Computer Science Degree Map

STEM

TRANSFER DEGREE | M MIDDLETOWN CAMPUS

A Day in the Life ...

The majority of Computer Scientists work in the area of programming software and applications development, although some might be involved in the infrastructure side of Information Technology. Generally, Computer Scientists use technology to solve problems by creating applications, developing websites, storing and retrieving data, and controlling other equipment. The job is often very collaborative requiring work be done in teams to analyze, design, implement and test software.

Three Reasons to Consider Computer Science

1. Computer Science is a very wide area of study that can be applied in many different fields. Those with a degree will have a broad job market to explore.
2. Our program's goal is to prepare students for a successful transfer into a B.S. degree program at a senior college or university. Most graduates with an A.S. degree in Computer Science plan to transfer and earn their B.S. in the field as quickly as possible.
3. Our curriculum includes classwork utilizing three popular and useful programming environments (such as Python, Java, and C++) along with a unique class in Digital Electronics that better prepares students to be able to program and develop in real-world environments.

Keep This in Mind

In this program, you will be given every opportunity to examine the broad field of Computer Science and learn how it applies to many different professional fields.

Computer Science Gateway Courses:

- Gateway courses: CSC 138
- Key courses: CSC 101, CSC 138

Courses above have been recommended by the department to help introduce you to the program (Gateway courses) and guide you in selecting courses that will provide you with the best academic experience (Key courses and suggested Electives).

First Semester

Course #	Course Name	P, C, P/C	Cr
ENG 101	Freshman English 1 (G10A [w] & G11A)	P	3
_____	Restricted SUNY Social Sciences* (G3A & G6A)		3
CSC 138	Intro to Applied Logic through Scripting (G11A)		3
MAT 205	Calculus 1 (G1A)	P	4
COM 101	Foundations of Communication (G10A [o] & G11A)		3
	Total Semester Credits		16

Milestones

During this semester, students should:

- Meet with your newly assigned "department" advisor to plan your second semester
- Consider joining the student-led Computer Club

Second Semester

Course #	Course Name	P, C, P/C	Cr
ENG 102	Freshman English 2 (G7A & G12A)	P	3
_____	Restricted SUNY Elective**		3
MAT 206	Calculus 2 (G1A)	P	4
CSC 101	Computer Science 1	P	4
EET 104	Digital Electronics 1	P	4
	Total Semester Credits		18

Milestones

During this semester, students should:

- Meet with department advisor to plan third semester

Third Semester

Course #	Course Name	P, C, P/C	Cr
CSC 102	Computer Science 2	P	4

Course #	Course Name	P, C, P/C	Cr
CSC 204	Computer Organization & Assembly Language	P	3
_____	Restricted SUNY Natural Sciences*** (G2A)		4
MAT 211	Linear Algebra (G1A)	P	3
_____	Restricted Elective****		3
	Total Semester Credits		17

Milestones

During this semester, students should:

- Investigate and apply for summer internships
- Schedule mock interviews through the Career Services Office or the Computer Science Department
- If continuing studies, research and apply to transfer schools

Fourth Semester

Course #	Course Name	P, C, P/C	Cr
CSC 201	Data Structures	P	3
_____	Restricted SUNY Natural Sciences*** (G2A)		4
MAT 120	Introduction to Statistics (G1A)	P	3
MAT 136	Discrete Mathematics (G1A)	P	3
	Total Semester Credits		13

Milestones

During this semester, students should:

- Apply for graduation
- If continuing studies, finalize planning with chosen transfer school
- Investigate summer internships

TOTAL DEGREE CREDITS: 64

Notes:

*Must satisfy both G3A (SUNY Social Sciences) and G6A (SUNY Diversity) requirements

**Select from G4A (SUNY US History & Gov) or G5A (SUNY World History)

***Students should consult with their advisor. Select one of the following pairs of courses: PHY 105 & PHY 106; or BIO 101 & BIO 102; or CHM 101 & CHM 102; or PHY 101 & PHY 102. Some four-year SUNY schools specifically require PHY 105 & PHY 106 to satisfy their B.S. in Computer Science programs. Students should carefully select which Natural Science to pursue and are urged to consult with an adviser if there is a concern.

****Select from CIT 103, CIT 105, CIT 117, CIT 118, or department approval