

# REQUIREMENTS FOR BACHELOR OF SCIENCE IN COMPUTER SCIENCE

for students matriculated **Fall 2023** or after

To receive the BS degree in computer science, students must earn a minimum of 126 credit hours, including transfer credits, with a minimum 2.0 (C) grade-point average in computer science major courses, and a minimum cumulative grade-point average of 2.0.

a minimum of 60 credits must be in liberal arts and sciences courses  
a minimum of 40 credits must be earned in Computer Science Watson College  
a minimum of 45 credits must be completed at the 300-level or above

course that meets the Binghamton University General Education Composition requirement.  
CS . Ethical, Social and Global Issues in Computing.

Two or three course sequence: BIOL 113, 114, & 115; or CHEM 104, 105, & 106; or CHEM 107 & 108; or PHYS 131 & 132<sup>2</sup>

MATH 224

Discrete

One elective chosen from:

MATH 304. Linear Algebra

MATH 381. Graph Theory

MATH 407. Intro. to the Theory of Numbers

MATH 371. Ordinary Diff. Equations

MATH 386. Combinatorics

MATH 323. Calculus III or a Science Elective chosen from courses that meet the General Education Laboratory Science requirement (L)

**Computer Science Electives (at least 15 credits) chosen from the Breadth Areas A, B, C, D, and E below. At least one course must be chosen from each of the areas A, B and C, and courses with multiple areas count as meeting all the areas indicated. Courses from areas D and E are optional. At most, one can be taken from E. (Prerequisites are listed in the tables on Page 2):**

**A: Networking and Communications**

**B: Large Software Development**

**C: Data and Information Management**

**D: Other courses**

**E. Internship, Co-op, Research**

CS 402. Software and Engineering Project Management (D)

CS 415. Social Media Data Science Pipeline (C)

CS 424. Intelligent Mobile Robotics (A, B, C)

CS 426. Internet of Things (A)

CS 427. Mobile Systems Security (A)

CS 428. Computer Networks (A, B)

CS 432. Database Systems (B, C)

CS 433. Information Retrieval (A, B, C)

## Supplemental information regarding the BS