

Associate in Engineering Science Degree in Mechanical Engineering

Transfer Curriculum AES 0096 Associate in Engineering Science: 68 Hrs. Min. Major Code: 1.1 141901 Effective Date: Fall 2025

IAI GECC RECOMMENDATIONS (27-39 semester credits)

Since completion of the A.E.S degree does not complete the Illinois General Education Core Curriculum, students will need to complete the general education requirements of the school to which they transfer.

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.

FIRST YEAR - FALL SEMESTER

| Dept. | No. | | Hrs. | Grade |
|-------|-----|-----------------------------------------|----------|-------|
| ORI | 100 | College 101 or SCI 100 STEM Fundamental | s 1 | |
| MAT | 131 | Calculus I | 5 | |
| ENG | 101 | English Composition I | 3 | |
| CHM | 151 | Chemical Principles | 5 | |
| EGR | 101 | Engineering Graphics or Elective | <u>3</u> | |
| | | | 17 | |

FIRST YEAR - SPRING SEMESTER

| Dept. | No. | | Hrs. | Grade |
|-------|-----|------------------------------------------------------------------------------------|-------------------|-------|
| MAT | 201 | Calculus II | 5 | |
| PHY | 205 | University Physics I | 5 | |
| CPS | 206 | Computer Science I <u>or</u> CHM 152 Chemical Principles w/Qualitative Analysis | 4-5 | |
| ENG | 102 | English Composition II | <u>3</u> 17-18 | |
| | | | | |

SECOND YEAR - FALL SEMESTER

| Dept. | No. | | Hrs. | Grade |
|----------|-------|-------------------------------------------|------------|-------|
| MAT | 202 | Calculus III | 4 | |
| PHY | 206 | University Physics II | 5 | |
| PHY | 201 | Statics | 3 | |
| ECO | 201 | Macroeconomics or Social Science Elective | e 3 | |
| IAI Life | Scien | ce Elective <u>or</u> Elective | <u>3-4</u> | |
| | | 1 | 8-19 | |

SECOND YEAR - SPRING SEMESTER

| Dept. | No. | | Hrs. | Grade |
|-------|-----|-----------------------------------------------|----------|-------|
| MAT | 205 | Differential Equations | 3 | |
| PHY | 202 | Dynamics | 3 | |
| PHY | 203 | Mechanics of Materials | 4 | |
| PHY | 214 | Intro to Circuit Analysis or PHY 224 Electric | c 3-4 | |
| | | Circuit Analysis w/Lab | | |
| ECO | 202 | Microeconomics or Social Science Elective | <u>3</u> | |
| | | | 16-17 | |

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 O | Courses: | Spring Only Courses: |
|-------------|----------|----------------------|
| EGR 101 | CPS 215 | CHM 202 PHY 203 |
| CHM 201 | PHY 201 | CPS 206 PHY 205 |
| CPS 215 | PHY 206 | MAT 205 PHY 214/224 |
| | | PHY 202 |

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.

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, 265

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, 250, 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

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