

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 2020-2021 academic catalog at St. Louis Community College and the 2021-2022 academic catalog at SLU. Students must complete all courses and transfer to SLU on or before the spring 2025 semester.

Students who plan to transfer to SLU after spring 2025 should contact a transfer admission counselor (<https://www.slu.edu/admission/transfer/contact.php>) to explore options.

For additional information see the catalog entry for:

Aerospace Engineering, B.S.

Admission Requirements

- Student must complete all the courses outlined on the Program Plan unless an exception is approved by SLU.
- Student must complete an application for admission.
- Student may be subject to admission review under circumstances outlined in the Admission Policies (<https://catalog.slu.edu/academic-policies/office-admission/undergraduate/admission-policies/>).
- Student must present a 2.70 cumulative GPA at the time of transfer to SLU.

Program Plan

Program Plans provide a guided pathway for students to earn an associate's 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 |
|-----------------|--|-------------------------|-------------------------|------------------------|
| Year One | | | | |
| Fall | | | | |
| ENG 101 | College Composition I (MOTR ENGL 100) | 3 | ENGL 1500 | 3 |
| CHM 105 | General Chemistry I (MOTR CHEM 150L) | 5 | CHEM 1110 and CHEM 1115 | 3 |
| MTH 210 | Analytic Geometry and Calculus I † | 5 | MATH 1510 | 5 |
| ESC 100 | Engineering Computer Applications and Design | 3 | ESCI 1010 and ESCI 1020 | 3 |

| | | | | |
|-----------------|--|--|----------------------------|----|
| Credits | | | | |
| | | 16 | 16 | |
| Spring | | | | |
| 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 |
| | Social & Behavioral Sciences - Civics Course (MOTR course) | 3 | Humanistic Values Elective | 3 |
| ESC 101 | Scientific Computer Programming | 3 | CSCI 1060 | 3 |
| | | Credits | 16 | 16 |
| Year Two | | | | |
| Fall | | | | |
| MTH 230 | Analytic Geometry and Calculus III | 5 | MATH 2530 | 5 |
| PHY 223 | Engineering Physics II | 5 | PHYS 1630 and PHYS 1640 | 5 |
| ESC 203 | Engineering Mechanics I | 3 | ESCI 2100 | 3 |
| ESC 200 | Engineering Circuits I | 4 | ECE 2001 and ECE 2002 | 4 |
| | | Credits | 17 | 17 |
| Spring | | | | |
| MTH 240 | Differential Equations | 3 | MATH 3550 | 3 |
| ESC 207 | Engineering Thermodynamics | 3 | ESCI 2300 | 3 |
| ENG 102 | College Composition II (MOTR ENGL 200) | 3 | ENGL 1900 | 3 |
| ESC 204 | Engineering Mechanics II | 3 | ESCI 2150 | 3 |
| ESC 205 | Mechanics of Materials | 3 | ESCI 3100 | 3 |
| ESC 206 | Strength of Materials Lab | 1 | ESCI 3101 | 1 |
| | | Credits | 16 | 16 |
| | | St. Louis Community College Total Credits | 65 | 65 |

Saint Louis University Courses

| Course | Title | Credits |
|------------------------------|--|-----------|
| Year Three | | |
| Fall | | |
| AENG 2000 | Intro to Aeronautics & Astron | 3 |
| ESCI 3200 | Fluid Dynamics | 3 |
| ESCI 3201 | Fluid Dynamics Laboratory | 1 |
| ESCI 3110 | Linear Vibrations | 3 |
| MATH 3270 | Advanced Mathematics for Engineers | 3 |
| MENG 2011 | Engineering Shop Practice | 1 |
| THEO 1000 | Theological Foundations | 3 |
| Credits | | 17 |
| Spring | | |
| AENG 3100 | Computer Aided Engineering | 3 |
| AENG 3150 | Astrodynamics | 3 |
| AENG 3210 | Gas Dynamics | 3 |
| AENG 3220 | Aerodynamics | 3 |
| ESCI 3410 | Analysis and Control of Linear Systems | 3 |
| Cultural Diversity Elective | | 3 |
| Credits | | 18 |
| Summer | | |
| AENG 3000 | Performance | 3 |
| Credits | | 3 |
| Year Four | | |
| Fall | | |
| AENG 4004 | Flight Vehicle Analysis and Design I | 3 |
| AENG 4110 | Flight Vehicle Structures | 3 |
| AENG 4111 | Aerospace Laboratory | 1 |
| AENG 4210 | Propulsion | 3 |
| AENG 4400 | Stability and Control | 3 |
| Mathematics/Science Elective | | 3 |
| Credits | | 16 |
| Spring | | |
| AENG 4014 | Flight Vehicle Analysis and Design II | 3 |
| MENG 4300 | Heat Transfer | 3 |
| PHIL 3400 | Ethics & Engineering | 3 |
| Humanistic Values Elective | | 3 |
| Technical Elective | | 3 |
| Technical Elective | | 3 |
| Credits | | 18 |
| Total Credits | | 72 |

Contact Us

For additional questions please contact:

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