



Anne Arundel Community College

AACC ASSOCIATE OF SCIENCE IN COMPUTER SCIENCE TRANSFER – COMPUTER SCIENCE



UNIVERSITY OF MARYLAND GLOBAL CAMPUS

CATALOG YEAR: 2022-2023

UMGC BACHELOR OF SCIENCE IN COMPUTER SCIENCE

<https://www.umgc.edu/transfers-and-credits/community-college-alliances/national-community-college-alliances.cfm>

Degree requirements may change based on date of initial enrollment at UMGC.

Students transferring from AACC with a conferred Associate of Arts or Associate of Science degree will have the General Education Requirement (Gen Ed) block of courses met at UMGC (A.A.S. degrees not included). See community college advisor for course sequencing.

CREDITS	ANNE ARUNDEL COMMUNITY COLLEGE Requirements for Associate's Degree		CREDITS	UNIVERSITY OF MARYLAND GLOBAL CAMPUS Requirements for Bachelor's Degree	
4	MAT 191 Program & Gen Ed requirement	TERM 1		MATH 140 (Gen Ed Mathematics; related requirement to the major)	
3	ENG 101 or ENG 101A Gen Ed requirement	TERM 1		WRTG 111 (Gen Ed Communications)	
3	Arts & Humanities Gen Ed requirement	TERM 1		Gen Ed Arts & Humanities	
3	Social & Behavioral Sciences Gen Ed req	TERM 1		Gen Ed Behavioral & Social Science	
4	CTP 115 Program requirement	TERM 1		◆ CMIS 141 (required for the major)	
4	MAT 192 Program requirement	TERM 2		MATH 141 (elective; related requirement the major)	
3	ENG 102 Gen Ed requirement	TERM 2		WRTG 112 (Gen Ed Communications; <i>completed with C- or better</i>)	
4	Biological & Physical Sci. w/ Lab Gen Ed req	TERM 2		Gen Ed Biological & Physical Lab Science	
4	CTP 150 Program requirement	TERM 2		◆ CMIS 242 (required for the major)	
4	CTP 250 Program requirement	TERM 3		◆ CMSC 350* (required for the major)	
4	MAT 202 Program requirement	TERM 3		MATH 240 (Gen Ed Communications; to honor Gen Ed block)	
3	Arts & Humanities Gen Ed requirement	TERM 3		Gen Ed Arts & Humanities	
4	Biological & Physical Sci. w/ Lab Gen Ed req	TERM 5		Gen Ed Biological & Physical Science	
3	MAT 250 Program requirement	TERM 4		CMSC 150 (Gen Ed Computing; related requirement to the major)	
3	HEA 111 Wellness requirement	TERM 4		HLTH 140 (elective)	
3	Social & Behavioral Sciences Gen Ed req	TERM 4		Gen Ed Behavioral & Social Science	
3	CTP 160 (recom'd program elective)	TERM 4		◆ SDEV 300* (required for the major)	
1	Elective	TERM 4		Elective	
3	Elective	TERM 5		Elective	
3	Elective	TERM 5		Elective	
3	Elective	TERM 5		Elective	
3	Elective	TERM 5		Elective	
3	Elective	TERM 6		Elective	
3	Elective	TERM 6		Elective	
3	Elective	TERM 6		Elective	
81	Total Credits Transferred				

REMAINING UMGC DEGREE REQUIREMENT RECOMMENDED SEQUENCE UPON TRANSFER WITH ASSOCIATE'S DEGREE

LIBS 150 or other Gen Ed course (will be fulfilled by 1 credit of MAT 202 from AACC)	---	---
PACE 111T Program and Career Exploration in Technology or other PACE 111	Fall OL1	3
◆ CMIS 310 Computer Systems and Architecture (required for the major)	Fall OL1	3UL
◆ CMSC 330 Advanced Programming Languages (required for the major)	Fall OL2	3UL
WRTG 393 Advanced Technical Writing or other upper-level writing (Gen Ed Communications)	Fall OL2	3UL
◆ CMSC 335 Object-Oriented and Concurrent Programming (required for the major)	Spring OL1	3UL
Elective (must be taken upper-level)	Spring OL1	3UL
◆ CMIS 330 Software Engineering Principles and Techniques (required for the major)	Spring OL2	3UL
◆ CMIS 320 Relational Database Concepts and Applications (required for the major)	Spring OL2	3UL
CMIS 420 Advanced Relational Database Concepts and Applications (recom'd elective; must be taken upper-level)	Summer OL1	3UL
◆ CMSC 430 Compiler Theory and Design (required for the major)	Summer OL1	3UL
◆ CMSC 451 Design and Analysis of Computer Algorithms (required for the major)	Fall OL1	3UL
Elective (must be taken upper-level)	Fall OL1	3UL
◆ CMSC 495 Current Trends and Projects in Computer Science (required capstone for the major)	Fall OL2	3UL
TOTAL CREDITS REMAINING AT UMGC		39

NOTES: Minimum of 120 credits, including 36 upper-level (courses numbered 300-499) required for bachelor's degree with minimum 2.0 (C) grade point average (GPA) / No course within major or minor below 2.0 GPA / At least one-half of credits within major and minor comprised of: a. upper-level; b. UMGC resident; c. traditional college courses earning a grade / Maximum of 70 transfer credits to UMGC from 2-year or community college (actual number of transfer credits dependent on meeting all UMGC bachelor's degree requirements) / WRTG 112 completed with grade of 1.67 GPA (C-) or better / ◆ = Denotes course in major at UMGC / * = Denotes lower-level course meets content requirement of upper-level course but does not transfer as upper-level / UL = Denotes upper-level course

~ TERM 1 & 4: fall semesters; TERM 2 & 5: spring semesters; TERM 3 & 6: summer semesters ~

**UNIVERSITY OF MARYLAND GLOBAL CAMPUS
MASTER OF SCIENCE IN INFORMATION TECHNOLOGY:
SOFTWARE ENGINEERING SPECIALIZATION**

CHECKLIST FOR FULFILLMENT OF DEGREE REQUIREMENTS

- Must maintain a GPA of 3.0 or higher at all times
- All degree requirements must be fulfilled within five consecutive years.
- Any transfer credits must have been earned within the five-year time frame to be applied toward a graduate degree

UNIVERSITY OF MARYLAND GLOBAL CAMPUS Requirements for Master's Degree	SEMESTER TAKEN	CREDIT S
UCSP 615 Orientation to Graduate Studies at UMGC (<i>to be taken within the first 6 credits of study</i>) <i>Waived based only upon successful completion of all requirements for the B.S. in Computer Science at UMGC</i>	<i>Waived</i>	0
ITEC 625 Computer Systems Architecture (Core course) <i>Waived only on the basis of successful completion of CMIS 310 Computer Systems and Architecture for the B.S. in Computer Science at UMGC</i>	<i>Waived</i>	0
ITEC 630 Information Systems Analysis, Modeling, and Design (Core course)	<i>Waived</i>	0
ITEC 640 Information Technology Project Management (Core course)	Spring GO1	3
SWEN 603 Modern Software Methodologies (Specialization course)	Spring GO1	3
DBST 651 Relational Database Systems (Specialization course) <i>Waived only on the basis of successful completion of CMIS 320 Relational Database Concepts and Applications for the B.S. in Computer Science at UMGC and CMIS 420 Advanced Relational Database Concepts and Applications as a recommended elective for the B.S. degree</i>	<i>Waived</i>	0
SWEN 646 Software Design & Implementation (Specialization course)	Spring GO2	3
SWEN 656 Advanced Software Design & Implementation (Specialization course)	Summer GO1	3
SWEN 645 Software Requirements (Specialization course)	Summer GO1	3
SWEN 647 Software Verification & Validation (Specialization course)	Fall GO1	3
SWEN 651 Usability Engineering (Specialization course)	Fall GO2	3
SWEN 661 User Interface Implementation (Specialization course)	Spring GO1	3
SWEN 670 Software Engineering Project (Specialization course)	Spring GO2	3
TOTAL CREDITS NEEDED FOR GRADUATION: 36	TOTAL CREDITS	27
<p>The software engineering specialization is designed for students with a degree and/or professional experience in software development and programming languages. / Students who do not have any recent programming coursework, or who have experience in old programming languages such as COBOL or RPG, are strongly encouraged to take UCSP 635 Essentials of Computer Programming (0 credits) and UCSP 636 Structure of Computer Programming (0 credits) before taking any SWEN courses. / UCSP 605 Effective Graduate Writing (0 credits) is recommended to help improve graduate writing skills and increase prospects for success in the master's degree program. / Degree requirements may change based on date of initial enrollment at UMGC.</p>		