# AEROSPACE AND MECHANICAL ENGINEERING, B.S. DOUBLE MAJOR

This double major option allows a Saint Louis University student to take additional courses to complete a bachelor's degree with both aerospace and mechanical engineering majors. The student must complete the standard requirements for one of these majors (the primary major). In addition, the student must complete an additional 23 or 25 credits in the other field (the secondary major). Students pursuing this option are responsible for creating a schedule that allows them to finish all these courses in a timely fashion while meeting all pre-and co-requisite requirements.

For additional information, see the catalog entries for the following programs:

Aerospace Engineering, B.S. (https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/aerospace-engineering-bs/)

Mechanical Engineering, B.S. (https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/mechanical-engineering-bs/)

### **Accreditation**

The aerospace engineering, biomedical engineering, civil engineering, computer engineering, electrical engineering and mechanical engineering undergraduate curricula are accredited by the Engineering Accreditation Commission of ABET, www.abet.org (https://www.abet.org).

## Requirements

# Aerospace Engineering Primary, Mechanical Engineering Secondary

### **Additional Courses Required**

Code	Title	Credits
MENG 2400	Mechatronics Systems Design	3
MENG 2450	Engineering Experimentation	3
MENG 3001	Mechanical Engineering Lab	1
MENG 3010	Machine Design	3
MENG 3600	Manufacturing Process	3
MENG 4024	Mechanical Systems Design	4
MENG 4300	Heat Transfer	3
MENG 4304	Thermal Systems Design	3
MENG 4450	Programmable Logic Controllers and Robotics	3
Total Credits		26

## Mechanical Engineering Primary, Aerospace Engineering Secondary

#### **Additional Courses Required**

Code	Title	Credits
AENG 2020	Introduction to Aero and Astro Engineering	1
AENG 3000	Performance	3
AENG 3150	Astrodynamics	3

Total Credits		23
AENG 4400	Stability and Control	3
AENG 4210	Propulsion	3
AENG 4111	Aerospace Laboratory	1
AENG 4110	Flight Vehicle Structures	3
AENG 4004	Flight Vehicle Analysis and Design I	3
or AENG 3240	Aerodynamics and Boundary Layer Flow	
AENG 3230	Compressible Flow	3

#### Non-Course Requirements

All Science and Engineering B.A. and B.S. students must complete an exit interview/survey near the end of their bachelor's program.

#### **Continuation Standards**

Students must maintain a minimum 2.00 GPA.

### Roadmap

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

Courses and milestones designated as critical (marked with!) must be completed in the semester listed to ensure a timely graduation. Transfer credit may change the roadmap.

This roadmap should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.