

**Catalog Year 2018-2019**

AAS, Energy Systems – Electrical Engineering Tech

A Major Academic Plan (MAP) is one way to complete a degree in a set number of semesters. The *example* below is an efficient strategy only. Actual plans for individual students will vary based on advisor recommendations and academic needs. Official Program Requirements including Major, General Education, Elective, and university requirements (see pg.2) are based on Catalog Year.

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| **Course Subject and Title** | **Cr.**  | **Min.** **Grade** | **\*GE,** **UU or UM** | **\*\*Sem. Offered** | **Prerequisite** | **Co Requisite** |
| Semester One |
| GE Objective 2: COMM 1101 Principles of Speech | 3 | C- | GE |  |  |  |
| ESET 0100: Engineering Technology Orientation | 1 | C- |  | F,S |  |  |
| ESET 0100L: Engineering Technology Orientation Lab | 1 | C- |  | F,S |  |  |
| ESET 0101: Electrical Circuits I | 5 | C- |  | F |  | ESET 0101L |
| ESET 0101L: Electrical Circuits I Lab | 5 | C- |  | F |  | ESET 0101 |
| ESET 0141: Applied Mathematics I | 4 | C- |  | F,S |  | ESET 0101 or ESET 0121 |
|  Total | **19** |  |  |  |  |  |
| Semester Two |
| GE Objective 5: PHYS 1101 & Lab OR CHEM 1100 | 4 | C- | GE |  |  |  |
| GE Objective 6:  | 3 | C- | GE |  |  |  |
| ESET 0102: Electrical Circuits II | 5 | C- |  | F,S |  | ESET 0102L |
| ESET 0102L: Electrical Circuits II Lab | 5 | C- |  | F,S |  | ESET 0102 |
| ESET 0142: Applied Mathematics II | 4 | C- |  | F,S |  | ESET 0102 or ESET 0127 |
| TGE 0159: Internship Strategies | 1 | D- |  | D |  |  |
|  Total | **22** |  |  |  |  |  |
| Semester Three |
| GE Objective 1: ENGL 1101 English Composition | 3 | C- | GE |  |  |  |
| ESET 0212: Electrical Sys Documentation and Standards | 1 | C- |  | F | ESET 0101, 0102 or Instructor Permission |  |
| ESET 0220: Thermal Cycles and Heat Transfer | 2 | C- |  | F |  |  |
| ESET 0292: Electrical Engineering Tech I | 7 | C- |  | F | ESET 0101, 0102, 0141, 0142 |  |
| ESET 0292L: Electrical Engineering Tech Lab I | 5 | C- |  | F | ESET 0101L,0102L, 0141, 0142 |  |
|  Total | **18** |  |  |  |  |  |
| Semester Four |
| GE Objective 3: MATH 1153 OR MATH 1170 | 3 | C- | GE |  | ESET 0141 and ESET 0142 |  |
| ESET 0221: Boiler Reactor and Turbine Principles | 2 | C- |  | S | ESET 0102 or ESET 0122 |  |
| ESET 0222: Process Control Theory | 3 | C- |  | S | ESET 0101, 0102, 0141, 0142 | ESET 0226 |
| ESET 0226: Process Control Devices Lab | 1 | C- |  | S | ESET 0101, 0102, 0141, 0142 | ESET 0222 |
| ESET 0293: Electrical Engineering Tech II | 5 | C- |  | S | ESET 0101, 0102, 0141, 0142 | ESET 0293L |
| ESET 0293L: Electrical Engineering Tech II Lab | 4 | C- |  | S | ESET 0101, 0102, 0141, 0142 | ESET 0293 |
|  Total | **18** |  |  |  |  |  |
| \*GE=General Education Objective, UU=Upper Division University, UM= Upper Division Major\*\*See Course Schedule section of Course Policies page in the e-catalog (or input F, S, Su, etc.)  |

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| **2018-2019 Major Requirements** | **CR** | **GENERAL EDUCATION OBJECTIVES****\* Satisfy 1, 2, 3, 5 and 6**  | **15 Cr.****Min** |
| **Energy Sys – Electrical Tech, AAS - MAJOR REQUIREMENTS** | **61** | 1. Written English (6 cr. min) ENGL 1101 (or equivalent) | 3 |
| ESET 0100: Engineering Technology Orientation | 1 |   |  |
| ESET 0100L: Engineering Technology Orientation Lab  | 1 | 2. Spoken English (3 cr. min) COMM 1101 | 3 |
| ESET 0101: Electrical Circuits I | 5 | 3. Mathematics (3 cr. min) MATH 1153 or MATH 1170 | 3 |
| ESET 0101L: Electrical Circuits I Lab | 5 | 4. Humanities, Fine Arts, Foreign Lang. |
| ESET 0102: Electrical Circuits II | 5 |  |  |
| ESET 0102L: Electrical Circuits II Lab | 5 |  |  |
| ESET 0141: Applied Mathematics I | 4 | 5. Natural Sciences **(1 Course including a lab; 4 cr. min)**  |
| ESET 0142: Applied Mathematics II | 4 |  PHYS 1101 and 1101 Lab Elements of Physics OR | 4 |
| ESET 0212: Electrical Systems Documentation and Standards | 1 |  CHEM 1100 Architecture of Matter |  |
| ESET 0220: Thermal Cycles and Heat Transfer | 2 | 6. Behavioral and Social Science **(1 course; 3 cr. min)** |
| ESET 0221: Boiler Reactor and Turbine Principles | 2 |  | 3 |
| ESET 0222: Process Control Theory | 3 |  |  |
| ESET 0226: Process Control Devices Lab | 1 | **One Course from EITHER Objective 7 OR 8** |
| ESET 0292: Electrical Engineering Technology I  | 7 | 7. Critical Thinking  |  |
| ESET 0292L: Electrical Engineering Technology I Lab | 5 | 8. Information Literacy  |
| ESET 0293: Electrical Engineering Technology II  | 5 | 9. Cultural Diversity  |
| ESET 0293L: Electrical Engineering Technology II Lab | 4 |  |  |
| TGE 0159: Internship Strategies | 1 | General Education Elective to reach 15 cr. min.  |
|  |  |   |  |
|  |  |  **Total GE** | **16** |
|  |  | Undergraduate Catalog and GE Objectives by [Catalog Year](https://www.isu.edu/advising/academic-support/general-education/)  |
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|  |  | **MAP Credit Summary** | **CR** |
|  |  | Major  | 61 |
|  |  | General Education  | 16 |
|  |  | Free Electives to reach 60 | 0 |
|  |  |  TOTAL | 77 |
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|  |  | **Graduation Requirement Minimum Credit Checklist** | **Confirmed** |
|  |  | Minimum 15 cr. General Education Objectives (Associate) |  |
|  |  | Minimum 60 cr. Total (Associate) |  |  |
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| **Advising Notes** | ***MAP Completion Status (for internal use only)*** |
| Students must register concurrently for the lab course associated with |  | *Date* |
| Each theory course.  | *Department:*  |  |
|  | *CAA or COT:* | TIM 07/25/2018 |
|  | *Registrar:*  |  |
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 Form Revised 1.24.2018