

**SOUTHERN ILLINOIS UNIVERSITY
EDWARDSVILLE**

Pathway - Mechatronics and Robotics Engineering

**Lincoln Land Community College
Associate in Engineering Science Degree
Fall Year 1**

LLCC Course		Hours
EGL 101	Composition I	3
CHE 101	General Chemistry I	4
ECO 132	Principles of Economics II (Macro)	3
MAT 131	Calculus & Analytic Geometry I	5
Total		15

Spring Year 1

LLCC Course		Hours
EGL 102	Composition II	3
CMN 104	Interpersonal Communication	3
MAT 132	Calculus & Analytic Geometry II	5
PHY 201	Physics I	4
Total		15

Fall Year 2

LLCC Course		Hours
PHY 202	Physics II	4
MAT 233	Calculus & Analytic Geometry III	4
ENG 220 ²	Statics	3
MAT 161	Computer Programming	4
ENG 101	Engineering Graphics	3
Total		18

Spring Year 2

LLCC Course		Hours
ENG 221	Dynamics	3
ENG 270	Circuit Analysis	3
MAT 235	Differential Equations	4
BIO 101/111	Gen. Biology/Prin. of Biology	4
ENG 240 ¹	Mechanics of Materials	4
Total		18

Associate in Engineering Science Total 66
Accepted Hours for Bachelor degree 60

¹ENG 240 may be offered in the summer semester.

²ENG 220 is the prerequisite course required for ENG 221.

*Students must complete 50% or more of the degree

**Southern Illinois University Edwardsville
Bachelor of Science Degree
Fall Year 3**

SIUE Course		Hours
ECE 282	Digital Systems Design	4
ME 356	Dynamic Systems Modeling	3
ME 354	Numerical Simulation	1
MRE 380	Design of Machine Elements	3
PHIL 323	Engineering Ethics	3
MATH 321	Linear Algebra	3
Total		17

Spring Year 3

SIUE Course		Hours
MRE 358	Introduction to Mechatronics	3
MRE 320	Sensors and Actuators	3
ME 450	Automatic Control	3
ECE 381	Microcontroller	3
EH	Health Experience	1
AP	Applications for Upper Division	0
Total		13

Fall Year 4

SIUE Course		Hours
MRE 454	Robotics, Dynamics & Controls	3
MRE 480	Design in Mechatronics & Robotics I	2
MRE XXX	Technical Elective I	3
IE 345	Engineering Economics	3
IS/EREG	IS/EREG	3
Total		14

Spring Year 4

SIUE Course		Hours
MRE XXX	Technical Elective II	3
MRE 477	Computer-Integ Manufacturing Sys.	3
MRE 481	Design in Mechatronics & Robotics II	2
BFPA	BFPA	3
STAT 380	Statistics for Application	3
Total		14

Bachelor of Science Degree Total 124

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School of Engineering Transfer Credit Advisory Notes:

NOTE: Student must apply for admission to upper-division classes before starting their 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, 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 Culture Race and Equity Experience (EREG). Please see the SIUE advisor for a current list of course options.

Students must select a life science course other than physics and chemistry. Department approved courses include:

ENSC 340, GEOG 202, BIOL 111, BIOL 140, BIOL 150, BIOL 151, BIOL 203, BIOL 204, BIOL 205, BIOL 220, BIOL 240A, BIOL 240B.