



Anne Arundel Community College - Mathematics, A.S.  
 UMBC - Mathematics, 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	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 <i>Major Core Requirement</i>	M*	4
MAT 192	Calculus II		4	MATH 152 - Calculus and Analytic Geometry II <i>Major Core Requirement</i>	M*	4
MAT 201	Multivariable Calculus		4	MATH 251 - Multivariable Calculus <i>Major Core Requirement</i>	*	4
MAT 202	Linear Algebra		4	MATH 221 - Introduction to Linear Algebra <i>Major Core Requirement</i>	*	4
MAT 212	Differential Equations		4	MATH 225 - Introduction to Differential Equations <i>Major Core Requirement</i>	*	4
PHY 211	General Physics I (Lab Course)		4	PHYS 121 - Introductory Physics I <i>Major Core Requirement</i>	SL*	4
PHY 212	General Physics II (Elective)		4	Lower Level Elective		4
PHY 213	General Physics III		4	PHYS 122 - Introductory Physics II <i>Major Core Requirement</i>	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 <i>Major Supplementary Requirement</i>	*	3
CTP 150	Computer Science 1 (Elective)		4	CMSC 201 - Computer Science I <i>Major Core Requirement</i>	*	4
Program Elective			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.						
** 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	Prereq: MATH 300		4		
MATH 302	Introduction to Mathematical Analysis II	Prereq: MATH 301		3		
	Upper Level Mathematic/Statistics Elective	See Section II of Mathematic Major Requirements for B.S.		3		
	Upper Level Mathematic/Statistics Elective	See Section II of Mathematic Major Requirements for B.S.		3		
	Upper Level Mathematic/Statistics Elective	See Section II of Mathematic Major Requirements for B.S.		3		
	Upper Level Mathematic/Statistics Elective	See Section II of Mathematic Major Requirements for B.S.		3		
	400-Level Mathematic/Statistics Elective	See Section II of Mathematic Major Requirements for B.S.		3		
	400-Level Mathematic/Statistics Elective	See Section II of Mathematic Major Requirements for B.S.		3		
	Upper Level Math/Stat Supplemental 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		
	**Foreign Language (if needed)		201L	4		
	Arts and Humanities or Culutre GEP Requirement or Lower Level Elective		AH or C	3		
Total credits at UMBC:				54		
Total credits toward UMBC degree (minimum 120 credits):				120		

Updated 12/14/2023