

## Anne Arundel Community College - Mathematics, A.S. UMBC - Mathematics, B.A. 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	English Lower Level Elective	AH	3				
ENG 102	Academic Writing and Research 2		3	ENGL 100 - Composition	ENG	3				
MAT 191	Calculus I		4	MATH 151 - Calculus and Analytic Geometry I Major Core Requirement	M*	4				
MAT 192	Calculus II		4	MATH 152 - Calculus and Analytic Geometry II Major Core Requirement	M*	4				
MAT 201	Multivariable Calculus		4	MATH 251 - Multivariable Calculus Major Core Requirement	*	4				
MAT 202	Linear Algebra		4	MATH 221 - Introduction to Linear Algebra Major Core Requirement	*	4				
MAT 212	Differential Equations		4	MATH 225 - Introduction to Differential Equations  Major Core Requirement	*	4				
PHY 211	General Physics I (Lab Course)		4	PHYS 121 - Introductory Physics I Major Supplementary Requirement	SL*	4				
PHY 212	General Physics II (Elective)		4	Lower Level Elective		4				
PHY 213	General Physics III		4	PHYS 122 - Introductory Physics II Major Supplementary Requirement	S*	4				
CTP 103 OR EGR 120	Theories and Applications of Digital Technology - OR - Intro to Engineering Design		3	IS101 - Intro to Compute based systems OR ENES101-Intro to Engineering	SS	3				
MAT 250	Introduction to Discrete Structures (Elective)		3	CMSC 203 - Discrete Structures Major Supplementary Requirement	*	3				
CTP 150	Computer Science 1 (Elective)		4	CMSC 201 - Computer Science I Major Core Requirement	*	4				
Program Elec	tive		3			3				
Social Science, Behavioral Science General Education Elective		3		SS	3					
Social Science, Behavioral Science General Education Elective		3		SS	3					
Arts & Humanities General Education Elective		** Foreign Language (if needed)	3		AH/C	3				
Arts & Humanities General Education Elective		** Foreign Language (if needed)	3		AH/C	3				
Wellness General Education			3		SS	3				
Total Credits at AACC: 66 Transferrable credits to UMBC (Maximum 70): 66										
* Course can be used to satisfy UMBC major requirements when completed with a "C" or better.										

<sup>\*\*</sup> 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		NOTES/RECOMMENDATIONS	GEP	CREDITS		
MATH 300	Introduction to Mathematical Reasoning		Required course		4		
MATH 301	Introduction to Mathematical Analysis I		Additional Prereq: MATH 300		4		
	Upper Level Mathematic/Statistics Elective		See Section II of Mathematic Major Requirements for B.A.		3		
	Upper Level Mathematic/Statistics Elective		See Section II of Mathematic Major Requirements for B.A.		3		
	Upper Level Mathematic/Statistics Elective		See Section II of Mathematic Major Requirements for B.A.		3		
	400-Level Mathematic/Statistics Elective		See Section II of Mathematic Major Requirements for B.A.		3		
	400-Level Mathematic/Statistics Elective		See Section II of Mathematic Major Requirements for B.A.		3		
	Upper Level Elective				3		
	Upper Level Elective				3		
	Upper Level Elective				3		
	Upper Level Elective				3		
	Upper Level Elective				3		
	Upper Level Elective				3		
	Upper Level Elective				3		
	Upper Level Elective (Writing Intensive if needed)			WI	3		
	**Foriegn Language (if needed)			201L	4		
	Arts and Humanities GEP Requirement or Lower Level Elective			AH	3		
	Culture GEP Requirement or Lower Level Elective			С	3		
	Total credits at UME						
Total credits toward UMBC degree (minimum 120 credits):							

Updated 12/14/2023