



# STUDENT SUCCESS CENTER

COLLEGE OF SCIENCE AND MATHEMATICS  
www.umb.edu/ssc

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

	Fall Semester	Spring Semester
Freshman Year	CS 110 – 4 cr Math 140 – 4 cr First Year Seminar – 4 cr English 101 – 3 cr  (15 credits)	CS 210 – 4 cr CS 240 – 3 cr Math 141 – 4 cr English 102 – 3 cr  (14 credits)
Sophomore Year	Math 260 – 3 cr CS 220 – 3 cr CS 285L – 3 cr General Education – 3 cr Elective – 3 cr  (15 credits)	CS 310 – 3 cr CS 341 – 3 cr Science Elective – 4 cr Intermediate Seminar – 3 cr General Education – 3 cr  (16 credits)
Junior Year †	CS 420 – 3 cr CS 444 – 3 cr Math 345 – 3 cr Physics 113 & 181 – 6 cr  (15 credits)	CS 451 – 3 cr CS Elective – 3 cr Physics 114 & 182 – 6 cr General Education – 3 cr  (15 credits)
Senior Year	CS 450 – 3 cr CS Elective – 3 cr General Education – 3 cr General Education – 3 cr Elective – 3 cr  (15 credits)	CS 410 – 3 cr General Education – 3 cr General Education – 3 cr Elective – 3 cr Elective – 3 cr  (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](http://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 BS 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 285L – Research Topics in Computer Issues: Ethics and Societal Impact

CS 310 – Advanced Data Structures and Algorithms

CS 341 – Computer Architecture and Organization

CS 410 – An Introduction to Software Engineering

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

Math 345 – Probability and Statistics

Physics 113 & 181 - Fundamentals of Physics Lecture & Laboratory

Physics 114 & 182 – Fundamentals of Physics II Lecture & Laboratory

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](http://www.umb.edu/academics/vpass/undergraduate_studies/general_education_requirements)

[www.umb.edu/academics/course\\_catalog/search](http://www.umb.edu/academics/course_catalog/search)

[www.umb.edu/academics/csm/student\\_success\\_center/degree\\_planning/math\\_placement](http://www.umb.edu/academics/csm/student_success_center/degree_planning/math_placement)