Computer Science Curriculum: AS Degree

PATHWAYS COMMON CORE: 30 CREDITS

This program has a waiver to list specific courses to complete Common Core requirements.

A. REQUIRED CORE: 12 Credits

**English:** 6 credits
ENG101 English Composition I 3
(ENA101 or ENC101 depending on placement scores)
ENG102 Writing through Literature 3

**Mathematical and Quantitative Reasoning:** 3 credits
MAT115 College Algebra & Trigonometry 3
(MAT117 Algebra and Trigonometry depending on placement scores)

**Life and Physical Sciences:** 3 credits
Select one of the following courses:
SCB101 Topics in Biological Sciences 3
SCB206 Introduction to Neuroscience
SCC101 Topics in Chemistry
SCC102 Chemistry of Photography
SCP101 Topics in Physics
SCP105 Life in the Universe
SCP140 Topics in Astronomy

B. FLEXIBLE CORE: 18 Credits

Select one course from each of the five flexible core categories below and one additional course:
World Cultures and Global Issues
US Experience in its Diversity
Creative Expression
Individual and Society
Scientific World - Students are required to take MAT115 and MAT200 under Scientific World; both courses are prerequisites for MAT201.

Note: Student can select only two courses from any one discipline. Students are advised to select one Urban Study course to complete college requirement. To complete the degree requirements from the Flexible Core, students are advised to select courses from the recommended course selections listed on the program website.

PROGRAM CORE: 30 CREDITS

**Math, Engineering and Computer Science**
CSF101 First Year Seminar for Computer Science 2
MAT231 Introduction to Discrete Math 3
MAT202 Calculus II 4
MAC101 Introduction to Computer Science 3
MAC125 Advanced C/C++ Programming 3
MAC190 Object Oriented Programming 3
MAC281 Discrete Structures 3
MAC283 Computer Organization and Assembly Language 3
MAC286 Data Structures 3*
MAT210 Linear Algebra 3

*Students intending to transfer to Queens College are advised to enroll in MAC270 Advanced Topics in Computer Science. This course will substitute for MAC286 Data Structures.

TOTAL CREDITS: 60