



ENGINEERING SCIENCE
Toward a Bachelor of Science Degree

Transfer Curriculum AES 0096
 Associate in Engineering Science
 Minimum Hrs. 68
 Major Code: 1.1 140101P

FIRST YEAR – FALL SEMESTER

| Dept. No. | Hrs. | Gr. |
|--|----------|-----|
| CHM 151 Chemical Principles | 5 | — |
| ENG 101 English Composition I ¹ | 3 | — |
| MAT 131 Calculus I | 5 | — |
| Humanities Elective ² | <u>3</u> | — |
| | 16 | — |

SECOND YEAR – FALL SEMESTER

| Dept. No. | Hrs. | Gr. |
|---|----------|-----|
| EGR 101 Engineering Graphics ⁴ | 2 | — |
| MAT 202 Calculus III | 3 | — |
| PHY 201 Statics ⁵ | 3 | — |
| PHY 205 University Physics I | 5 | — |
| Elective ² | 2 | — |
| Social Science Electives ² | <u>3</u> | — |
| | 18 | — |

FIRST YEAR – SPRING SEMESTER

| Dept. No. | Hrs. | Gr. |
|---|----------|-----|
| CHM 152 Chemical Principles with Qualitative Analysis | 5 | — |
| ENG 102 English Composition II ¹ | 3 | — |
| MAT 201 Calculus II | 5 | — |
| CPS Programming Course ³ | <u>4</u> | — |
| | 17 | — |

SECOND YEAR – SPRING SEMESTER

| Dept. No. | Hrs. | Gr. |
|---|----------|-----|
| MAT 205 Differential Equations | 3 | — |
| PHY 202 Dynamics ⁵ | 3 | — |
| PHY 206 University Physics II | 5 | — |
| PHY 214 Introduction to Circuit Analysis ⁵ | 3 | — |
| Humanities/Social Science Elective ² | <u>3</u> | — |
| | 17 | — |

- ¹ Requires a grade of "C" or higher.
- ² Students are encouraged to select at least one course in either the humanities/fine arts or the social/behavioral sciences that emphasizes non-Western cultures or minority cultures within the United States. Check with transfer institution for preferred list.
- ³ Students should select either CPS 203 or CPS 206 depending on the specific engineering concentration and the transfer institution requirements. See advisor for preferred course. Both CPS 203 and CPS 206 assume prior knowledge of programming (CPS 176 or equivalent is the prerequisite for both). Students must complete Calculus I with a grade of "C" or higher prior to CPS 203.
- ⁴ Not required for electrical or computer engineering majors. Students should substitute SPE 115.
- ⁵ The specific engineering major requirements at the transfer institution vary. Student should consult with appropriate transfer institution catalog.

This curriculum guide outlines a recommended or suggested first two years for individuals interested in pursuing a bachelor degree in an Engineering option or specialization. This degree program is an IAI statewide articulated degree designed to keep students on a similar schedule to those who begin study in this field at an Illinois IAI participating institution. Since completion of this curriculum does not fulfill the requirements of the Illinois Transferable General Education Core Curriculum (IAI GECC), students will need to complete the remaining requirements for the IAI GECC after transfer to an Illinois IAI participating institution or complete that institutions general education requirements required for general graduation purposes. With appropriate justification and in consultation with your academic advisor, a request to substitute a course for one recommended in this guide may be granted with the appropriate approvals from the Department Chair, Dean of Instruction and Vice President of Instruction. However, no substitutions are recommended since this an Illinois statewide articulated degree.

It is recommended that you consult the catalog of the college or university you are considering as a transfer institution to complete a baccalaureate degree. It is also recommended that you consult with an academic advisor at that college or university considering the variety of specializations and options in 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.*

Effective Date: Fall 2010

Career Opportunities: Engineering specializations in aerospace, civil, computer, electrical, environmental, industrial, manufacturing and mechanical.