

Pathway - Mechanical Engineering

**Rend Lake College
Associate Engineering Science Degree**

Fall Year 1

RLC Course	Hours
ENGL 1101 Rhetoric and Composition I	3
CHE 1103 Inorganic Chemistry	5
MATH 1121 Calculus and Analytic Geometry I	5
Fine Arts ART 1101, MUSI 1100 or THEA 1106	3
ORIE 1101 Orientation	1.5
Total	17.5

Spring Year 1

RLC Course	Hours
ENGL 1102 Rhetoric and Composition II	3
PHY 1103 University Physics I	5
MATH 2122 Calculus and Analytic Geometry II	5
ENGG 1101 Graphics	4
Total	17

Fall Year 2

RLC Course	Hours
CSCI 1103 Introduction to Programming	3
PHY 1104 University Physics II	5
MATH 2123 Calculus and Analytic Geometry III	4
PHY 2101 Statics	3
ECON 2101 Principles of Economics I	3
Total	18

Spring Year 2

RLC Course	Hours
Social Science HIST 2101, HIST 2012 or SOCI 1101	3
PHY 2121 Electrical Engineering Circuits	4
PHY 2102 Dynamics	3
MATH 2130 Differential Equations	3
COMM 1101 Principles of Effective Speaking	3
Total	16

Associate in Engineering Total 68.5

**Southern Illinois University Edwardsville
Bachelor Degree**

Summer Year 3

SIUE Course	Hours
CE 242 Mechanics of Solids	3
Total	3

Fall Year 3

SIUE Course	Hours
ME 310 Thermodynamics I	3
ME 350 Dynamics of Mechanisms	3
ME 354 Numerical Simulation	3
ME 370 Materials Engineering	3
STAT 380 Statistics for Application	3
Total	15

Spring Year 3

SIUE Course	Hours
ME 312 Thermodynamics II	3
ME 315 Fluid Mechanics	3
ME 356 Dynamic Systems Modeling	3
ME 380 Design of Machine Elements	3
ME 380L Stress Lab	1
IS XXX Interdisciplinary Course	3
EH ¹ Health Experience	2
Total	18

Fall Year 4

SIUE Course	Hours
ME 410 Heat Transfer	3
ME 410L Thermal Fluid Lab	1
ME 482 Mechanical Engineering Design I	2
ME XXX Elective	3
IE 345 Engineering Economic Analysis	3
IE 106 Engineering Problem Solving	3
Total	15

Spring Year 4

SIUE Course	Hours
ME 356L Dynamical Systems Lab	1
ME 484 Mechanical Engineering Design II	3
ME XXX Elective	3
ME XXX Elective	3
PHIL 323 Engr. Ethics & Professionalism	3
BLS Breadth Life Science	3
Total	16

Bachelor of Science Total 135.5

¹Non-credit experiences available. See advisor.

** Students must complete 50% or more of SIUE degree requirements at SIUE (120 hours required for graduation).