

Computer Science - B.S.

Degree Requirements

Total Academic Credits: 120 - 121

Major Credits: 78

Min. Upper-Level Credits: 45

Min. Cumulative GPA: 2.0

§ indicates Benchmark requirements

‡ indicates Gateway courses

Curriculum Notes

- This sample plan assumes no AP/IB/CLEP or transfer credit, foreign language proficiency up to the 201 level and a math placement level of MATH 151
- All students must complete a credit-bearing English and Mathematics course in the first year of study
- Gateway Course Information: advising.coeit.umbc.edu/gateway-information/computer-science-gateway

Year One

Fall Semester	Credits	Spring Semester	Credits
CMSC 201 Computer Science I (grade of B or better required) § ‡	4	CMSC 202 Computer Science II (grade of B or better required) § ‡	4
MATH 151 Calc. & Analytic Geom. I (MATH GEP)	4	MATH 152 Calculus and Analytic Geometry II	4
Foreign Language 201	4	CMSC 203 Discrete Structures (grade of C or better required) § ‡	3
ENGL GEP	3	AH GEP	3
Total	15	SS GEP	3
		Total	17

Year Two

Fall Semester	Credits	Spring Semester	Credits
CMSC 331 Principles of Programming Language	3	CMSC 313 Computer Organization & Assembly Language Programming §	3
CMSC 341 Data Structures §	3	MATH 221 Introduction to Linear Algebra	3
Science Sequence I course (S non-lab GEP, see advisor)	4	Science Sequence II course (S non-lab GEP)	4
SS GEP	3	Science Lab (GEP, see advisor, credit varies)	2
Elective	3	SS GEP	3
Total	16	Total	15

Year Three

Fall Semester	Credits	Spring Semester	Credits
CMSC 304 Social & Ethical Issues in Information Technology (AH GEP, WI)	3	CMSC 421 Principles of Operating Systems	3
CMSC 411 Computer Architecture	3	CMSC 4XX Elective (see elective requirements)	3
CMSC 4XX Elective (see elective requirements)	3	CMSC 4XX Elective (see elective requirements)	3
STAT 355 Introduction to Probability & Statistics for Scientists & Engineers §	4	AH GEP	3
		C GEP	3
Total	13	Total	15

Year Four

Fall Semester	Credits	Spring Semester	Credits
CMSC 441 Design & Analysis of Algorithms	3	CMSC 4XX Elective (see elective requirements)	3
CMSC 447 Software Engineering I	3	CMSC 4XX Elective (see elective requirements)	3
Upper-Level Elective	3	Elective	3
Elective	3	Elective	3
Elective	3	Elective	2-3
Total	15	Total	14 - 15

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