



**MONTGOMERY COLLEGE  
AA IN COMPUTER SCIENCE  
TO UNIVERSITY OF MARYLAND UNIVERSITY COLLEGE  
BS IN COMPUTER SCIENCE  
TRANSFER GUIDE**

**CHECKLIST FOR FULFILLMENT OF DEGREE REQUIREMENTS** See catalog for overview of all requirements.

<input type="checkbox"/> 30 credits at UMUC, including at least half of the major and minor and 15 upper-level credits. <input type="checkbox"/> 45 upper-level credits, including half the credit for the major and for the minor. <input type="checkbox"/> All required courses <u>and</u> minimum number of credits for major and minor. <input type="checkbox"/> Prerequisites for major and minor courses, if needed.	<input type="checkbox"/> All General Education Requirements. <input type="checkbox"/> Grade of C or better in all courses for the major and minor. <input type="checkbox"/> Overall GPA of at least 2.0. <input type="checkbox"/> At least half the credit for the major earned through graded coursework. Total 120 credits.
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UMUC DEGREE REQUIREMENTS	MC COURSES	UMUC EQUIVALENCY	CREDITS FROM MC	CREDITS NEEDED AT UMUC
<b>COMMUNICATIONS</b>	<b>Credits:</b>		<b>9</b>	<b>3</b>
WRTG 101 or WRTG 101S Introduction to Writing (3)	ENGL 102 or ENGL 103	WRTG 101 or 293	3	
WRTG 293 (3) <i>Or other 3-credit WRTG course except 288, 388, 486A, 486B. ENGL 102 and JOUR 201 apply</i>	ENGL 101	WRTG	3	
COMM 202 (3) <i>Or other communication, writing, or speech</i>	COMM 108 or 112	SPCH 100 or SPCH	3	
WRTG 393 (3) <i>Or other upper-level advanced writing</i>				3UL
<b>ARTS AND HUMANITIES</b>	<b>Credits:</b>		<b>6</b>	<b>0</b>
HUMN 100 (3) <i>Or other arts/humanities</i>	Arts Distribution	Arts & Humanities	3	
HIST 125 (3) <i>Or any ARTH or HIST from a 2<sup>nd</sup> discipline</i>	Humanities Distribution	Arts & Humanities	3	
<b>BEHAVIORAL AND SOCIAL SCIENCES</b>	<b>Credits:</b>		<b>6</b>	<b>0</b>
ECON 103 (3) <i>Or other first behavioral/social science</i>	Behavioral & Social Sciences Distribution	Behavioral & Social Sciences	3	
BEHS 103 (3) <i>Or other behavioral/social science from a 2<sup>nd</sup> discipline</i>	Behavioral & Social Sciences Distribution from a 2 <sup>nd</sup> discipline	Behavioral & Social Sciences	3	
<b>BIOLOGICAL AND PHYSICAL SCIENCES</b>	<b>Credits:</b>		<b>7</b>	<b>0</b>
BIOL 103 (4) <i>Or other biological/physical science with related lab</i>	Natural Sciences Distribution with Lab	Lab Science	4	
NSCI 100 (3) <i>Or other 3-credit biological/physical science</i>	Natural Sciences Distribution	Science	3	
<b>MATHEMATICS</b>	<b>Credits:</b>		<b>4</b>	<b>0</b>
MATH 115 (3) <i>Or both MATH 107 and MATH 108. Prerequisite for later mathematics courses</i>	MATH 165 Recom'd Elective	MATH 115	4	
<b>INTERDISCIPLINARY OR EMERGING ISSUES</b>	<b>Credits:</b>		<b>3</b>	<b>4</b>
LIBS 150 Introduction to Research (1)				1
IFSM 201 Concepts & Applications of Information Technology or CMST 301 Digital Media and Society (3)				3
CMIS 102 Introduction to Problem Solving & Algorithm Design (3) <i>Prerequisite for major courses</i>	CMSC 140	CMIS 102	3	

**Legend/Notes**

◆ required course for the major or minor  
 \* course meets content requirement but not upper-level minimum  
 UL – UL stands for upper-level junior/senior courses and denotes the minimum upper-level credit that must be taken at UMUC for graduation  
 ^ only 21 credits of vocational technical are permitted for transfer at UMUC  
 Courses placed in the ELECTIVES/MINOR section may meet degree requirements depending on which course the student takes from the list of courses offered for the associate's degree. Any credit applied to the associate's degree must also meet UMUC's transfer credit policy.

UMUC DEGREE REQUIREMENTS	MC COURSES	UMUC EQUIVALENCY	CREDITS FROM MC	CREDITS NEEDED AT UMUC	
<b>COMPUTER SCIENCE MAJOR</b>	<b>Credits:</b>		<b>20</b>	<b>18</b>	
◆ MATH 140 Calculus I (4)	MATH 181	MATH 140	4		
◆ CMSC 150 Discrete Structures (3)	CMSC 207	CMSC 150	4		
◆ MATH 141 Calculus II (4)	MATH 182	MATH 141	4		
◆ CMIS 141 Introductory Programming (3)	CMSC 203	CMIS 141	4		
◆ CMIS 242 Intermediate Programming (3)	CMSC 204	CMIS 242	4		
◆ CMIS 310 Computer Systems and Architecture (3)				3UL	
◆ CMSC 350 Data Structures and Analysis (3)				3UL	
◆ CMSC 330 Advanced Programming Languages (3)				3UL	
◆ CMSC 335 Object-Oriented and Concurrent Programming (3)				3UL	
◆ CMSC 451 Design and Analysis of Computer Algorithms (3)				3UL	
◆ CMSC 405 Computer Graphics (3)				3UL	
<b>CAPSTONE COURSE FOR MAJOR</b>	<b>Credits:</b>		<b>0</b>	<b>3</b>	
◆ CMSC 495 Current Trends and Projects in Computer Science (3)	<b>MUST BE TAKEN AT UMUC</b>			3UL	
<b>ELECTIVES/MINOR</b>	<b>Credits:</b>		<b>6</b>	<b>31</b>	
<p>Choose any electives to meet degree requirements. Note minimum requirements for upper-level coursework.</p> <p>See requirements of individual minor. Recommended minors: Cybersecurity or Mathematics</p> <p>Students who complete the bachelor's degree from UMUC in an appropriate major (Computer Science, English, History, or Social Science), and other students who have the appropriate coursework (including Biology, Mathematics), can reduce the total coursework for the Master of Arts in Teaching graduate degree by up to 12 credits. Please see a UMUC advisor or visit UMUC's website for more information.</p>	Health Foundation	Elective	1		
	Arts or Humanities Distribution	Elective	3		
	Elective	Elective	2		
	Upper-Level Electives at UMUC				21UL
Any Electives at UMUC				10	
<b>Total Minimum Credits Needed for Graduation: 120</b>	<b>Total Credits:</b>		<b>61</b>	<b>59</b>	