MECHANICAL 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 2024-2025 academic catalog at SLU. Students must complete all courses and transfer to SLU by the Fall 2027 semester.

Students who plan to transfer to SLU after Fall 2027 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 at https://catalog.slu.edu/previous-catalogs/.

For additional information see the catalog entry for: Mechanical Engineering, B.S. (https://catalog.slu.edu/colleges-schools/science-engineering/aerospace-mechanical/mechanical-engineering-bs/)

Admission Requirements

- Students must complete all the courses outlined on the program plan unless an exception is approved by SLU.
- 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

<table>
<thead>
<tr>
<th>Transfer Course</th>
<th>Transfer Course Title</th>
<th>Transfer Course Credits</th>
<th>Equivalent SLU Course</th>
<th>Equivalent SLU Credits</th>
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<tbody>
<tr>
<td>Year One</td>
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<tr>
<td>Fall</td>
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<tr>
<td>CHM 105</td>
<td>General Chemistry I (MOTR CHEM 150L)**</td>
<td>5</td>
<td>CHEM 1110 and CHEM 1115</td>
<td>5</td>
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</tbody>
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| 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                      |
| Credits         |                                      |                        |                      | 16                     |

| Spring          |                                      |                        |                      |                        |
| 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 |
| Credits         |                                      |                        |                      | 16                     |

| Year Two        |                                      |                        |                      |                        |
| Fall            |                                      |                        |                      |                        |
| ESC 200         | Engineering Circuits I t **          | 4                      | ECE 2001 and ECE 2002 | 5                      |
| ESC 203         | Engineering Statics **              | 3                      | MENG 2100X            | 3                      |
| MTH 230         | Analytic Geometry and Calculus III ** | 5                      | MATH 2530             | 5                      |
| PSY 223         | Engineering Physics II **           | 5                      | PHYS 1630 and PHYS 1640 | 5 |
| Credits         |                                      |                        |                      | 17                     |

| Spring          |                                      |                        |                      |                        |
| 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                      |
Saint Louis University Courses

Year Three
Fall
- CORE 1200 or CORE 1900: Eloquentia Perfecta 2: Oral and Visual Communication or Eloquentia Perfecta 1: Written and Visual Communication
- CORE 1500: Cura Personalis 1: Self in Community
- CORE 3600: Ways of Thinking: Social and Behavioral Sciences
- MENG 1011: Prototyping
- MENG 3010: Machine Design
- MENG 3200: Fluid Dynamics
- SE 1700 & SE 1701: Engineering Fundamentals and Engineering Fundamentals Studio

Credits: 17

Spring
- CORE 2500: Cura Personalis 2: Self in Contemplation
- CORE 2800: Eloquentia Perfecta 3: Creative Expression
- MENG 1000: Design Thinking
- MENG 2450: Engineering Experimentation
- MENG 3110: Linear Vibrations
- MENG 3510X: Materials Science
- MENG 4300: Heat Transfer

Credits: 17-18

Year Four
Fall
- CORE 1600: Ultimate Questions: Theology
- CORE 3500: Cura Personalis 3: Self in the World
- CORE Requirement: 3
- Equity and Global Identities: Global Interdependence
- Equity and Global Identities: Dignity, Ethics, and a Just Society
- Math/Science Elective: 3
- MENG 3001: Mechanical Engineering Lab
- MENG 4300: Heat Transfer
- Technical Elective: 3

Credits: 17

Spring
- CORE 4000: Collaborative Inquiry
- MENG 2400: Mechatronics Systems Design
- MENG 3111: Mechanics Laboratory
- MENG 3600: Manufacturing Process
- MENG 4024: Mechanical Systems Design
- Technical Elective: 3

Credits: 13-16

Year Five
Fall
- CORE 1700: Ultimate Questions: Philosophy
- CORE 4500: Reflection-in-Action
- CORE Requirement: 3
- Eloquenta Perfecta: Writing Intensive (EP4)
- MENG 4450: Programmable Logic Controllers and Robotics
- Technical Elective: 3
- Technical Elective: 3

Credits: 15

Total Credits: 79-83

Contact Us
For additional questions please contact:
Transfer Admission
314-977-2500
transfer@slu.edu