

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 2020-2021 academic catalogs at St. Louis Community College and SLU. Students must complete all courses and transfer to SLU on or before the spring 2024 semester.

Students who plan to transfer to SLU after spring 2024 should choose a newer program plan.

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 that 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	5
MTH 210	Analytic Geometry and Calculus I (or higher) †	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
PSY 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

† This course must be passed with a grade of 'C' or higher to transfer to SLU.

Saint Louis University Courses

Course	Title	Credits
Year Three		
Fall		
ESCI 3110	Linear Vibrations	3
ESCI 3200	Fluid Dynamics	3
ESCI 3201	Fluid Dynamics Laboratory	1
MATH 3270	Advanced Mathematics for Engineers	3
MENG 2011	Engineering Shop Practice	1
AENG 3100	Computer Aided Engineering	3
THEO 1000	Theological Foundations	0,3
Credits		14-17
Spring		
MENG 2000	Foundation to Engineering Design	3
MENG 2300	Applied Thermodynamics	3
MENG 2600	Manufacturing Process	3
MENG 3430	Measurements	3
MENG 3010	Machine Design <small>Prerequisite waiver needed to take concurrent with MENG 2000.</small>	3
MENG 3510	Material Science	3
Credits		18
Year Four		
Fall		
ESCI 3410	Analysis and Control of Linear Systems	3
MENG 4004	Design I	3
MENG 4450	Principles of Mechatronics	3
Technical Elective		3
Mathematics/Science Elective		3
Humanistic Values Elective II * <small>*Recommended to take over the summer to reduce credit hours in final year.</small>		3
Credits		18
Spring		
MENG 3001	Mechanical Engineering Lab	1
MENG 4014	Design II	3
MENG 4300	Heat Transfer	3
PHIL 3400	Ethics & Engineering	3
Cultural Diversity Elective * <small>*Recommended to take over the summer to reduce credit hours in final year.</small>		3
Technical Elective		3
Credits		16
Total Credits		66-69

Contact Us

For additional questions please contact:

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