# Sample Four-Year Plan for a BA in Computer Science

| | Fall Semester | Spring Semester |
|---|---|---|
| **Freshman Year** | CS 110 – 4 cr<br>Math 140 – 4 cr<br>First Year Seminar – 4 cr<br>English 101 – 3 cr<br><br>(15 credits) | CS 210 – 4 cr<br>Math 141 – 4 cr<br>English 102 – 3 cr<br>General Education – 3 cr<br>Elective – 3 cr<br>(17 credits) |
| **Sophomore Year** | CS 240 – 3 cr<br>CS 220– 3 cr<br>Math 260 – 3 cr<br>Intermediate Seminar – 3 cr<br>General Education – 3 cr<br>(15 credits) | CS 310 – 3 cr<br>CS 341 – 3 cr<br>General Education – 3 cr<br>General Education – 3 cr<br>Elective – 3 cr<br>(15 credits) |
| **Junior Year †** | CS 420 – 3 cr<br>CS Elective – 3 cr<br>General Education – 3 cr<br>Elective – 3 cr<br>Elective – 3 cr<br>(15 credits) | CS Elective – 3 cr<br>CS 444 or 451 – 3 cr<br>General Education – 3 cr<br>Elective – 3 cr<br>Elective – 3 cr<br>(15 credits) |
| **Senior Year** | Math/CS elective – 3 cr<br>General Education – 3 cr<br>General Education – 3 cr<br>Elective – 3 cr<br>Elective – 3 cr<br>(15 credits) | CS 450 – 3 cr<br>General Education – 3 cr<br>General Education – 3 cr<br>Elective – 3 cr<br>Elective – 3 cr<br>(15 credits) |

† - The Writing Proficiency Requirement (WPR) is recommended to be completed at 60-75 credits. Please consult the WPR website:
www.umb.edu/academics/vpass/undergraduate_studies/writing_proficiency

**Residency requirement:** A minimum of four CS/Math courses at the 300 or 400 level must be taken at UMass Boston.

- This document is a suggested plan for the major. Students must meet with their faculty advisor each semester and refer to their degree audit to ensure adequate progress toward their degree.
- See reverse side for more detailed information

# Computer Science BA Course Number Guide

This course guide provides the detailed names of courses listed by number on the four-year plans. It is not a comprehensive list of courses for your major, or a substitute for an advising appointment! Consult with your faculty advisor when choosing courses, and check your degree audit regularly.

CS 110 – Introduction to Computing

CS 210 – Intermediate Computing with Data Structures

CS 220 – Applied Discrete Mathematics

CS 240 – Programming in C

CS 310 – Advanced Data Structures and Algorithms

CS 341 – Computer Architecture and Organization

CS 420 – An Introduction to the Theory of Computation

CS 444 – An Introduction to Operating Systems

CS 450 – The Structure of Higher Level Languages

CS 451 – Compilers I

Math 140 – Calculus I

Math 141 – Calculus II

Math 260 – Linear Algebra I


Computer Science pass/fail rule: no major requirements may be taken pass/fail

**Additional resources:**
www.umb.edu/academics/vpass/undergraduate_studies/general_education_requirements
www.umb.edu/academics/course_catalog/search
www.umb.edu/academics/csm/student_success_center/degree_planning/math_placement