

Degree Pathway

A.A.S. in Cybersecurity – Catalog Year 2022-23

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 **ENGL-101 and MA-119**. Additional pathways are available for students who place into MA-440 or who must complete developmental math or English. 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 (Required Core 1A - English Composition)	3	Prerequisite: Complete developmental requirements in English
MA-114 College Algebra and Trigonometry for Technical Students OR MA-119 College Algebra and MA-121 Elementary Trigonometry²	4	Prerequisite: Placement or completion of developmental requirements in mathematics
ET-574 Programming and Applications with Python	3	None
ET-704 Networking Fundamentals I	4	None
Total credits for the term	14	

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-705 Networking Fundamentals II	4	Prerequisite: ET-704
ET-725 Computer Network Security	3	Corequisite: ET-704
Total credits for the term	14	

Fall Semester #2

Courses	Credits	Prerequisites and Corequisites ¹
ET-506 Linux Operating System	3	Corequisite: ET-704 or Departmental Permission
ET-726 Advanced Network Security	3	Prerequisite: ET-725
ET-754 Security Policies and Procedures	3	None
ET-756 Database Administration	3	Corequisite: ET-574 or ET-575
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	16	

Spring 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-760 Ethical Hacking and Penetration Testing	3	Prerequisite: ET-725
Major Elective Course – see list below	4	Check individual courses for prerequisites and corequisites
One History or Social Science course from Flexible Core 2A, 2B, 2D, or 2E	3	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 JavaScript Programming: Client and Server	3	None
ET-716 Java Programming Technology	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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