

**SOUTHERN ILLINOIS UNIVERSITY
EDWARDSVILLE**

Pathway - Mechanical Engineering

**Southwestern Illinois College
Associate in Engineering Science Degree**

Fall Year 1

SWIC Course	Hours
ENG 101 Rhetoric and Composition I	3
MATH 203 Analytic Geometry & Calculus I	5
CHEM 105 General Chemistry I	5
IAI Social Science SOC 230 recommended (ERGU)	3
Total	16

Spring Year 1

SWIC Course	Hours
ENG 102 Rhetoric and Composition II	3
MATH 204 Analytic Geometry & Calculus II	5
PHYS 204 Physics- Mechanics	4
COMM 155 Interpersonal Comm (ERGU or EREG)*	3
Total	15

Fall Year 2

SWIC Course	Hours
MATH 205 Analytic Geometry & Calculus III	4
MATH 210 ² Computer Prog. For Engineers	3
PHYS 205 Physics-Heat/Electrical/Magnetism	4
ENGR 263 Analytical Mechanics-Statics	3
ENGR 103 Engineering Graphics	4
Total	18

Spring Year 2

SWIC Course	Hours
MATH 290 Differential Equations	3
ENGR 264 Analytical Mechanics - Dynamics	3
ENGR 271 Electrical Circuits	3
ENGR 275 Mechanics of Solids	3
ECON 201 Principles of Macroeconomics	3
Total	15

Associate in Engineering Science Degree Total 64

*Students should follow AES subplan. Consult SWIC Advisor or Program Coordinator.

**Southern Illinois University Edwardsville
Bachelor of Science Degree**

Fall Year 3

SIUE Course	Hours
ME 310 Thermodynamics	3
ME 350 Mechanisms	3
ME 354 Numerical Simulation	1
ME 370 Materials Engineering	3
STAT 380 Statistics for Application	3
BFPA Breadth Fine & Performing Arts	3
Total	16

Spring Year 3

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

Fall Year 4

SIUE Course	Hours
ME 410 Heat Transfer	3
ME 410L Thermal Fluid Laboratory	1
ME 482 Mechanical Engineering Design I	3
ME XXX ME Elective I	3
IE 345 Engineering Economic Analysis	3
IS IS (EREG/ERGU - if needed)	3
EH Health Experience	0-2
Total	16

Spring Year 4

SIUE Course	Hours
ME 484 Mechanical Engineering Design II	3
ME 356L Dynamical Systems Laboratory	1
ME XXX Elective II	3
ME XXX Elective III	3
BLS Breadth Life Science	3
ELE XXX Engineering Elective	3
Total	16

Bachelor of Science Degree Total 128

Pathway - Mechanical Engineering

School of Engineering Transfer Credit Advisory Notes:

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

SIUE 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 as 1XX, 2XX, 3XX or TRF 1XX, TRF 2XX, TRF 3XX may require a course description and/or syllabus for further evaluation.

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

Interdisciplinary Studies (IS) Courses must be taken at the junior/senior level class standing. This requirement is not waived with completion of transfer associate degree or IAI-GECC. It is recommended that students choose a course to meet this general education requirement AND Global Cultures, Race, and Equity Education Experience (EREG) or US Race, Gender, and Equity Experience (ERGU). Please see the SIUE advisor for a current list of course options.