

Degree Pathway

A.A.S. in Cybersecurity – Catalog Year 2023-24

The number of credits you take each year will determine when you graduate. To graduate on time, you are strongly encouraged to enroll in at least 30 credits toward your degree during the calendar year, including fall and spring semesters and winter and summer sessions. This Degree Pathway is designed for students who place into developmental math and English. Additional pathways are available for students who place into MA-119 or MA-440 and ENGL-101. Please see the degree website or your advisor for more information.

Courses in Bold Text are prerequisites for later courses or only offered in the Fall or Spring semester and should be taken where indicated in the sequence.

Fall Semester #1

| Courses | Credits | Prerequisites and Corequisites¹ |
|--|------------------|---|
| ENGL-101 English Composition I (ALP section) (Required Core 1A - English Composition) | 3 | Pre/corequisite: Must satisfy developmental requirement in English or be co-enrolled in ENGL-99 |
| ENGL-99 Developing Competence in College Reading, Writing, & Study Skills | 0 (4 eq.) | Corequisite: ENGL-101 |
| MA-114 College Algebra and Trigonometry for Technical Students OR MA-119 College Algebra and MA-121 Elementary Trigonometry² | 4 | Corequisite for MA-114: MA-114ALP Corequisite for MA-119: MA-10ALP |
| MA-114 ALP College Algebra and Trigonometry for Technical Students OR MA-10 ALP Elementary Algebra | 0 (3 eq.) | Corequisite for MA-114ALP: MA-114 Corequisite for MA-10ALP: MA-119 |
| Total credits for the term | 7 + 7 eq. | |

Spring Semester #1

| Courses | Credits | Prerequisites and Corequisites¹ |
|--|----------------|---|
| ENGL-102 English Composition II (Required Core 1A - English Composition) | 3 | Prerequisite: ENGL-101 or placement |
| MA-440 Pre-Calculus Mathematics (Required Core 1B - Mathematical & Quantitative Reasoning) | 4 | Prerequisite: MA-119 and MA-121 or MA-114 (C or better) |
| ET-574 Programming and Applications with Python | 3 | None |
| ET-704 Networking Fundamentals I | 4 | None |
| Total credits for the term | 14 | |

Summer Term

| Courses | Credits | Prerequisites and Corequisites ¹ |
|--|----------|---|
| ET-725 Computer Network Security | 3 | Corequisite: ET-704 |
| One course from Required Core 1C: Life & Physical Sciences | 3-4 | Check individual courses for prerequisites and corequisites |
| Science Laboratory course ³ | 0-1 | Corequisite: 3-credit Science course in Required Core 1C |
| Total credits for the term | 7 | |

Fall Semester #2

| Courses | Credits | Prerequisites and Corequisites ¹ |
|---|-----------|---|
| ET-581 Object-Oriented Programming in Java | 3 | Prerequisite: ET-574 or ET-575 (C or better) |
| ET-705 Networking Fundamentals II | 4 | Prerequisite: ET-704 |
| ET-726 Advanced Network Security (Fall only) | 3 | Prerequisite: ET-725 |
| ET-754 Security Policies and Procedures | 3 | None |
| One History or Social Science course from Flexible Core 2A, 2B, 2D, or 2E | 3 | Check individual courses for prerequisites and corequisites |
| Total credits for the term | 16 | |

Spring Semester #2

| Courses | Credits | Prerequisites and Corequisites ¹ |
|--|-----------|---|
| ET-506 Linux Operating System | 3 | Corequisite: ET-704 or Departmental Permission |
| ET-756 Database Administration (Spring only) | 3 | Corequisite: ET-574 or ET-575 |
| ET-760 Ethical Hacking and Penetration Testing (Spring only) | 3 | Prerequisite: ET-725 |
| Major Elective Course – see list below | 4 | Check individual courses for prerequisites and corequisites |
| One humanities course from Flexible Core 2A, 2B, 2C, or 2D SP-211 recommended | 3 | Check individual courses for prerequisites and corequisites |
| Total credits for the term | 16 | |
| Total credits required for the A.A.S. degree | 60 | |

Notes:

1. Prerequisites for a course must be passed before taking the course. Corequisites must be passed before taking the course or taken in the same term as the course.
2. Students who place into entry level mathematics will take either MA-114 or MA-119 and MA-121 as major electives. Students who place higher than MA-440 will use the upper-level course to satisfy Required Core 1B.
3. This course is not required for students who take a 4-credit STEM variant course in Required Core 1C.

All students must complete two (2) WI designated classes to fulfill degree requirements.

Major Elective Courses – Complete 8 credits from the list below.

| Major Elective Courses | Credits | Prerequisites and Corequisites |
|--|----------------|---|
| ET-232 Wireless Mobile Communications | 3 | Prerequisite: ET-704 or Departmental Permission |
| ET-575 Introduction to C++ Programming Design & Implementation | 3 | Prerequisite: ET-502 or ET-574 OR Corequisite: MA-440 OR Departmental Permission |
| ET-580 Object-Oriented Programming | 3 | Prerequisite: ET-575 (C or better) |
| ET-585 Computer Architecture | 3 | Prerequisite: ET-574 or ET-575 |
| ET-712 Web Client Programming: JavaScript | 3 | None |
| ET-716 JavaScript Programming: Client and Server | 4 | Prerequisite: ET-710 and ET-712 |
| ET-757 Cloud Technology Developing | 3 | Prerequisite: ET-718 or ET-756 or Departmental Permission |
| ET-758 Cloud Technology Operations | 3 | Prerequisite: ET-757 or Departmental Permission |
| ET-991 Cooperative Education | 1 | Departmental Permission |
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