A.A.S. COMPUTER INFORMATION SYSTEMS
Department: Mathematics and Computer Sciences
Total credits: 60

COLLEGE REQUIREMENTS	CREDITS
• Successful completion of CUNY Tests in Reading and Writing and the COMPASS Math Skills Test with passing examination scores or developmental courses may be required. • One (1) Writing Intensive course in any discipline from any category below is required. Participation in a Learning Community that includes ENG 1200 or 2400 also satisfies this requirement. • Two (2) Civic Engagement experiences—satisfied by CE-Certified or CE-Component courses or approved outside activity. Refer to the *Degree Requirements* section of this catalog.	

CUNY CORE
Approved Required and Flexible Core courses are listed in the *General Education: CUNY Pathways* section of this catalog. When possible it is recommended you fulfill your Required and/or Flexible Core requirements with courses also required for the major.

REQUIRED CORE:	
ENG 1200	3
ENG 2400	3
Mathematical and Quantitative Reasoning: Choose one of the following: Analytic Geometry and Pre-Calculus Math (MAT 1400)√ or Business Statistics (BA/MAT 2200)√	4
Life and Physical Sciences	3

FLEXIBLE CORE: ◊

Nine (9) credits with one (1) course from three (3) groups A-E. Each course from a different discipline.	9

A. World Cultures & Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual & Society
E. Scientific World

DEGREE REQUIREMENTS §
If not taken for the CUNY Required Core or Flexible Core, the following are required:

Analytic Geometry and Pre-Calculus Math (MAT 1400) √ or Business Statistics (BA/MAT 2200)√	4
Introduction to Computer Programming (CP 500)	4
C Programming 1 (CP 2100)	4
C Programming 2 (CP 2200)	4
Introduction to Operating Systems (CIS 1200)	3
Applied Computer Architecture (CIS 1500)	3
Introduction to Database (CIS 3100)	3
Fundamentals of Accounting I (ACC 1100) or Fundamentals of Business (BA 1100) or Business Law I (BA 1200)	3-4
Critical Issues in Personal Health (HE 1400)	1
Choose three of the following:	12-13

JAVA Programming 2 (CP 6200)
Programming In UNIX/LINUX (CP 7100)
Introduction to Webpage Development (CIS 2100)
HTML Authoring and JavaScript (CIS 2200)
Network Server Administration (CIS 4500)
Advanced Database Programming (CIS 3200)

ELECTIVES: 0 - 1 credits sufficient to total 60 credits for the degree.

√ Refer to course descriptions for pre-requisites, co-requisites and/or pre/co-requisites
§ Consultation with the Department Advisor is required.
◊ This program has a waiver to require particular courses in the Common Core, otherwise more than the minimum credits for the degree may be necessary.

STUDENT LEARNING OUTCOMES

Analyze, design, implement, and understand computer based solutions and apply them to real world applications
ACC 1100 CIS 1200 CIS 1500 CP 2100 CP 2200 CIS 3100 CP 500

Demonstrate the ability to maintain current knowledge of emerging and changing information technology
CIS 1200 CIS 1500 CP 2100 CP 2200 CIS 3100 CP 500

Demonstrate proficiency in programming concepts and techniques by creating logically sound and efficient algorithms
CP 2100 CP 2200 CIS 3100 CP 500

Demonstrate ability to analyze and troubleshoot computer problems and identify appropriate solutions
CIS 1200 CIS 1500 CP 2100 CP 2200 CIS 3100 CP 500

Demonstrate the ability to identify computer techniques, skills, and tools to meet end user needs
CIS 1200 CIS 1500 CP 2100 CP 2200 CIS 3100 CP 500

Comprehend the structure of a computing system, design of its basic components, and interaction of hardware and software
CIS 1200 CIS 1500 CP 2200 CIS 3100 CP 500