



Anne Arundel Community College - Computer Science Transfer - Computer Science (A.S.)
 UMBC - Computer Science, B.S.
 Catalog Year: 2023-2024



Anne Arundel Community College				UMBC Equivalency		
CODE	TITLE	NOTES/RECOMMENDATIONS	Credits	Course	GEP	Credits
ENG 101	Academic Writing and Research 1		3	Lower Level Elective - ENGL	AH	3
ENG102	Academic Writing and Research 2		3	ENGL100 - Composition	EN	3
	Social and Behavioral Science		3		SS	3
	Social and Behavioral Science		3		SS	3
**Arts and Humanities		Foreign Language 111-Level	3		C	3
**Arts and Humanities		Foreign Language 112-Level	3		C	3
*Biological and Physical Sciences (2)		BIOL101 + BIOL104 OR PHY 211 + PHY 212 OR CHE 111 + CHE 112	8	BIOL141 + BIOL142 + BIOL300L OR PHYS121 + PHYS122 + PHYS122L OR CHEM101 + CHEM102 + CHEM102L	S + SL	8
** Elective		Foreign Language 211-Level	3		201L	3
	Wellness GER		3		SS	3
*MAT 191	Calculus of a Single Variable I		4	MATH151 - Calculus I	M	4
*MAT 192	Calculus of a Single Variable II		4	MATH152 - Calculus II		4
^CTP 150	Computer Science I		4	CMSC 201 - Computer Science I		4
^CTP 250	Computer Science 2		4	CMSC 202 - Computer Science II		4
*MAT 250	Discrete Structures		3	CMSC 203 - Discrete Structures		3
CTP 115	Intro Object-Oriented Program Analysis		4	Elective		4
MAT 202	Linear Algebra		4	MATH 221- Linear Algebra		4
Elective			1	Elective		1
Total Credits at Anne Arundel Community College:			60	Transferrable credits to UMBC (Maximum 70):		60

Computer Science Specific Requirements:
 - Students who have more than two attempts in any course required to progress in the major will not be permitted to major in Computer Science at UMBC (a withdrawal is considered an attempt).
 - Students pursuing Computer Science are "Pre-Computer Science" majors until they have successfully completed the gateway requirements (CMSC 201 and CMSC 202 with grades of B or higher, and CMSC203 with a grade of C or higher) and finished one semester of enrollment at UMBC.

* Course can be used to satisfy UMBC major requirements when completed with a "C" or better.
 ^ CMSC 201 and CMSC 202 can be used to satisfy the Computer Science major requirements when completed with a "B" or better; other majors may allow a "C" or better

**** Foreign Language Requirement:** The language requirement consists of completion of a foreign language through the 201 level or demonstrated proficiency at that level. The proficiency requirement is met by previous experience as follows: 1) completion of level 4 or higher of a language in high school, or 2) corresponding AP, IB or CLEP credit, or 3) completion of a language through the 201 level at a regionally accredited college or university.

CODE	TITLE	PRE-REQUISITES	NOTES/RECOMMENDATIONS	GEP	CREDITS
CMSC304	Social and Ethical Issues in Information Technology			AH/WI	3
CMSC313	Computer Organization and Assembly Language Programming				3
CMSC331	Principles of Programming Language				3
CMSC341	Data Structures				3
CMSC411	Computer Architecture				3
CMSC421	Principles of Operating Systems				3
CMSC441	Design and Analysis of Algorithms				3
CMSC447	Software Engineering I				3
	STAT355 or STAT451				3-4
	Computer Science Elective				3
	Computer Science Elective				3
	Technical Elective				3
	Technical Elective				3
	Technical Elective				3
	Upper Level Elective				3
	Elective				3
	Elective				3
	Elective				3
	Elective				3
	Elective				3

Total credits at UMBC: 60-61
Total credits toward UMBC degree (minimum 120 credits): 120-121