

**Catalog Year 2018-2019**

AAS, Energy Systems – Instrumentation 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 1: ENGL 1101 English Composition | 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 |  |  |  |
| ESET 0102: Electrical Circuits II | 5 | C- |  | F,S |  | ESET 0102L |
| ESET 0102L: Electrical Circuits II Lab | 5 | C- |  | F,S |  | ESET 0102 |
| ESET 0110: Introduction to Process Control | 1 | C- |  | F,S | ESET 0100 | ESET 0110L |
| ESET 0110L: Introduction to Process Control Lab | 1 | C- |  | F,S | ESET 0100L | ESET 0110 |
| ESET 0142: Applied Mathematics II | 4 | C- |  | F,S |  | ESET 0102 or ESET 0127 |
| TGE 0159: Internship Strategies | 1 | C- |  | F,S |  |  |
| Total | **21** |  |  |  |  |  |
| Semester Three | | | | | | |
| GE Objective 2: COMM 1101 Principles of Speech | 3 | C- | GE |  |  |  |
| INST 0281: Electrical Automation Theory | 8 | C- |  | F,S | ESET 0102, 0110 | INST 0282 |
| INST 0282: Electrical Automation Lab | 5 | C- |  | F,S |  | INST 0281 |
| Total | **16** |  |  |  |  |  |
| Semester Four | | | | | | |
| GE Objective 3: MATH 1153 OR MATH 1170 | 3 | C- | GE |  | MATH 1108 OR MATH 1144 |  |
| GE Objective 6: | 3 | C- | GE |  |  |  |
| INST 0292: Process Measurement and Control Theory | 10 | C- |  | F,S | INST 0281, 0282 | INST 0293 |
| INST 0293: Process Measurement and Control Lab | 4 | C- |  | F,S |  | INST 0292 |
| Total | **20** |  |  |  |  |  |
| \*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 – Instrumentation, AAS - MAJOR REQUIREMENTS** | **60** | 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 0110: Introduction to Process Control | 1 | 5. Natural Sciences **(1 Course including a lab; 4 cr. min)** | | | | | | |
| ESET 0110L: Introduction to Process Control Lab | 1 | PHYS 1101 and 1101 Lab Elements of Physics OR | | | | | | 4 |
| ESET 0141: Applied Mathematics I | 4 | CHEM 1100 Architecture of Matter | | | | | |  |
| ESET 0142: Applied Mathematics II | 4 | 6. Behavioral and Social Science **(1 course; 3 cr. min)** | | | | | | |
| INST 0281: Electrical Automation Theory | 8 |  | | | | | | 3 |
| INST 0282: Electrical Automation Lab | 5 |  | | | | | |  |
| INST 0292: Process Measurement and Control Theory | 10 | **One Course from EITHER Objective 7 OR 8** | | | | | | |
| INST 0293: Process Measurement and Control Lab | 4 | 7. Critical Thinking | | | | | |  |
| TGE 0159: Internship Strategies | 1 | 8. Information Literacy | | | | | |
|  |  | 9. Cultural Diversity | | | | | | |
|  |  |  | | | | | |  |
|  |  | 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 | | | | | 60 | |
|  |  | General Education | | | | | 16 | |
|  |  | Free Electives to reach 60 | | | | | 0 | |
|  |  | TOTAL | | | | | 76 | |
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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:* | CZ, 12/717 | | | | | |
|  | | *Registrar:* |  | | | | | |
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Form Revised 1.24.2018