

# Computer Science, B.S.

05/18/2024

Sample four-year plans are examples. Students will create an individualized degree plan with their advisor, reflecting their preparation, interests, and goals. Sequences may vary based on course availability, developmental needs, and preferences. For complete degree requirements, see the Undergraduate Course Catalog at <http://hood.smartcatalogiq.com/>.

## BSCS Sample 4-year Schedule 1

**Student Places in Calculus I; begins major courses in first year, first semester.**

<b>Freshman year: Fall</b> 15 credits *FYS 101 First Year Seminar (3cr) CS 201 Computer Science I (4cr) *Math 201 Calculus I (4cr) Math 207 Discrete Math (3cr) *Health and Wellness (1cr)	<b>Freshman year: Spring</b> 16 credits CS 202 Computer Science II (4cr) Math 202 Calculus II (4cr) *ENGL 100 Elements of Composition (4cr) *Methods of Inquiry (3cr) *Health and Wellness (1cr)
<b>Sophomore year: Fall</b> 14 credits CS 219 Data Structures (3cr) CS 226 Computer Organization (3cr) *Foreign Language 101 (4cr) *Lab Science I (4cr)	<b>Sophomore year: Spring</b> 17 credits CS 319 Algorithm Analysis (3cr) CS 329 Intro to DBMS (3cr) *Foreign Lang 102 (4cr) *Lab Science II (4cr) *Methods of Inquiry (3cr)
<b>Junior year: Fall</b> 15 credits CS 324 Software Engineering (3cr) *CSIT 203/302 Impact of Computers on Society (3cr) CS Elective (3cr) * Method of Inquiry (3cr) Free Elective (3cr)	<b>Junior year: Spring</b> 16 credits CS 453 Data Communication and Networking (3cr) CS 464 Operating Systems (3cr) Math 213 Statistics or other 200+ Math (4cr) CS Elective: (3cr) *Methods of Inquiry (3cr)
<b>Senior year: Fall</b> 16 credits CS 471 Programming Languages (3cr) CS 474 Capstone Proseminar (3cr) CS 399 Internship or CS Elective (3cr) *Methods of Inquiry (3cr) Free Elective (4cr)	<b>Senior year: Spring</b> 15 credits CS 475 Senior Project (3cr) Free Elective (3cr) Free Elective (3cr) Free Elective (3cr) Free Elective (3cr)

\*Meet core requirements.

## BSCS Sample 4-year Schedule 2

Mathematics placement in Precalculus or Precalc + Lab. Begin major courses in the second semester.

<b>Freshman year: Fall</b> 14-15 credits  *FYS 101 First Year Seminar (3cr) Math 120 Precalculus (3cr) OR Math 120 + Math 120L (4cr) *Foreign Language 101 (4cr) *Methods of Inquiry (3cr) *Health and Wellness (1cr)	<b>Freshman year: Spring</b> 16 credits  *ENGL 100 Elements of Composition (4cr) CS 201 Computer Science I (4cr) Math 207 Discrete Math (3cr) *Foreign Language 102 (4cr) *Health and Wellness (1cr)
<b>Sophomore year: Fall</b> 15 credits  CS 202 Computer Science II (4cr) CS 226 Computer Organization (3cr) *Math 201 Calculus I (4cr) *Lab Science I (4cr)	<b>Sophomore year: Spring</b> 17 credits  CS 219 Data Structures (3cr) *CSIT 302 Impact of Computers on Society (3cr) Math 202 Calculus II (4cr) *Lab Science II (4cr) *Methods of Inquiry (3cr)
<b>Junior year: Fall</b> 15 credits  CS 324 Software Engineering (3cr) CS Elective (3cr) *Methods of Inquiry (3cr) Free Elective (3cr) Free Elective (3cr)	<b>Junior year: Spring</b> 16 credits  CS 319 Algorithm Analysis (3cr) CS 329 Intro to DBMS (3cr) CS 453 Data Communication and Networking (3cr) Math 213 Statistics or other 200+ Math (4cr) *Methods of Inquiry (3cr)
<b>Senior year: Fall</b> 15-16 credits  CS 471 Programming Languages (3cr) CS 474 Capstone Proseminar (3cr) *Methods of Inquiry (3cr) CS 399 Internship or CS Elective (3cr) Free Elective (3-4cr)	<b>Senior year: Spring</b> 15 credits  CS 464 Operating Systems (3cr) CS 475 Senior Project (3cr) CS Elective (3cr) Free Elective (3cr) Free Elective (3cr)

\*Meet core requirements.

### Notes:

- 124 total credits are required for graduation.
- Free Electives may be Honors program courses, a minor, additional major courses, or another subject of interest.
- There is some flexibility for interchanging the scheduling of Methods of Inquiry and Free Elective courses, but it is best not to leave too many requirements until the end.
- Students majoring in computer science:
  - Meet the Core-Global Perspectives requirement by taking the CSIT 302 Impact of Computers on Society.
  - Meet the Core-Scientific Thought Lab requirement by taking eight credits of lab science courses required for a major or minor in biology, chemistry, or physics. **Non-lab courses, CHEM 100, and courses for the nursing program do not count.**