* Requires MAT 123 pre-requisite.
^ Requires MAT 225 pre-requisite.
5. Students must choose to take a two semester science sequence:
- PHY 151 Physics Science and Math I -
- PHY 152 Physics Science and Math II,
- BIO 109 General Biology I -
- BIO 110 General Biology II or
- CHE 151 General Chemistry I -
- CHE 152 General Chemistry II.
6. Students should choose a course that fulfills one of the following SUNY General Education Requirements and be a different requirement than the one fulfilled in Semester I:
- SUNY GER American History,
- SUNY GER Other World Civilizations,
- SUNY GER Social Sciences, or
- SUNY GER Western Civilization.
7. Students should choose a course that fulfills one of the following SUNY General Education Requirements and be a different requirement than the one fulfilled in Semester II:
- SUNY GER Foreign Languages,
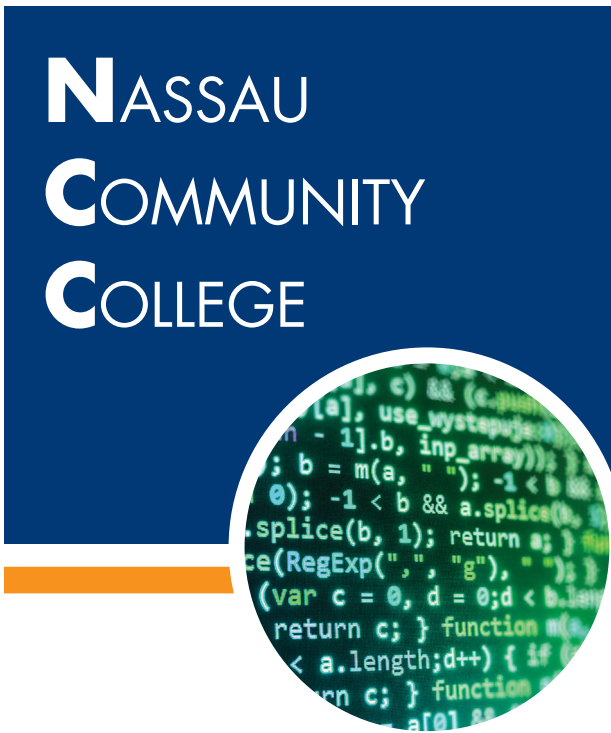- SUNY GER Humanities, or
- SUNY GER The Arts.

Additional Information

Students are encouraged to join departmental clubs and become involved in extra-curricular activities and leadership positions. Please contact the MAT/CSC/ITE department for additional information at (516)-572-7383.

Nassau Community College reserves the right to add or withdraw courses and to amend, revise, or modify the curricula.

NASSAU COMMUNITY COLLEGE

COMPUTER SCIENCE

Associate in Science Degree

Rev. 8/19

NASSAU COMMUNITY COLLEGE
One Education Drive
Garden City, NY 11530

MATHEMATICS, COMPUTER SCIENCE AND INFORMATION TECHNOLOGY DEPARTMENT

Tel   516.572.7383
admissions@ncc.edu

SUNY The State University of New York

NCC
NASSAU COMMUNITY COLLEGE

Nassau Community College offers the

Computer Science (A.S.) program for students seeking to transfer to a baccalaureate program in Computer Science.

Our Mission Statement

The goal of the A.S. in Computer Science degree is to prepare students to transfer into a baccalaureate program in Computer Science. The department has strived to maintain a balance among the incorporation of new and emerging technologies, maintenance of transferability with neighboring institutions and incorporation of the guidelines set forth by the Association for Computing Machinery.

What is the Computer Science (A.S.) degree?

This degree program gives you a strong background in computer courses offered in the first four semesters of a four-year computer science degree including courses in Computer Science 1 (CSC 120), Computer Science 2 (CSC 130), Data Structures (CSC 230) and Computer Architecture and Organization (CSC 260). Additional required courses are a two-semester sequence in Calculus (MAT 122 & MAT 123), Discrete Mathematics (MAT 241) and a two-semester science sequence in Biology, Chemistry or Physics. This degree also gives you a broad liberal arts background by requiring additional courses in English Composition, Humanities, Social Sciences and other electives.

Our Focus

Our program is designed to provide you with a solid foundation in problem solving as well as programming concepts and principles. We place a strong emphasis throughout our curriculum on reading, writing and interpreting code using a variety of data structures and programming paradigms. All of our curricula include opportunities to critically analyze a problem, break it down into its component parts and create a program to solve it.

Did You Know…

- According to the Bureau of Labor Statistics, the median income for a software developers (in 2018) is $105,590/year or $50.77/hr
- According to the Bureau of Labor Statistics, the job outlook for 2016-2026 for software developers is a 24% growth rate, which is higher than the 7% average for all occupations.
- Software developers work to create the applications used in every industry from medicine, to finance, to automotive, to education and more! Any field you can think of uses software and software developers are the ones determining what that software looks like and will do.

Why a Computer Science (A.S.) degree?

If you are planning to pursue a four-year degree in Computer Science, start your studies at NCC. We have small classes, one-on-one advising, computer learning centers with knowledgeable, helpful staff and a caring, dedicated faculty who will help you to acquire a solid foundation in the basic skills needed to successfully transfer into a baccalaureate computer science program as well as prepare you to think critically. We have joint admission programs with some SUNY schools and articulation agreements with local four-year private institutions that offer generous scholarships to our graduates.

First Semester	Credits
CSC 120 Computer Science I	4
ENG 100 Enhanced Composition I or ENG 101 Composition I or ENG 108 The Craft of Composition / Honors English I [1]	3
HED Health Elective	2-3
MAT 122 Calculus I	4
Social Science Elective [2]	3
Total Semester Credits	**16-17**

Second Semester	Credits
CSC 130 Computer Science II	4
ENG 102 Composition II or ENG 109 The Art of Analysis / Honors English II	3
Humanities Elective [3]	3
MAT 123 Calculus II	4
MAT 241 Discrete Mathematical Structures	3
Total Semester Credits	**17**

Third Semester	Credits
CSC 217 C Programming Language	3
CSC 230 Data Structures	3
CSC/MAT Elective [4]	3-4
PHY 151 Physics Science and Math I BIO 109 General Biology I, or CHE 151 General Chemistry I [5]	4
Social Science Elective [6]	3
Total Semester Credits	**16-17**

Fourth Semester	Credits
CSC 260 Computer Architecture and Organization	4
CSC/MAT Elective [4]	3-4
Humanities Elective [7]	3
PED Physical Education Activity	1
PHY 152 Physics Science and Math II BIO 110 General Biology II or CHE 152 General Chemistry II [5]	4
Total Semester Credits	**15-16**
Total Credits	**64-67**

1. Depending on placement.
2. Students should choose a course that fulfills one of the following SUNY General Education Requirements:
- SUNY GER American History,
- SUNY GER Other World Civilizations,
- SUNY GER Social Sciences, or
- SUNY GER Western Civilization.
3. Students should choose a course that fulfills one of the following SUNY General Education Requirements:
- SUNY GER Foreign Languages,
- SUNY GER Humanities, or
- SUNY GER The Arts.
4. Computer Science/Mathematics Elective: Choose from:
- CSC 240 Mobile Application Development,
- MAT 131 Probability with Statistical Inference*,
- MAT 200 Foundations of Advanced Mathematics*,
- MAT 225 Multivariable Calculus*,
- MAT 226 Elementary Linear Algebra*,
- MAT 234 Elementary Differential Equations*,
- MAT 235 Algebraic Structures^