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 Title</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>
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<th>No.</th>
<th>Course Title</th>
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<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>
<td>206</td>
<td>Computer Science I or CHM 152 Chemical Principles w/Qualitative Analysis***</td>
<td>4-5</td>
</tr>
<tr>
<td>ENG</td>
<td>102</td>
<td>English Composition II</td>
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SECOND YEAR - FALL SEMESTER

<table>
<thead>
<tr>
<th>Dept.</th>
<th>No.</th>
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<th>Hrs.</th>
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</thead>
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<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>
</tr>
<tr>
<td>PHY</td>
<td>201</td>
<td>Statics</td>
<td>3</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 Title</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>202</td>
<td>Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHY</td>
<td>203</td>
<td>Mechanics of Materials</td>
<td>4</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>
</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
- CHM 201
- PHY 201
- CPS 215
- MAT 202

Spring Only Courses:
- CHM 202
- PHY 203
- CPS 206
- PHY 205
- 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, 235, 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
- Political Science: PSC 131, 211, 212, 213, 289
- Psychology: PSY 132, 200, 203, 262
- Sociology: SOC 133, 215, 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 EGR 101 (IAI EGR 941), PHY 201 (EGR 942), PHY 202 (EGR 943), PHY 214 (EGR 931) or PHY 214 and 224 (EGR 931l) and PHY 203 (EGR 945).
Take MAT 131 (IAI MTH 901), MAT 201 (MTH 902), MAT 202 (MTH 903), CHM 151 (CHM 911), PHY 205 (PHY 911), PHY 206 (PHY 912) and CPS 206 (C5 911).
ECO 202 (IAI S3 9020 is recommended. In addition, if two courses are selected in this GECC area, a two course sequence is recommended (ECO 202 and ECO 201)

SIUC TRANSFER INFORMATION
SIUC offers a B.S. degree in Mechanical Engineering. In addition, a specialization and minor is available in Energy Engineering. Take BIO 225 (BIO 202), ECO 202 (ECON 240) and MAT 131 (MATH 150).
Take CHM 151 (CHEM 200/201) and CHM 152 (CHEM 210), PHY 205 (PHYS 205A/255A), PHY 206 (PHYS 205B/255B), MAT 131 (MATH 150), MAT 201 (MATH 250), MAT 202 (MATH 251), MAT 205 (MATH 305), PHY201 (ENGR 250), PHY 202 (ENGR 261), PHY 203 (ENGR 350A) and EGR 101 (ME 102).

SIUE TRANSFER INFORMATION
SIUE offers a B.S. degree in Mechanical Engineering
Take MAT 131 (MATH 150), MAT 201 (MATH 152), MAT 202 (MATH 250), MAT 205 (MATH 205), EGR 101 (CE 204), PHY 201 (CE 240), PHY 205 (PHYS 151L), PHY 206 (PHYS 152L), PHY 202 (ME 262), PHY 203 (CE 242), PHY 214 or 215 (ECE 210), ECO 201 (ECON 111) and COM 116 (ACS 103).
CHEM 131-ENGINEERING CHEMISTRY, CHEM 135-ENGINEERING CHEMISTRY LAB, PHYS 141-PHYSICS I FOR ENGINEERING, PHY 142-PHYSICS II FOR ENGINEERING, IE 106-ENGINEERING PROBLEM SOLVING AND CS 145-INTRO TO COMPUTING FOR ENGINEERS ARE ALSO REQUIRED BUT EQUIVALENTS ARE CURRENTLY NOT OFFERED AT JALC.

UIUC TRANSFER INFORMATION
UIUC offers a degree in Mechanical Engineering. It is generally expected that applicants to an Engineering program will have a minimum GPA of 3.00 (A=4.00). The average GPA in 2019 for admitted transfer students was 3.91 for Mechanical Engineering. 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), ECO 201 (ECON 103) and CPS 206 (CS101). Also take MAT202 (MATH 241-to get credit for 241 a bride course must be completed at UIUC /MATH 292), MAT 205(MATH 284), PHY 206 (PHYS 212), PHY 201 (TAM 211), PHY 202 (TAM 212), PHY 203 (TAM 251) As a Graduation Requirement, a single foreign language through the third level-FRE 201, GER 201 or SPN 201 is required. It is not an admission requirement.

OTHER
Of the other Illinois Public Senior Institutions, NIU, UIC and WIU offer a degree in Mechanical 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.