Degree Pathway

A.A.S. in Internet and Information Technology – 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 English and math**. Additional pathways are available for students who place directly into ENGL-101 and MA-119/MA-114 or who are interested in the NYC Jobs CEO Council Software Engineering Apprenticeship Program. 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 Corequisites[1]
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 BE-102
ENGL-99 Developing Competence in College Reading, Writing, & Study Skills	0 (4 eq.)	Corequisite: ENGL-101
MA-119 College Algebra or MA-114 (Required Core 1B - Mathematical & Quantitative Reasoning)	3-4	Pre/corequisite: Must satisfy developmental requirement in Math or be co-enrolled in MA-119 ALP or MA-114 ALP
MA-119 ALP College Algebra or MA-114 ALP	0 (2 eq.)	Corequisite: MA-119 or MA-114
ET-710 Front-End UI/UX Web Development	3	None
Total credits for the term	9-10 + 6 eq.	

Spring Semester #1

Courses	Credits	Prerequisites and Corequisites[1]
ENGL-102 English Composition II (Required Core 1A - English Composition)	3	Prerequisite: ENGL-101 or placement
ET-712 JavaScript Programming: Client and Server	3	Prerequisite: ET-710
ET-713 Full Stack Web Development	3	Prerequisite: ET-710
ET-704 Networking Fundamentals I	4	None
ET-574 Programming and Applications with Python (Students interested in software engineering need this before ET-575 and ET-581. Other students may choose to take it later.)	3	None
Total credits for the term	16	

Summer Session

Courses	Credits	Prerequisites and Corequisites[1]
One course from Required Core 1C: Life & Physical Sciences	3-4	Check individual courses for prerequisites and corequisites
Science Laboratory course[2]	0-1	Corequisite: 3-credit Science course in Required Core 1C
Major Elective: Select from list below	3	Check the table below for prerequisites and corequisites
Total credits for the session	**7**	

Fall Semester #2

Courses	Credits	Prerequisites and Corequisites[1]
ET-721 Software Development Practicum (fall only)	2	ET-712 and ET-713
Major Electives: Select from list below	9	Check the table below for prerequisites and corequisites
Flexible Core 2A, 2B, 2C, or 2D – Select one humanities course (SP-214 or SP-217 is highly recommended)	3	Check the table below for prerequisites and corequisites
Total credits for the term	**14**	

Spring Semester #2

Courses	Credits	Prerequisites and Corequisites[1]
Major Electives: Select from list below	8	Check the table below for prerequisites and corequisites
Flexible Core 2A, 2B, 2D, or 2E – Select one History or Social Science course (ECON-101 or ECON-102 is highly recommended)	3	Check individual courses for prerequisites and corequisites
Flexible Core 2A, 2B, 2D, or 2E – Select one History or Social Science course	3	Check individual courses for prerequisites and corequisites
Total credits for the term	**14**	
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. 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 – courses in **bold** are strongly recommended

Major Elective Courses	Credits	Prerequisites and Corequisites
ET-232 Wireless Mobile Communications	3	Prerequisite: ET-704 or permission of the Department
ET-375 Introduction to Robotics	4	Prerequisite: ET-110 and either ET-510 or ET-540 or POD
ET-481 Personal Computer Technology, Architecture & Troubleshooting[3]	2	Prerequisite: ET-501 or ET-504 or permission of the Department
ET-504 Operating Systems and System Deployment	2	None
ET-570 Creating Smartphone Apps	3	None
ET-575 Introduction to C++ Programming Design & Implementation[4,5]	3	Prerequisite: MA-321 or corequisite: MA-114, MA-119 or MA-440
ET-580 Object-Oriented Programming[5]	3	Prerequisite: ET-575 with a grade of C or better
ET-581 Object-Oriented Programming in Java	3	Prerequisite: ET-574 or ET-575 with a grade of C or better
ET-582 Data Structures (spring only)	3	ET-580 or ET-581
ET-585 Computer Architecture[5]	3	Prerequisite: ET-574 or ET-575
ET-705 Networking Fundamentals II	4	Prerequisite: ET-704
ET-714 Web Technologies II: Building Database-Driven Web Sites	4	Prerequisite: ET-710
ET-716 Java Programming Technology	4	Prerequisites: ET-710 and ET-712
ET-720 Advanced Web & Multimedia Programming Applications	1	Prerequisite: ET-710
ET 725 Computer Network Security[3]	3	Prerequisite: ET 704 or permission of the department
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
ET-757 Cloud Technology Developing	3	Prerequisite: ET-713 (formerly ET-718) or ET-756 or permission
ET-758 Cloud Technology Operations	3	Prerequisite: ET-757 or permission of the Department
ET-760 Ethical Hacking and Penetration Testing	3	Prerequisite: ET-725
ET-991 Cooperative Education[5]	1	Permission of the Department
ET-992 Cooperative Education	1	Permission of the Department
TECH-931 Cooperative Education	3	Permission of the Department
TECH-932 Cooperative Education	3	Permission of the Department

Notes:
3. Elective highly recommended because these courses lead to industry certifications. ET-481 lead may to COMP-TIA A+ certification. ET-725 may lead to COMP-TIA Sec+ certification. The exams must be taken separately from the course.
4. Offered winter session
5. Offered summer session.