Degree Path - Mechatronics and Robotics Engineering

Kaskaskia College	Southern Illinois University Edwardsville
Associate in Engineering Degree	**Bachelor of Science Degree**

Fall Year 1

KC Course		Hours
CHEM 111	Chemistry I (Inorganic Chemistry)	5
ENGL 101	Composition I	3
MATH 166	Analytical Geometry & Calculus I	5
ENGR 103	Engineering Graphics & CAD	3
PHLE 110[1]	Logic	3
Total		**19**

Spring Year 1

KC Course		Hours
MATH 267	Analytical Geometry & Calculus II	4
PHYS 201	University Physics I	5
ENGL 102	Composition II	3
ENGR 203	Statics	3
COMM 204	Interpersonal Communication	3
Total		**18**

Fall Year 2

KC Course		Hours
PHYS 202	University Physics II	5
MATH 268	Analytical Geometry & Calculus III	4
ENGR 201	Computer Programming for Engineers	3
ENGR 204	Dynamics	3
ECON 205	Principles of Macroeconomics	3
Total		**18**

Spring Year 2

KC Course		Hours
MATH 269	Differential Equations	3
ENGR 205	Mechanics of Materials	3
ENGR 210	Electrical Circuits	4
ANTH 101	Cultural Anthropology	3
PHLE 201	Professional Ethics for Engineers	3
Total		**16**

Associate in Engineering Degree Total **71**

[1]Required for AES degree but is not needed for Mechatronics & Robotics Engineering at SIUE.

Students must complete 50% of SIUE degree requirements at SIUE.

Summer Year 3

SIUE Course		Hours
ME 262	Dynamics	3
ECE 211	Circuit Analysis ll	3
Total		**6**

Fall Year 3

SIUE Course		Hours
ECE 282	Digital Systems Design	4
ME 356	Dynamic Systems Modeling	3
ME 354	Numerical Simulation	1
MRE 320	Sensors and Actuators	3
MATH 321	Linear Algebra	3
Total		**14**

Spring Year 3

SIUE Course		Hours
MRE 358	Introduction to Mechatronics	3
ME 450	Automatic Control	3
MRE 380	Design of Machine Elements	3
ECE 381	Microcontroller	3
BFPA	Breadth Fine & Performing Arts	3
Total		**15**

Fall Year 4

SIUE Course		Hours
MRE 454	Robotics, Dynamics & Controls	3
MRE 480	Design in Mechatronic & Robotics l	2
MRE XXX	MRE Technical Elective I	3
IE 345	Engineering Economic Analysis	3
IS	Interdisciplinary Studies	3
EH	Health Experience	0-2
Total		**14**

Spring Year 4

SIUE Course		Hours
MRE XXX	MRE Technical Elective II	3
MRE 477	Comp. Integ. Manufac. Systems	3
MRE 481	Design in Mechatronic & Robotics ll	2
BLS	Breadth Life Science	3
STAT 380	Statistics for Applications	3
Total		**14**

Bachelor of Science Degree Total **134**

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School of Engineering Transfer Credit Advisory Notes:

NOTE: For students majoring in Civil, Industrial, Mechanical or Mechatronics & Robotics Engineering they 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