

Pathway - Mechanical Engineering

SIUE Course

Southwestern Illinois College Associate in Engineering Science Degree

Fall Year 1

SWIC Course		Hours
ENG 101	Rhetoric and Composition I	3
CHEM 105	General Chemistry I	5
ENGR 103	Engineering Graphics	4
MATH 203	Analytical Geom & Calculus I	5
Total		17
Spring Year 1		

SWIC Course		Hours
SOC 230 ¹	Race and Ethnicity in U.S.	3
MATH 204	Analytical Geom & Calculus II	5
PHYS 204	Physics- Mechanics	4
COMM 155	Interpersonal Communications	3
ENG 102	Rhetoric and Composition II	3
Total		18

Summer Year 1

SWIC Course		Hours
MATH 210 ²	Computer Prog. For Engineers	3
Total		3

Fall Year 2

SWIC Course		Hours
PHYS 205	Physics-Heat/EL/Mag	4
MATH 205	Analytical Geom & Calculus III	4
ENGR 263	Analytical Mech-Statics	3
IAI Fine Arts	ART 103 or MUS 110	3
HES 151 ³	Personal Health & Wellness	2
Total		16

Spring Year 2

SWIC Course		Hours
MATH 290	Differential Equations	3
BIOL 100/101	General Biology/Prin. Of Biol I	4
ENGR 271	Electrical Circuits	3
ENGR 264	Analytical Mech-Dynamics	3
ECON 201	Prin. Of Economics I (Macro)	3
Total		16

Associate in Engineering Science Total

¹SOC 230 Satisfies the ERGU requirement at SIUE. Spring only.

Southern Illinois University Edwardsville Bachelor of Science Degree

Summer Year 2

Hours

CE 242	Mechanics of Solids	3	
Total		3	
	Fall Year 3		
SIUE Course		Hours	
ME 310	Thermodynamics	3	
ME 350	Mechanisms	3	
ME 370	Materials Engineering	3	
STAT 380	Statistics for Application	3	
ME 354	Numerical Simulation	1	
Total		13	

Spring Year 3

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SIUE Course		Hours
ME 312	Thermodynamics II	3
ME 315	Fluid Mechanics	3
ME 380	Design Machine Elements	3
ME 380L	Stress Laboratory	1
ME 356	Dynamics Systems Modeling	3
PHIL 323	Engineering Ethics	3
Total		16

Fall Year 4

SIUE Course		Hours
ME 410	Heat Transfer	3
ME 410L	Thermal Fluid Laboratory	1
ME 482	Mech. Engr. Design I	2
ME XXX	ME Elective I	3
IE 345	Engineering Economic Analysis	3
IS/EREG	IS/EREG	3
Total		15

Spring Year 4

SIUE Course		Hours
ME 484	Mechanical Eng. Design II	2
ME356L	Dynamical Systems Laboratory	1
ME XXX	Elective II	3
ME XXX	Elective III	3
ELE XXX	Engineering Elective	3
Total		12

Bachelor of Science Total

129

70

²Students can substitute MATH 171 for 210.

³Students may also take HES 152 or HES 130 and 131.

^{*}Students should follow SWIC AES specialty curriculum

^{*}Students must complete 50% or more of degree requirements at SIUE.



NOTE: Students must apply for admission to upper-division classes before starting the junior year at SIUE. The form for 'APPLICATION FOR ADMISSION TO UPPER-DIVISION' must be submitted by the deadline to the academic advisor in the School of Engineering at SIUE.

Students must earn 60 hours from a senior institution for graduation requirements. If students take all SIUE junior and senior level courses, stated above, at SIUE, they will meet this requirement. Please note: deviating from the planned schedule above may jeopardize this requirement.

*A course that satisfies both the ERGU and EREG requirement will only be counted as one and not both.

School of Engineering Transfer Credit Advisory Note: The University may accept transfer "D" grades; however, in the School of Engineering, a grade of C or better is required in all chemistry, computer science, mathematics, physics, and engineering courses applied to major or minor requirements. A course that transfers in as 1xx, 2xx, 3xx or TRF 1xx; TRF 2xx; TRF 3xx may require a course description and/or syllabus for further evaluation.