

**Catalog Year 2019-2020**

Industrial Cybersecurity Engineering Technology - ITC

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 0100: Introduction to Engineering Technology | 1 | C- |  | F, S, D |  | ESET 0100L |
| ESET 0100L: Introduction to Engineering Technology Laboratory | 1 | C- |  | F, S, D |  | ESET 0100 |
| ESET 0181: Information Technology Fundamentals | 3 | C- |  | F, D |  |  |
| ESET 0223: Digital Control Theory | 2 | C- |  | F, S, D |  | ESET 0227 |
| ESET 0227: Digital Control Systems Lab | 1 | C- |  | F, S, D |  | ESET 0223 |
| ESET 0282A: Introduction to Network Security I | 1 | C- |  | F, D |  |  |
| ESET 0282B: Introduction to Network Security II | 2 | C- |  | F, D |  |  |
| ESET 0283: Information Security Design | 3 | C- |  | F, D |  |  |
| ESET 0284: Risk Management for Critical Data Systems | 3 | C- |  | F, D |  |  |
|  |  |  |  |  |  |  |
| Total | 17 |  |  |  |  |  |
| Semester Two | | | | | | |
| ESET 0120: Introduction to Energy Systems | 2 | C- |  | F, D |  | ESET 0120L |
| ESET 0120L: Introduction to Energy Systems Lab | 1 | C- |  | F, D |  | ESET 0120 |
| ESET 0242: Practical Process Measurements and Control | 2 | C- |  | F, D |  |  |
| ESET 0281: Defending Critical Infrastructure & Cyber Physical Systems | 3 | C- |  | S, D |  |  |
| ESET 0286: Critical Network Security | 3 | C- |  | S, D |  |  |
| ESET 0287: Professional Certification | 3 | C- |  | S, D |  |  |
| ESET 0289: Capstone  or  ESET 0297: Internship | 3 | C- |  | D |  |  |
|  |  |  |  |  |  |  |
| Total | 17 |  |  |  |  |  |
| \*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**  **Satisfy Objectives 1,2,3,4,5,6 (7 or 8) and 9** | | | | | | **0 cr. min** |
| **MAJOR REQUIREMENTS** |  | 1. Written English (6 cr. min) | | | | | |  |
| ESET 0100: Introduction to Engineering Technology | 1 |  | | | | | |  |
| ESET 0100L: Introduction to Engineering Technology Laboratory | 1 | 2. Spoken English (3 cr. min) | | | | | |  |
| ESET 0120: introduction to Energy Systems | 2 | 3. Mathematics (3 cr. min) | | | | | |  |
| ESET 0120L: Introduction to Energy Systems Laboratory | 1 | 4. Humanities, Fine Arts, Foreign Lang. **(2 courses; 2 categories; 6 cr. min)** | | | | | | |
| ESET 0181: Information Technology Fundamentals | 3 |  | | | | | |  |
| ESET 0223: Digital Control Theory | 2 |  | | | | | |  |
| ESET 0227: Digital Control Systems Laboratory | 1 | 5. Natural Sciences **(2 lectures-different course prefixes, 1 lab; 7 cr. min)** | | | | | | |
| ESET 0242: Practical Process Measurements and Control | 2 |  | | | | | |  |
| ESET 0281: Defending Critical Infrastructure and Cyber Physical Systems | 3 |  | | | | | |  |
| ESET 0282A: Introduction to Network Security I | 1 |  | | | | | |  |
| ESET 0282B: Introduction to Network Security II | 2 | 6. Behavioral and Social Science **(2 courses-different prefixes; 6 cr. min)** | | | | | | |
| ESET 0283: Information System Security Design | 3 |  | | | | | |  |
| ESET 0284: Risk Management for Critical Data Systems | 3 |  | | | | | |  |
| ESET 0286: Critical Network Security | 3 | One Course from EITHER Objective 7 OR 8 **(1course; 3 cr. min)** | | | | | | |
| ESET 0287: Professional Certification | 3 | 7. Critical Thinking | | | | | |  |
| ESET 0289 (Capstone) OR ESTEC 0297 (Internship) | 3 | 8. Information Literacy | | | | | |
|  |  | 9. Cultural Diversity **(1 course; 3 cr. min)** | | | | | | |
|  |  |  | | | | | |  |
|  |  | General Education Elective to reach 36 cr. min. **(if necessary)** | | | | | | |
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|  |  | **Total GE** | | | | | |  |
|  |  | 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 | | | | | 34 | |
|  |  | General Education | | | | | 0 | |
|  |  | Free Electives to reach 120 credits | | | | | 0 | |
|  |  | TOTAL | | | | |  | |
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|  |  | **Graduation Requirement Minimum Credit Checklist** | | | **Confirmed** | | | |
|  |  | Minimum 36 cr. General Education Objectives (15 cr. AAS) | | |  | | | |
|  |  | Minimum 16 cr. Upper Division in Major (0 cr. Associate) | | |  |  | | |
|  |  | Minimum 36 cr. Upper Division Overall (0 cr. Associate) | | |  |  | | |
|  |  | Minimum of 120 cr. Total (60 cr. Associate) | | |  |  | | |
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| **Advising Notes** | | ***MAP Completion Status (for internal use only)*** | | | | | | |
|  | |  | *Date* | | | | | |
|  | | *Department:* | TIM 09/19/2018 | | | | | |
|  | | *CAA or COT:* |  | | | | | |
|  | | *Registrar:* |  | | | | | |
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Form Revised 1.24.2018