# Computer Information Systems, A.A.S

HEGIS: 5101.00
PROGRAM CODE: 01055
PROGRAM DIRECTOR: Dr. David Salb

DEPARTMENT: MATHEMATICS AND COMPUTER SCIENCE

The Computer Information Systems AAS degree exposes students to the field of information technology and provides the technical skills and business knowledge for entry-level positions in the field. The degree examines how modern hardware and software systems are organized and work together by teaching students how to relate to and utilize computer systems in solving real-world problems. Courses cover a broad range of topics from coding in many languages, such as Java and C++, to data base design and computer architecture.

The curriculum presented here applies to students who started the major in Fall 2025 or Spring 2026. If you enrolled as a matriculant prior to that, please see the *College Catalog* for the year you started the major as a matriculant for the curriculum requirements that apply to you.

***Consultation with the Program Advisor is required.***

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## Degree Maps:

Degree Map for Computer Information Systems, A.A.S. - MAT 9010 Placement
Degree Map for Computer Information Systems, A.A.S. - MAT 9B0 or MAT 900 Placement

Your Degree Map contains the suggested term-by-term course sequence for your academic path towards graduation.

To ensure successful and timely completion of your degree, it is recommended that you meet with your academic advisor to discuss your unique map.

Please note some courses *may* only be offered once an academic year.

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## Program Learning Outcomes:

Upon successful completion of the Computer Information Systems degree program requirements, graduates will:

1. analyze, design, implement, and understand computer based solutions and apply them to real world applications
2. demonstrate the ability to maintain current knowledge of emerging and changing information technology
3. demonstrate proficiency in programming concepts and techniques by creating logically sound and efficient algorithms

4. demonstrate the ability to analyze and troubleshoot computer problems and identify appropriate solutions
5. demonstrate the ability to identify computer techniques, skills, and tools to meet end user needs
6. comprehend the structure of a computing system, design of its basic components, and interaction of hardware and software

## College Requirements:

English and Math proficient as determined by the CUNY Proficiency Index, unless otherwise exempt, or successful completion of any required developmental course(s).

## Civic Engagement Experiences:

One (1) Civic Engagement experience satisfied by Civic Engagement Certified or Civic Engagement Component course or approved outside activity.

## Writing Intensive Requirement:

One (1) Writing Intensive Course in any discipline is required.

## Required Core (4 Courses, 12 Credits):

**When Required Core Courses are specified for a category, they are required for the major**

- ENG 1200 - Composition I 3 Credit(s)
- ENG 2400 - Composition II 3 Credit(s)
- **Mathematical & Quantitative Reasoning Course***
    - MAT 9010 - Introduction to Mathematics with College Algebra 3 Credit(s) **^ or**
    - MAT 9B0 - College Algebra for STEM Majors 3 Credit(s) **^ or**
    - MAT 900 - College Algebra 3 Credit(s) **^**
- **Life & Physical Sciences Course 3 Credit(s)**

## Flexible Core (3 Courses, 9 to 10 Credits):

**When Flexible Core courses are specified for a category, they are required for the major.**

Select **one (1)** from Groups A to C for a total of **three (3)** credits. Groups D and E are satisfied by the courses shown (6 to 7 credits). ***Each Course Must be in a <u>Different</u> Discipline***

A. World Cultures and Global Issues Designated Course

B. U.S. Experience in its Diversity Designated Course

C. Creative Expression Designated Course

D. Individual and Society Designated Course

- CIS 100 - Digital Society 3 Credit(s)

E. Scientific World Designated Course*

- MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics 3 Credit(s) ^ **or**
- MAT 2200 - Business Statistics 4 Credit(s) **or**
- BA 2200 - Business Statistics 4 Credit(s)

## Major Requirements (11 Courses, 37 to 38 Credits):

- CP 500 - Introduction to Computer Programming 4 Credit(s)
- CP 2100 - C++ Programming 1 4 Credit(s)
- CP 2200 - C++ Programming 2 4 Credit(s)
- CIS 1200 - Introduction to Operating Systems 3 Credit(s)
- CIS 1500 - Applied Computer Architecture 3 Credit(s)
- CIS 3100 - Introduction to Database 3 Credit(s)

**AND**

- ACC 1100 - Fundamentals of Accounting I 4 Credit(s) **or**
    - BA 1100 - Fundamentals of Business 3 Credit(s) **or**
    - BA 1200 - Business Law I 3 Credit(s)

**AND**

- HE 1400 - Critical Issues in Personal Health 1 Credit(s)

Select three (3) courses from the following (12 credits)

- CP 6200 - Java Programming 2 4 Credit(s)
- CIS 2100 - Introduction to Web Page Development 4 Credit(s)
- CIS 2200 - HTML Authoring and Javascript 4 Credit(s)
- CIS 3200 - Advanced Database Programming 4 Credit(s)
- CIS 4500 - Network Server Administration 4 Credit(s)

## Electives:

0 to 2 credit sufficient to meet required total of 60 credits

## Notes:

* 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.

^ Depending on Math placement, students may be required to complete MAT 9010, **or** MAT 9B0**, or** MAT 900**, and** MAT 1400.

## Total Credits: 60