

**SOUTHERN ILLINOIS UNIVERSITY  
EDWARDSVILLE**

**Pathway - Mechatronics and Robotics Engineering**

**Lewis and Clark Community College  
Associate Degree AES**

**Fall Year 1**

LCCC Course		Hours
ENGL 131	First Year English I	3
CHEM 141	General Chemistry I	5
CHEM 121	Recitation	1
SPCH 145	Public & Private Communication	3
MATH 171	Calculus and Analytic Geo	5

**Total** **17**

**Spring Year 1**

LCCC Course		Hours
ENGL 132	First Year English II	3
MATH 172	Calculus and Analytic Geo II	5
PHYS 141	General Physics I	5
ECON 151	Macroeconomics	3

**Total** **16**

**Fall Year 2**

LCCC Course		Hours
MATH 271	Calculus and Analytic Geo III	4
PHYS 142	General Physics II	5
CIS 235	C++ Programing Language	3
PHYS 241	Statics	3

**Total** **15**

**Spring Year 2**

LCCC Course		Hours
<sup>1</sup> IAI Life Science	IAI Life Science	3
MATH 272	Differential Equations	3
PHYS 242	Dynamics	3
IAI Fine Arts	IAI Fine Arts	3
PHYS 210	Circuit Analysis	3

**Total** **15**

**Associate in Engineering Total** **63**

<sup>1</sup> Students please consult with LCCC/Pathways advisor for courses that can be used for SIUE Life Science.

<sup>2</sup> Students may take PHYS 245 at LCCC in the summer if offered. If not offered, students will take CE 242 and ECE 111 in the summer at SIUE.

<sup>3</sup> ME 450 may be substituted by the two-course series of ECE 365 (control systems) and ECE 465 (control systems design).

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

**Summer Year 3**

SIUE Course		Hours
<sup>2</sup> CE 242	Mechanics of Solids	3
<sup>2</sup> ECE 211	Circuit Analysis II	3

**Total** **6**

**Fall Year 3**

SIUE Course		Hours
ECE 282	Digital Systems Design	3
ME 356	Dynamic Systems Modeling	3
ME 354	Numerical Simulation	3
MRE 380	Design of Machine Elements	3
MATH 321	Linear Algebra	3
ERGU	EXP- US Race Gender and Equity	3

**Total** **18**

**Spring Year 3**

SIUE Course		Hours
MRE 358	Introduction to Mechatronics	3
MRE 320	Sensors and Actuators	3
<sup>3</sup> ME 450	Automatic Control	3
ECE 381	Microcontroller	3
PHIL 323	Engr. Ethics & Professionalism	3

**Total** **15**

**Fall Year 4**

SIUE Course		Hours
MRE 454	Robotics, Dynamics & Controls	3
MRE 480	Design in Mechatronic & Robotics I	3
MRE XXX	MRE Elective I	3
IE 345	Engineering Economic Analysis	3
IS/EREG	IS/EREG	3

**Total** **15**

**Spring Year 4**

SIUE Course		Hours
MREXXX	MRE Elective II	3
MRE 477	Comp. Integ. Manufac. Systems	3
MRE 481	Design in Mechatronic & Robotics II	2
EH	Health Experience	1
STAT 380	Statistics for Applications	3

**Total** **12**

**Bachelor of Science Total** **129**

<sup>\*</sup> Students must complete 50% or more of the degree requirements at SIUE.

## **Pathway - Mechatronics and Robotics Engineering**

### **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.