



The Grainger College of Engineering  
**Engineering Pathways**

Plan of Study<sup>1</sup> – Illinois Central College

**First Year – Option 1**

<b>Fall Semester</b>		<b>Hours</b>
MATH 222	Calculus and Analytic Geometry I	5
CHEM 130	General Chemistry I	4
CMPS 125 (or ENGR 230)	CS I: Programming in C++	3
ENGR 110	Introduction to Engineering	1
General education <sup>2</sup>		3
<b>Semester Hours</b>		<b>16</b>
<b>Spring Semester</b>		
MATH 223	Calculus and Analytic Geometry II	4
CHEM 132	General Chemistry	4
PHYS 211	Engineering Physics: Mechanics	4
General education <sup>2</sup>		3
<b>Semester Hours</b>		<b>15</b>

**First Year – Option 2**

<b>Fall Semester</b>		
MATH 222	Calculus and Analytic Geometry I	5
CHEM 130	General Chemistry I	4
ENGR 110	Introduction to Engineering	1
General education <sup>2</sup>		3
General education <sup>2</sup>		3
<b>Semester Hours</b>		<b>16</b>
<b>Spring Semester</b>		
MATH 223	Calculus and Analytic Geometry II	4
CHEM 132	General Chemistry	4
PHYS 211	Engineering Physics: Mechanics	4
CMPS 115 (or ENGR 230)	CS I: Programming in C++	3
<b>Semester Hours</b>		<b>15</b>

<sup>1</sup> Engineering Pathways is a cohort-based experience. As such, all technical coursework in the plan of study must be completed as listed and for a grade while enrolled in the program – this includes mathematics, physics, computer science, chemistry, and engineering.

<sup>2</sup> Requests to enroll in a course other than a transferable Gen Ed (see General Education Categories) must be pre-approved by an Engineering Pathways advisor at UIUC.

## Second Year

### Fall Semester

MATH 224	Calculus and Analytic Geometry III	4
PHYS 212	Engineering Physics: Electricity and Magnetism	4
ENGR 251	Statics	3
Major-specific technical course <sup>3</sup>		3
General education or technical elective <sup>4</sup>		3
<b>Semester Hours</b>		<b>17</b>

### Spring Semester

Major-specific technical course		3
Major-specific technical course		3
Major-specific technical course		3
Major-specific technical course		3
General education or technical elective <sup>4</sup>		3
<b>Semester Hours</b>		<b>15</b>
<b>Electives</b>		<b>7</b>
<b>Total Hours:</b>		<b>69</b>

### General Education Categories<sup>5</sup>

Composition I	<i>ENGL 110 &amp; ENGL 111</i>	4-6
Advanced Composition	<i>typically completed after transfer</i>	
Humanities & the Arts		3
Humanities & the Arts		3
Social & Behavioral Sciences	<i>ECON 110 or ECON 111 or PSY 110</i>	3
Social & Behavioral Sciences		3
Western/Comparative Cultures		
Non-Western Cultures		
US Minority Cultures		
Language Other Than English (LOTE)		

<sup>3</sup> Major-specific technical courses will be selected in consultation with a program advisor.

<sup>4</sup> Optional if the four major-specific technical courses for the semester total at least 15 hours.

<sup>5</sup> It is not mandatory that all UIUC General Education categories be completed prior to transfer. However, it is important adequate progress be made; otherwise, time to degree completion may be extended.