, thermodynamics, machine shop, wind tunnels, water tunnel and mechatronics labs provide a well-rounded engineering experience.

## Programs

### Undergraduate

- Aerospace Engineering, B.S. (<https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/aerospace-engineering-bs/>)
- Aerospace Engineering, B.S. to Aerospace Engineering, M.S. Accelerated Program (<https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/aerospace-engineering-abm/>)
- Aerospace Engineering, Minor (<https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/aerospace-engineering-minor/>)
- Mathematics, B.S. (Harris-Stowe State University) and Aerospace Engineering, B.S. Dual Degree (<https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/math-hssu-aerospace-engineering-dual-bs/>)
- Mathematics, B.S. (Harris-Stowe State University) and Mechanical Engineering, B.S. Dual Degree (<https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/math-hssu-mechanical-engineering-dual-bs/>)

- Mechanical Engineering, B.S. (<https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/mechanical-engineering-bs/>)
- Mechanical Engineering, B.S. to Mechanical Engineering, M.S. Accelerated Program (<https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/mechanical-engineering-abm/>)
- Mechanical Engineering, Minor (<https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/mechanical-engineering-minor/>)

## Graduate

- Aerospace Engineering, M.S. (<https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/aerospace-engineering-ms/>)
- Aerospace Engineering, Ph.D. (<https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/aerospace-engineering-phd/>)
- Mechanical Engineering, M.S. (<https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/mechanical-engineering-ms/>)
- Mechanical Engineering, Ph.D. (<https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/mechanical-engineering-phd/>)

## Faculty Leadership

Jenna Gorlewicz, Ph.D.  
*Department chair*

## Faculty

Theodosios Alexander, Sc.D.  
Patricia Benoy, Ph.D., emeritus  
Sridhar Condoor, Ph.D.  
John George, Ph.D., emeritus  
Jenna Gorlewicz, Ph.D.  
Srikanth Gururajan, Ph.D.  
Sanjay Jayaram, Ph.D.  
Swami Karunamoorthy, Ph.D., emeritus  
Ray LeBeau, Ph.D.  
Danahe Marmolejo, Ph.D.  
Mark McQuilling, Ph.D.  
Susheel Singh, Ph.D.  
Michael Swartwout, Ph.D.