

# AEROSPACE ENGINEERING, B.S.(STLCC 2+SLU)

This program plan is part of the formal 2+SLU transfer agreement between St. Louis Community College and Saint Louis University.

Students in this program will satisfy the degree requirements published in the 2023-2024 academic catalog at St. Louis Community College and the 2025-2026 academic catalog at SLU. Students must complete all courses and transfer to SLU by the fall 2028 semester.

Students who plan to transfer to SLU after fall 2028 should contact a transfer admission counselor (<https://www.slu.edu/admission/transfer/contact.php>) to explore options.

Students who have been following a program plan from a previous year's academic catalog can reference their older program plan version by reviewing our previous catalogs (<https://catalog.slu.edu/previous-catalogs/>).

For additional information see the catalog entry for:

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

## Admission Requirements

- Students must complete all the courses outlined in the program plan unless an exception is approved by Saint Louis University.
- Students must complete an application for admission.
- Students may be subject to admission review under circumstances outlined in the admission policies (<https://catalog.slu.edu/academic-policies/office-admission/undergraduate/admission-policies/>).
- Students must present a 2.70 cumulative GPA at the time of transfer to SLU.
- This program plan is structured for a fall semester start at SLU and will take five semesters to complete. Students interested in starting the spring semester should contact SLU to explore this option.

## Program Plan

Program Plans provide a guided pathway for students to earn an associate degree at their home institution and a bachelor's degree at Saint Louis University. Students may change the sequence in which they complete courses at their home institution. Students who complete a course that is not part of this Program Plan are encouraged to contact SLU to see if the course could be substituted.

## St. Louis Community College Courses

Transfer Course	Transfer Course Title	Transfer Course Credits	Equivalent SLU Course	Equivalent SLU Credits
<b>Year One</b>				
<b>Fall</b>				
CHM 105	General Chemistry I (MOTR CHEM 150L) **	5	CHEM 1110 and CHEM 1115	3

ENG 101	College Composition I (MOTR ENGL 100)	3	ENGL 1500	3
ESC 100	Engineering Computer Applications and Design	3	Elective	3
MTH 210	Analytic Geometry and Calculus I **	5	MATH 1510	5
		<b>Credits</b>		16
<b>Spring</b>				
ESC 101	Scientific Computer Programming **	3	CSCI 1060	3
HST 101 or HST 102	United States History to 1865 (MOTR HIST 101) or United States History from 1865 to the Present (MOTR HIST 102)	3	HIST 1600 or HIST 1610	3
MTH 220	Analytic Geometry and Calculus II **	5	MATH 1520	5
PHY 122	Engineering Physics I (MOTR PHYS 200L) **	5	PHYS 1610 and PHYS 1620	5
		<b>Credits</b>		16
<b>Year Two</b>				
<b>Fall</b>				
ESC 200	Engineering Circuits I † **	4	ECE 2001 and ECE 2002	4
ESC 203	Engineering Mechanics I **	3	MENG 2100X	3
MTH 230	Analytic Geometry and Calculus III **	5	MATH 2530	5
PHY 223	Engineering Physics II **	5	PHYS 1630 and PHYS 1640	5
		<b>Credits</b>		17
<b>Spring</b>				
ENG 102 or COM 107	College Composition II (MOTR ENGL 200) or Public Speaking (MOTR COMM 110)	3	ENGL 1900 or CMM 1200	3

ESC 204	Engineering Dynamics **	3	MENG 2150	3
ESC 205	Mechanics of Materials **	3	MENG 3105	3
ESC 207	Engineering Thermodynamics **	3	MENG 2310	3
MTH 240	Differential Equations **	3	MATH 3550	3
<b>Credits</b>		15	15	
<b>St. Louis Community College Total Credits</b>		64	64	

\*\*This course must be passed with a grade of "C" or higher. SLU must review this course if it is transferred from another institution or testing service.

† ESC 200 (ECE 2001 and ECE 2002) is substituted for ECE 1100 and ECE 1200.

**Note:** This program plan is structured for a Fall semester start at SLU and will take 5 semesters to complete. Students interested in starting the Spring semester should contact SLU to explore this option.

**Note:** This program plan meets the program requirements for an A.S. in Engineering Science at STLCC.

## Saint Louis University Courses

Course	Title	Credits
<b>Year Three</b>		
<b>Fall</b>		
AENG 2020	Introduction to Aero and Astro Engineering	1
CORE 1500	Cura Personalis 1: Self in Community	1
MATH 3270	Advanced Mathematics for Engineers	3
MENG 1011	Prototyping	1
MENG 3110	Linear Vibrations	3
MENG 3200	Fluid Dynamics	3
SE 1700 & SE 1701	Engineering Fundamentals and Engineering Fundamentals Studio	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
AENG 3000	Performance	3
AENG 3410	Analysis and Control of Linear Systems	3
CORE 1200 or CORE 1900	Eloquentia Perfecta 2: Oral and Visual Communication or Eloquentia Perfecta 1: Written and Visual Communication	3
CORE 1700	Ultimate Questions: Philosophy	3
CORE 2500	Cura Personalis 2: Self in Contemplation	0
CORE Requirement	Equity and Global Identities: Global Interdependence	3
	Equity and Global Identities: Dignity, Ethics, and a Just Society	
MENG 3111	Mechanics Laboratory	1
<b>Credits</b>		<b>16</b>

<b>Year Four</b>		
<b>Fall</b>		
AENG 3150	Astrodynamics	3
AENG 3230	Compressible Flow	3
AENG 4004	Flight Vehicle Analysis and Design I	3
AENG 4400	Stability and Control	3
Technical Elective		3
<b>Credits</b>		<b>15</b>

<b>Spring</b>		
AENG 3050	Design of Space Missions	3
AENG 3240	Aerodynamics and Boundary Layer Flow	3
AENG 4014	Flight Vehicle Analysis and Design II	3
CORE 1600	Ultimate Questions: Theology	3
CORE 3600	Ways of Thinking: Social and Behavioral Sciences	3
<b>Credits</b>		<b>15</b>

<b>Year Five</b>		
<b>Fall</b>		
AENG 4110	Flight Vehicle Structures	3
AENG 4111	Aerospace Laboratory	1
AENG 4210	Propulsion	3
CORE 4500	Reflection-in-Action	0
Technical Electives		6
<b>Credits</b>		<b>13</b>
<b>Total Credits</b>		<b>74</b>

## Contact Us

For additional questions, please contact:

Transfer Admission  
314-977-2500  
transfer@slu.edu