

## Pathway - Computer 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
<b>Total</b>		<b>17</b>

#### 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
IAI Fine Art	IAI Fine Art	3
<b>Total</b>		<b>16</b>

#### Fall Year 2

LCCC Course		Hours
MATH 271	Calculus and Analytic Geo III	4
PHYS 142	General Physics II	5
ECON 151	Macroeconomics	3
<sup>1</sup> AI Life Science	<sup>1</sup> Life Science	3
<b>Total</b>		<b>15</b>

#### Spring Year 2

LCCC Course		Hours
PHYS 210	Circuit Analysis	3
MATH 272	Differential Equations	3
CIS 210	Java Programing	3
<sup>1</sup> ELEC	<sup>1</sup> Elective	3
<b>Total</b>		<b>12</b>

**Associate in Engineering Total** **60**

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

<sup>2</sup> IE 106 may no longer be required if AES is earned. More details coming.

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

### Southern Illinois University Edwardsville Bachelor of Science Degree

#### Summer Year 3

SIUE Course		Hours
ECE 211	Circuit Analysis II	4
CS 150	Intro to Computing II	3
<b>Total</b>		<b>7</b>

#### Fall Year 3

SIUE Course		Hours
ECE 282	Digital Systems Design	4
ECE 351	Signals and Systems	3
ECE 352	Stochastic Processes	3
CS 240	Intro to Computing III	3
MATH 224	Discrete Math	3
<b>Total</b>		<b>16</b>

#### Spring Year 3

SIUE Course		Hours
ECE 326	Electronic Circuits I	3
ECE 483	Adv. Digital Systems Engr.	3
ECE 381	Microcontrollers	3
CS 286	Intro to Computer Org.	3
<sup>2</sup> IE 106	<sup>2</sup> Engineering Problem Solving	3
ECE/CS XXX	Elective I	3
<b>Total</b>		<b>18</b>

#### Fall Year 4

SIUE Course		Hours
IS/EGC	Interdisciplinary Studies	3
CS 314	Operating Systems	3
ECE 404	ECE Design	3
ECE/CS XXX	Elective II	3
PHIL 323	Engineering Ethics	3
<b>Total</b>		<b>15</b>

#### Spring Year 4

SIUE Course		Hours
ECE 405	ECE Design Lab	3
BICS	Breadth Info. Comm. in Soc.	3
ECE/CS XXX	Elective III	3
IE 345	Engineering Economics	3
CS 340	Algorithms Data Structures	3
<b>Total</b>		<b>15</b>

**Bachelor of Science Total** **131**

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NOTE: Students must apply for admission to upper-division classes before starting the 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, stated above, at SIUE, they will meet this requirement. Please note: deviating from the planned schedule above may jeopardize this requirement.

**School of Engineering Transfer Credit Advisory Note:** *The University 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 in as 1xx, 2xx, 3xx or TRF 1xx; TRF 2xx; TRF 3xx may require a course description and/or syllabus for further evaluation.*