

**Catalog Year 2019-2020**

BTC, Instrumentation and Automation Assistant

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 |
| ESET 0103: Introduction to Electronics Theory | 1 | C- |  | D |  |  |
| ESET 0103L: Introduction to Electronics Lab | 1 | C- |  | D |  |  |
| ESET 0104: DC Electronics Principles Theory | 2 | C- |  | D |  |  |
| ESET 0104L: DC Electronics Principles Lab | 2 | C- |  | D |  |  |
| ESET 0105: AC Electronics Principles Theory | 4 | C- |  | D |  |  |
| ESET 0105L: AC Electronics Principles Lab | 2 | C- |  | D |  |  |
|  Total | **12** |  |  |  |  |  |
| Semester Two |
| INST 0140: Introduction to Motors and Motor Control Theory | 2 | C- |  | S |  |  |
| INST 0220: Introduction to Programmable Logic Controllers | 3 | C- |  | F,S |  |  |
| INST 0240: Theory | 2 | C- |  | F,S,Su |  |  |
| INST 0242: Theory | 2 | C- |  | F,S,Su |  |  |
| INST 0251: Laboratory | 1 | C- |  | F,S,Su |  |  |
| INST 0253: Laboratory | 1 | C- |  | F,S,Su |  |  |
| INST 0254: Laboratory | 1 | C- |  | F,S,Su |  |  |
|  Total | **12** |  |  |  |  |  |
| Semester Three |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  Total |  |  |  |  |  |  |
| Semester Four |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  Total |  |  |  |  |  |  |
| \*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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| **2019-2020 Major Requirements** | **CR** | **GENERAL EDUCATION OBJECTIVES****\* GenEd Objectives not required**  | **0 Cr.****Min** |
| **Energy Systems Tech, BTC - MAJOR REQUIREMENTS** | **24** | 1. Written English (6 cr. min) ENGL 1101 (or equivalent) |  |
| ESET 0103: Introduction to Electronics Theory | 1 |   |  |
| ESET 0103L: Introduction to Electronics Lab | 1 | 2. Spoken English (3 cr. min) COMM 1101 | 0 |
| ESET 0104: DC Electronics Principles Theory | 2 | 3. Mathematics (3 cr. min)  |  |
| ESET 0104L: DC Electronics Principles Lab | 2 | 4. Humanities, Fine Arts, Foreign Lang. |
| ESET 0105: AC Electronics Principles Theory | 4 |  |  |
| ESET 0105L: AC Electronics Principles Lab | 2 |  |  |
| INST 0140: Intro to Motors and Motor Control Theory | 2 | 5. Natural Sciences **(1 Course including a lab; 4 cr. min)**  |
| INST 0220: Introduction to Programmable Logic Controllers | 3 |   |  |
| INST 0240: Theory | 2 |   |  |
| INST 0242: Theory | 2 | 6. Behavioral and Social Science **(1 course; 3 cr. min)** |
| INST 0251: Laboratory | 1 |  |  |
| INST 0253: Laboratory | 1 |  |  |
| INST 0254: Laboratory | 1 | **One Course from EITHER Objective 7 OR 8** |
|  |  | 7. Critical Thinking  |  |
|  |  | 8. Information Literacy  |
|  |  | 9. Cultural Diversity  |
|  |  |  |  |
|  |  | General Education Elective to reach 15 cr. min.  |
|  |  |   |  |
|  |  |  **Total GE** | **0** |
|  |  | Undergraduate Catalog and GE Objectives by [Catalog Year](https://www.isu.edu/advising/academic-support/general-education/)  |
|  |  |
|  |  |
|  |  | **MAP Credit Summary** | **CR** |
|  |  | Major  | 24 |
|  |  | General Education  | 0 |
|  |  | Free Electives to reach 60 | 0 |
|  |  |  TOTAL | 24 |
|  |  |  |
|  |  |
|  |  |
|  |  |
|  |  | **Graduation Requirement Minimum Credit Checklist** | **Confirmed** |
|  |  | Min. of 24 credits Total |  |  |
|  |  |  |  |  |
|  |  |  |  |
| **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 06/18/2019 |
|  | *Registrar:*  |  |
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 Form Revised 1.24.2018