

COMPUTER INFORMATION SYSTEMS
Coding & Programming Option

A.A.S. Degree*

¹ Students with English Proficiency Index (EPI) of 0-49 enroll in corequisite course ENG 100. Students with EPI of 50-64 enroll in corequisite course ENG 110. Students with EPI of at least 65 (or other English proficiency qualification) enroll in ENG 111. Students with ESL need should take appropriate ESL course/s (Sequence: ESL 1 > 2 > 3 > 9) before enrolling in ENG 110.

² Students with Math Proficiency Index (MPI) of 0-59 enroll in corequisite course MTH 21.5 OR MTH 23.5. Students with MPI of 39 or lower are strongly encouraged to enroll in Math Start/CUNY Start. Students planning to transfer to a four-year college should take MTH 28 or MTH 28.5 and MTH 30 or MTH 31.

³ Students accepted into the apprenticeship opportunities will enroll in a combination of CWE 41, CWE 42 and CWE 43 in place of BUS 110, CWE 31, DAT 33, and KEY 10. If students have completed any or all of these courses prior to participating in the apprenticeship, alternative course substitutions may be determined. Participation in an apprenticeship may prevent students from finishing their degree within the regular number (60) of credits.

⁴ Students must take FYS 11 prior to earning 24 degree or equated credits. Students who have earned 24 or more degree or equated credits are permitted to use the one credit as a free elective. It is highly recommended that students take FYS 11 in their first or second semester.

⁵ Students must choose one science course. This course may be selected from any 3-credit courses included in Required Core C or Flexible Core E. While not required, students should strongly consider enrolling in a science course with a lab component for the educational value. Completion of a 4-credit science course will fulfill this requirement but is not mandatory. This may result in students exceeding 60 total degree credits.

⁶ HIS 11 students must also enroll in ENG 110 as a corequisite.

⁷ CWE 31 is a two (2) credit course. Students should enroll in CWE 31 one year before graduating or when they have completed 30 credits towards their degree. Students should see the CWE 31 Coordinator in the Department of Business and Information Systems, during their second semester. Students who are employed full-time are not required to complete the internship portion of CWE 31, provided their employer agrees to participate in course-related surveys. Permission must be obtained from the CWE 31 Coordinator or Department Chairperson by submitting documentation of current full-time employment. College Work-Study assignments within CUNY may not be used as substitutes for the CWE internship.

*Note: In order to [apply for graduation](#), students must complete all required courses with appropriate grades, complete two writing intensive courses, and have a minimum GPA of 2.0.

SEMESTER I Freshman

	Prerequisite/Corequisite	
<input type="checkbox"/> Required Core A: English Composition I - ENG 100 Integrated Reading and Writing OR ENG 110 Fundamentals of Writing and Rhetoric OR ENG 111 Writing and Rhetoric ¹	See footnote ¹	3
<input type="checkbox"/> Required Core B: MTH 23 Probability and Statistics ² OR MTH 23.5 Probability and Statistics with Algebra ²	See footnote ²	3
<input type="checkbox"/> Major Requirement: BIS 13 Website Development	KEY 10 or dept. approval; Corequisite: ENG 100, if required	3
<input type="checkbox"/> Major Requirement: DAT 30 Introduction to Computer Fundamentals and Programming	Corequisites: ENG 100, if required; and MTH 23.5 or 28.5, if required	3
<input type="checkbox"/> Major Requirement: DAT 33 Microcomputer Applications ³	Corequisites: ENG 100, if required; and MTH 23.5 or 28.5, if required	2
<input type="checkbox"/> Major Requirement: KEY 10 Keyboarding for Computers ³	None	1
<input type="checkbox"/> Major Requirement: FYS 11 First Year Seminar ⁴	None	1
Subtotal:		16

SEMESTER II Freshman

	Prerequisite/Corequisite	
<input type="checkbox"/> Required Core A: ENG 112 Composition and Rhetoric II OR ENG 113 Writing About Literature OR ENG 114 Written Composition and Prose Fiction OR ENG 115 Written Composition and Drama OR ENG 116 Written Composition and Poetry	ENG 100, 110, or 111	3
<input type="checkbox"/> Major Requirement: BUS 110 Introduction to Business Fundamentals ³	Corequisite: ENG 110, if required; MTH 23.5 or MTH 28.5, if required; and DAT 10 or DAT 33	3
<input type="checkbox"/> Major Requirement: DAT 51 Web Programming with Python	BIS 13 and DAT 30, or dept. approval	3
<input type="checkbox"/> Major Requirement: DAT 54 Mobile Applications	BIS 13 or DAT 30, or dept. approval	3
<input type="checkbox"/> Major Requirement: DAT 47 JAVA Programming	DAT 10 or DAT 30 or dept. approval	3
Subtotal:		15

SEMESTER III Sophomore

	Prerequisite/Corequisite	
<input type="checkbox"/> Required Core C: Select ONE course from Life and Physical Science ⁵ OR Flexible Core E: Scientific World ⁵	See catalog	3
<input type="checkbox"/> Flexible Core A-E: Select ONE course from any Flexible Core A-E	See catalog	3
<input type="checkbox"/> Major Requirement: DAT 36 Microcomputer Applications	DAT 10 or DAT 30 or DAT 33 or dept. approval	3
<input type="checkbox"/> Major Requirement: DAT 39 Database Management	DAT 10 or DAT 30 or DAT 33 or dept. approval	3
<input type="checkbox"/> Major Requirement: BIS 23 Client-Side Programming	ENG 100, ENG 110, or ENG 111 and BIS 13 and KEY 10 or dept. approval	3
Subtotal:		15

SEMESTER IV Sophomore

	Prerequisite/Corequisite	
<input type="checkbox"/> Flexible Core A: HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World ⁶	See catalog	3
<input type="checkbox"/> Flexible Core B or D: ECO 12 Macroeconomics OR ECO 11 Microeconomics	Corequisite: ENG 110, if required	3
<input type="checkbox"/> Major Requirement: CWE 31 Cooperative Work Experience ^{3,7}	BUS 110 or LAW 17, and 30 credits with 2.00 GPA, or dept. permission	2
<input type="checkbox"/> Major Requirement: BIS 31 Server-Side Programming	BIS 13 and BUS 110	3
<input type="checkbox"/> Major Requirement: DAT 49 Linux Operating System	DAT 30 or dept. approval	3
Subtotal:		14

TOTAL: 60