



**MONTGOMERY COLLEGE  
AA IN INFORMATION SCIENCE & SYSTEM TRACKS,  
COMPUTER SCIENCE & TECHNOLOGIES  
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.

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> 30 credits at UMUC, including at least half of the major and minor and 15 upper-level credits.</li> <li><input type="checkbox"/> 45 upper-level credits, including half the credit for the major and for the minor.</li> <li><input type="checkbox"/> All required courses <u>and</u> minimum number of credits for major and minor.</li> <li><input type="checkbox"/> Prerequisites for major and minor courses, if needed.</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> All General Education Requirements.</li> <li><input type="checkbox"/> Grade of C or better in all courses for the major and minor.</li> <li><input type="checkbox"/> Grade of C- or better for WRTG 101</li> <li><input type="checkbox"/> Overall GPA of at least 2.0.</li> <li><input type="checkbox"/> At least half the credit for the major earned through graded coursework.</li> <li><input type="checkbox"/> Total 120 credits.</li> </ul> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

UMUC DEGREE REQUIREMENTS	MC COURSES	UMUC EQUIVALENCY	CREDITS FROM MC	CREDITS NEEDED AT UMUC
<b>COMMUNICATIONS</b>	<b>Credits:</b>			<b>9</b>
WRTG 101 (3)	ENGL 102 or ENGL 103	WRTG 101	3	
WRTG 100A (3) <i>Or other 3-credit WRTG course except 288, 388, 486A, 486B. COMM 390, 492, 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>
HUMN 100 (3) <i>Or other arts/humanities</i>	Arts Distribution	Arts & Humanities	3	
HIST 125 (3) <i>Or other arts/humanities</i>	Arts or Humanities Distribution	Arts & Humanities	3	
<b>BEHAVIORAL AND SOCIAL SCIENCES</b>	<b>Credits:</b>			<b>6</b>
ECON 103 (3) <i>Or other behavioral/social science</i>	Behavioral & Social Sciences Distribution	Behavioral & Social Sciences	3	
BEHS 103 (3) <i>Or other behavioral/social science</i>	Behavioral & Social Sciences Distribution from a 2nd discipline	Behavioral & Social Sciences	3	
<b>BIOLOGICAL AND PHYSICAL SCIENCES</b>	<b>Credits:</b>			<b>7</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>
MATH 140 (4) <i>Related requirement for major and GenEd course</i>	MATH 181 Recom'd Mathematics Foundation	MATH 140	4	
<b>INTERDISCIPLINARY OR EMERGING ISSUES</b>	<b>Credits:</b>			<b>3</b>
LIBS 150 (1)				1
IFSM 201 or CMST 301 (3)	CMSC 110	IFSM 201	3	
CMIS 102 (3) <i>Prerequisite for major courses</i>				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>0</b>	<b>33</b>
◆ CMIS 141 Introductory Programming (3)				3
◆ CMIS 242 Intermediate Programming (3)				3
◆ CMIS 310 Computer Systems and Architecture (3)				3UL
◆ SDEV 300 Building Secure Web Applications (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 430 Compiler Theory and Design (3)				3UL
◆ CMSC 451 Design and Analysis of Computer Algorithms (3)				3UL
◆ CMSC 412 Operating Systems (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>ADDITIONAL REQUIREMENTS</b>	<b>Credits:</b>		<b>4</b>	<b>4</b>
MATH 141 Calculus II (4) <i>Related requirement for major</i>				4
CMSC 150 Discrete Structures (3) <i>Related requirement for major</i>	CMSC 207 Recom'd Elective	CMSC 150	4	
<b>ELECTIVES/MINOR</b>	<b>Credits:</b>		<b>21</b>	<b>13</b>
Choose any electives to meet degree requirements. Note minimum requirements for upper-level coursework.  See requirements of individual minor. Recommended minors: Cybersecurity or Mathematics	CMSC 140	CMIS	3	
	Electives	Electives	12	
	CMSC 243	IFSM 461*	3	
	Humanities Distribution	Arts & Humanities	3	
	Upper-Level Electives at UMUC			
Any Electives at UMUC				1
<b>Total Minimum Credits Needed for Graduation: 120</b>	<b>Total Credits:</b>		<b>60</b>	<b>60</b>