**GENERAL EDUCATION (IAI GECC, 27-39 CREDITS)**
The Illinois Articulation Initiative (IAI) General Education Core Curriculum (GECC) requires 27 to 39 credit hours from the following five areas: communication; mathematics; physical and life sciences; humanities; and social and behavioral sciences. Courses selected to meet IAI GECC requirements may also meet course requirements for a specific major.

**FIRST YEAR - FALL SEMESTER**

<table>
<thead>
<tr>
<th>Dept.</th>
<th>No.</th>
<th>Course</th>
<th>Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORI</td>
<td>100</td>
<td>College 101 or SCI 100 STEM Fundamentals</td>
<td>1</td>
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<tr>
<td>MAT</td>
<td>131</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>EGR</td>
<td>101</td>
<td>Engineering Graphics or Elective***</td>
<td>3</td>
</tr>
<tr>
<td>ENG</td>
<td>101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>CHM</td>
<td>151</td>
<td>Chemical Principles</td>
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**FIRST YEAR - SPRING SEMESTER**

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<thead>
<tr>
<th>Dept.</th>
<th>No.</th>
<th>Course</th>
<th>Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT</td>
<td>201</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>PHY</td>
<td>205</td>
<td>University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>CPS</td>
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<td>Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>ENG</td>
<td>102</td>
<td>English Composition II</td>
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**SECOND YEAR - FALL SEMESTER**

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<tr>
<th>Dept.</th>
<th>No.</th>
<th>Course</th>
<th>Hrs.</th>
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<tbody>
<tr>
<td>MAT</td>
<td>202</td>
<td>Calculus III</td>
<td>3</td>
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<tr>
<td>PHY</td>
<td>206</td>
<td>University Physics II</td>
<td>5</td>
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<tr>
<td>CPS</td>
<td>215</td>
<td>Computer Science II</td>
<td>4</td>
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<tr>
<td>ECO</td>
<td>201</td>
<td>Macroeconomics or Social Science Elective*</td>
<td>3</td>
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</tbody>
</table>

**SECOND YEAR - SPRING SEMESTER**

<table>
<thead>
<tr>
<th>Dept.</th>
<th>No.</th>
<th>Course</th>
<th>Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT</td>
<td>205</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHY</td>
<td>224</td>
<td>Electric Circuit Analysis w/Lab or PHY 214 Intro to Circuit Analysis</td>
<td>4-3</td>
</tr>
<tr>
<td>ECO</td>
<td>202</td>
<td>Microeconomics or Social Science Elective*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IAI Life Science Elective or Elective***</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fine Arts/Humanities Elective**</td>
<td>3</td>
</tr>
</tbody>
</table>

Consult with the transfer institution to determine if certain courses require a grade of "C" or higher, or if there is a minimum grade point average for admission to your declared major. Please select courses on this guide in accordance with the Articulation Notes for your transfer institution.

**Fall Only Courses:**
- EGR 101
- PHY 201
- CHM 201
- CPS 215
- MAT 202

**Spring Only Courses:**
- EGR 101
- PHY 201
- CHM 201
- CPS 206
- MAT 205

*Recommended Social Science electives: ANT 111, ANT 202, ANT 216, GEO 112, SOC 215. For other IAI Social Science Electives, see below.

**Recommended Humanities/Fine Arts Electives:**
- HIS 103, HIS 104, HIS 213, LIT 284, LIT 295, PHL 121, PHL 200. For other IAI Humanities, see below.

***Choose electives based on your chosen transfer institution requirements.

**IAI INFORMATION:** This guide follows the guidelines established by the IAI Engineering major Panel for an Associates in Engineering Science Degree. This guide is not designed to complete the full IAI GECC component. You will need to fulfill the remaining IAI GECC courses at your transfer institution.

**IAI Fine Arts Electives:**
- Art: ART 111, 220, 221, 291
- Literature: LIT 275
- Music: MUS 105, 225
- Theater: THE 113

**IAI Humanities Electives:**
- Foreign Language: FRE 202, GER 202, SPN 202
- History: HIS 101, 102, 213
- Literature: LIT 210, 230, 264, 280, 281, 284, 295
- Philosophy: PHL 111, 121, 131, 200, 260

**IAI Social and Behavioral Sciences Electives:**
- Anthropology: ANT 111, 202, 216, 240
- Economics: ECO 201, 202
- Geography: GEO 112
- History: HIS 103, 104, 201, 202, 223
- Political Science: PSC 131, 211, 212, 289
- Psychology: PSY 132, 200, 203, 262
- Sociology: SOC 133, 220, 221, 263, 264

**IAI Life Science Electives:**
- Biology: BIO 100, 101, 105, 225
- Interdisciplinary: SCI 101 with SCI 111, SCI 210A and SCI 210B
- Life Science: SCI 215

*Please see your advisor for possible specific four-year university transfer guides.

**ARTICULATION NOTES:** Consult your academic advisor and/or transfer institution to assess if any courses required for your major require a grade of C or higher and if there is a minimum grade point average needed for admission consideration into your major.
IAI ENGINEERING MAJOR PANEL INFORMATION
Take CPS 206 (IAI CS 911), CPS 215 (CS 912), PHY 214 (EGR 931 or PHY 224). Equivalents to the Digital Systems courses are currently not offered (IAI EGR 932 OR 932L).

Take MAT 131 (MTH 901), MAT 201 (MTH 902), MAT 202 (MTH 903), MAT 205 (MTH 912), CHM 151 (CHM 911), PHY 205 (PHY 911) and PHY 206 (PHY 912). ECO 202 (IAI S3 902) is recommended. In addition, a two course sequence is recommended. If ECO 202 is selected, then add ECO 201 (S3 901).

SIUC TRANSFER INFORMATION
SIUC offers a B.S. degree in Computer Engineering
Take COM 115 (CMST 101), ENG 101 (ENGL 101), ENG 102 (ENGL 102), MAT 131 (MATH 150) and BIO 215 (BIO 202). Take PHY 205 (PHYS 205A/255A), PHY 206 (PHYS 205B/255B) CHM 151 (CHEM 200/201) or BIO 205 (PHSL 201/208), Take MAT 201 (MATH 259), MAT 202 (MATH 251), MAT 205 (MATH 305), PHY 214 (ECE 235) and PHY 224 (ECE 235L). ECE 24 TECHNICAL ELECTIVE CREDITS (24) MUST BE APPROVED BY THE SIUC Electrical and Computer Engineering (ECE) department. GENERAL TECHNICAL ELECTIVES (6) MUST ALSO BE APPROVED BY THE SIUC ECE DEPARTMENT.

SIUE TRANSFER INFORMATION
SIUE offers a B.S. degree in Computer Engineering
Take ENG 101 (ENG 101), ENG 102 (ENG 102), COM 116 (ACS 103), MAT 131 (MATH 150), MAT 201 (MATH 152), MAT 202 (MATH 250), MAT 205 (MATH 305), CPS 206 (CS 140), CPS 215 (CS 150), PHY 205 (PHYS 151L), PHY 206 (PHYS 152L) and ECO 201 (ECON 111). CHEM 131, CHEM 135, PHYS 141 and PHYS 142 are also required but currently JALC does not offer an equivalent course.

UIUC TRANSFER INFORMATION
UIUC offers a B.S. degree in Computer Engineering. It is generally expected that applicants have a minimum GPA of 3.00(A=4.00). The average GPA of fall 2019 admits to Computer Engineering was at 3.88.
Take ENG 101/102 (RHET 105), CHM 151 (CHEM 102/103), CHM 152 (CHEM 104/105), MAT 131 (MATH 220), PHY 205 (PHYS 211), ECO 202 (ECON 102) or ECO 201 (ECON 103) is recommended. In addition, CPS 206 (CS 125) is recommended. A foreign language through the third level (FRE 201, GER 201 or SPN 201) is required as a graduation requirement not for admission.

OTHER
Among the Illinois Public Senior Institutions, NIU and UIC also offers a degree in Computer Engineering.

John A. Logan College reserves the right to modify this curriculum guide as needed. Please verify with your academic advisor the accuracy and time lines of this document.