

# ASSOCIATE IN ENGINEERING SCIENCE DEGREE

## RLC Graduation Requirements Worksheet

Students will not be denied admission because of deficiencies in high school work but must satisfy these deficiencies before graduation from Rend Lake College. **Meeting graduation requirements ultimately is the responsibility of the student. Students are encouraged to be familiar with the catalog and program requirements and to work with their academic advisors in selecting courses.**

**IMPORTANT NOTE:** Completion of the AES degree does not fulfill the requirements of the Illinois General Education Core Curriculum. Therefore, students will need to fulfill the general education requirements of the institution to which they transfer. The student's total program must contain a minimum of 68 semester hours of academic work with a grade-point average of not less than "C" (2.0).

### I. SOCIAL and BEHAVIORAL SCIENCES – Required 1 course (3 hrs.)

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|--|--|---|
| ___ ANTH 1101 - Cultural Anthropology (3)*     | ___ HIST 1102 - Western Civilization II (3)  | ___ PSYC 2101 - Intro to Psychology (3) |
| ___ ECON 1101 - Intro to Economics (3)         | ___ HIST 2101 - American History I (3)       | ___ PSYC 2102 - Child Psychology (3)    |
| ___ ECON 2101 - Principles of Economics I (3)  | ___ HIST 2102 - American History II (3)      | ___ PSYC 2105 - Social Psychology (3)   |
| ___ ECON 2102 - Principles of Economics II (3) | ___ HIST 2107 - Latin American History (3)*  | ___ SOCI 1101 - Intro to Sociology (3)  |
| ___ GEOG 1101 - Introduction to Geography (3)* | ___ POLI 1101 - State / Local Government (3) | ___ SOCI 2101 - Social Problems (3)     |
| ___ HIST 1101 - Western Civilization I (3)     | ___ POLI 2101 - American Government (3)      | ___ SOCI 2102 - Marriage and Family (3) |

\*This course meets the requirement for this section and Section VI/Multiculturalism.

### II. MATHEMATICS – Required 4 courses (17 hrs.)

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|--|---|
| ___ MATH 1121 - Calculus/An. Geometry I (5)  | ___ MATH 2123 - Calculus/An. Geometry III (4) |
| ___ MATH 2122 - Calculus/An. Geometry II (5) | ___ MATH 2130 - Differential Equations (3)    |

### III. SCIENCE – Required 6 or 7 courses (21-30 hrs.)

*Required: All three Physical Science courses listed and the Computer Programming course; two or three courses from Engineering Specialties*

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|---|--|---|
| <b>PHYSICAL SCIENCES (15 hours)</b>           | ___ PHY 1103 - University Physics I (5)  | ___ COMPUTER PROGRAMMING (3 hours)          |
| ___ CHE 1103 - Inorganic Chemistry (5)        | ___ PHY 1104 - University Physics II (5) | ___ CSCI 1104 - Intro to Programming (4)    |
| <b>LIFE SCIENCES</b>                          | ___ BIO 1104 - College Biology II (5)    | ___ ZOO 1101 - General Zoology (4)          |
| ___ BIO 1100 - Biology for Non-Majors (4)     | ___ BOT 1101 - General Botany (4)        |   |
| ___ BIO 1101 - College Biology (5)            | ___ MICR 1111 - Microbiology (4)         |   |
| ___ BIO 1102 - Environmental Ecology (4)      |  |   |
| <b>ENGINEERING SPECIALTIES (6-15 hours)</b>   |  |   |
| <i>Chemical Engineering</i>                   | <i>Civil Engineering</i>                 | <i>Electrical Engineering</i>               |
| ___ CHE 1104 - Q.A. / Inorganic Chemistry (5) | ___ ENGG 1101 - Engineering Graphics (4) | ___ PHY 2121 - Electrical Eng. Circuits (4) |
| ___ CHE 2120 - Organic Chemistry I (5)        | ___ PHY 2101 - Statics (3)               |   |
| ___ CHE 2121 - Organic Chemistry II (5)       | ___ PHY 2102 - Dynamics (3)              |   |

### IV. HUMANITIES AND FINE ARTS – Required 1 course (3 hrs.)

*Required: One course selected from either Humanities or Fine Arts*

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|--|---|---|
| <b>HUMANITIES</b>                          | ___ ENGL 2110 - British Literature II (3)     | ___ PHIL 2101 - Logic (3)                   |
| ___ ENGL 2101 - Classical Literature (3)   | ___ ENGL 2111 - American Lit to 1865 (3)      | ___ PHIL 2103 - World Religion (3)*         |
| ___ ENGL 2102 - Intro to Literature (3)    | ___ ENGL 2112 - American Lit 1865-Present (3) | ___ PHIL 2104 - Ethics (3)                  |
| ___ ENGL 2104 - The Short Story (3)        | ___ ENGL 2113 - Intro to Drama (3)            | ___ PHIL 2105 - Non-Western Philosophy (3)* |
| ___ ENGL 2105 - Introduction to Poetry (3) | ___ ENGL 2114 - The Novel (3)                 | ___ PHIL 2106 - Philosophy of Religion (3)  |
| ___ ENGL 2107 - Mythology (3)              | ___ HUMT 1105 - Humanities thru Arts (3)      |   |
| ___ ENGL 2109 - British Literature I (3)   | ___ PHIL 1101 - Intro to Philosophy (3)       |   |
| <b>FINE ARTS</b>                           | ___ HUMT 1104 - Introduction to Film (3)      | ___ MUSI 1110 - Intro to American Music (3) |
| ___ ART 1101 - Art Appreciation (3)        | ___ MUSI 1100 - Music Appreciation (3)        | ___ THEA 1106 - Theatre Appreciation (3)    |

\*This course meets the requirement for this section and Section VI/Multiculturalism.

### V. COMMUNICATIONS – Required 3 courses (9 hrs.)

*Required: Two-course sequence in writing (with grade of "C" or better) (6 hrs.); one course in oral communications*

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|---|--|---|
| ___ COMM 1101 - Principles of Eff. Speaking (3) | ___ ENGL 1101 - Rhetoric and Comp. I (3) | ___ ENGL 1102 - Rhetoric and Comp. II (3) |
|---|--|---|

### VI. REND LAKE COLLEGE REQUIREMENTS

#### FIRST-YEAR EXPERIENCE

- \_\_\_ ORIE 1101 - Orientation (1.5) - Required during first semester for degree-seeking students

#### MULTICULTURALISM (Choose 1 Course)

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|---|--|--|
| ___ ANTH 1101 - Cultural Anthropology (3)*      | ___ GEOG 1101 - Introduction to Geography (3)* | ___ PHIL 2103 - World Religion (3)**         |
| ___ COMM 1106 - Intercultural Communication (3) | ___ HIST 2106 - Black American History (3)**   | ___ PHIL 2105 - Non-Western Philosophy (3)** |
| ___ EDUC 1107 - Diversity in Education (3)**    | ___ HIST 2107 - Latin American History (3)*    |  |

\* Also meets requirement for Section I/Social and Behavioral Sciences | \*\* Also meets requirement for Section IV/Humanities & Fine Arts

### VII. DEFICIENCIES

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Total Hours I through VI \_\_\_\_\_

OK Graduation? Yes  No

No single course can be used to fulfill more than one requirement, with the exception of Multiculturalism (Section VI).