

# University of Mary Washington Bachelor's of Science in Computer Science

## Associate Transfer Degree Plan in Computer Science

## COURSE REQUIREMENTS

Complete at VCCS				Complete at University of Mary Washington		
BACHELOR'S DEGREE REQUIREMENT		SATISFIED BY		BACHELOR'S DEGREE REQUIREMENT		
Course	Credits	CC Course	Notes	Course	Credits	Notes
	1-2	SDV 100 or 101		CPSC 240	4	Object-oriented Analysis and Design; Take in first semester; Counts as Digital Intensive Gen Ed
ENGL 101; Writing Intensive)	3	ENG 111		CPSC 225	1	Software Development Tools; Take in first semester
ENGL non-major; Writing Intensive	3	ENG 112 or 113		CPSC 302	3	Computer Ethics; Both Writing And Speaking Intensive
Methods of Investigation Gen Ed: Humanities course 1	3	Any UCGS Humanities, PHI 220 recommended		CPSC 350	4	Applications of Databases
Methods of Investigation Gen Ed: Arts & Literature	3	Any UCGS Art or Lit		CPSC 326	4	Theoretical Foundations of Computing
Methods of Investigation Gen Ed: Humanities course	3	Any UCGS History		CPSC 405	4	Operating Systems & Systems Programming
Methods of Investigation Gen Ed: Social Science	3	Any UCGS Social/Behavioral Science	This course may not be a history course.	CPSC 430	4	Software Engineering; Both Writing and Speaking Intensive; Beyond the Classroom Gen Ed
Methods of Investigation Gen Ed: Natural Science	4	BIO 101, CHM 111, or PHY 241, GOL 105, GOL 106, GOL 110		any CPSC course numbered 300 or higher	3	
Methods of Investigation Gen Ed: Quantitative Reasoning course 1	4	MTH 263	Calculus is not required for the major but will count as a general education requirement.	any CPSC course numbered 400 or higher	3	
Methods of Investigation Gen Ed: Quantitative Reasoning course 2	3-4	MTH 245 or MTH 264	Statistics and Calculus II are not required for the major but will count as a general education requirement.	World Language at 201 level	3	If not completed as part of associate degree.

World Language at the level taken (101, 102, or 201)	3-4	BIO 102, CHM 112, GOL 105-106-110, or PHY 242 MTH 245, 264, 265, CST 100 or 110, World Languages	World Language at 101 level is recommended	After Mary Washington Gen Ed	1	
CPSC 110	3	CSC 221		Diverse & Global Perspectives Gen Ed	3	
CPSC 220 (major)	4	CSC 222		Electives or coursework not selected as part of the associate's degree.	up to 23	Must include CPSC 305 If CSC 205 not taken for associate degree.  Must include CPSC 284 if CSC 208 not taken for associate degree.  Must include 1 additional CPSC credit if CSC 208 is taken for associate degree.  Must include 1 additional CPSC credit if CSC 205 is taken for associate degree.  May include world language if not taken for associate degree
CPSC 340 (major)	4	CSC 223				
CPSC 284 (major), Methods of Investigation: Quantitative Reasoning	3	CSC 208				
CPSC 305 (major)	3	CSC 205				
and any additional coursework	10-12 credits	World Language 101, 102, or 201 or other elective courses	World Language at 201 level is required for UMW bachelor's degree. Completing some World Language as part of the associate degree is recommended.			
CREDITS PRE-TRANSFER: 60-62				CREDITS POST-TRANSFER: 60		

## TRANSFER GUIDANCE

### Guaranteed Admission to University of Mary Washington

**By meeting the following criteria, you are eligible for admission. Separate admission to the Computer Science program is not required.**

- Earn a transfer associate degree (AS or AA&S in Computer Science)
- Earn a minimum GPA of 3.0 for your associate degree
- Earn grades of "C" or higher in all your courses for the associate degree to be eligible to transfer those credits.

Please create an account through the [Transfer Virginia](#) portal to register your intent to use this guarantee for admission to UMW.

### IMPORTANT LINKS & DATES:

- [University Transfer Center](#)
- **Register Intent to Transfer:** After the first 15 credits, complete this form and submit to [admit@umw.edu](mailto:admit@umw.edu) to receive application fee waiver. [Letter of Intent](#).
- **Admission Application:** Apply by October 15 for spring admission, March 1 for summer admission, and April 1 for fall admission. Additional details and a transfer checklist are available at [UMW admissions](#).
- [Financial Aid](#)
- **FAFSA - Free Application for Federal Student Aid:** Apply by April 1 to ensure you receive the maximum aid for which you are eligible. FAFSA's will still be accepted after the April 1 deadline. The required forms are found at [studentaid.gov](http://studentaid.gov)

### WHAT SHOULD I CONSIDER WHEN SELECTING COURSES?

- Create a schedule for all required courses, pay attention to prerequisites and when courses are offered, complete your first math and English courses in your first year. For help, see [Transfer Steps and Resource Center](#)
- UMW requires proficiency in a second language as part of the general education requirements. This can be satisfied in a number of ways including completing four years of language in high school, transferring credits from a community college, or completing a sequence of language courses through the 201 level at UMW. All of the options for satisfying this requirement are found in the [UMW Catalog](#)
- Connect with an advisor at your community college and UMW within your first year. College Connect available in your account on Transfer Virginia.

### IS THIS DEGREE RIGHT FOR ME?

- The UMW Computer Science major is focused on software development. Students learn to tackle interesting problems while honing their programming skills. Our curriculum also

provides a foundation in ethics, databases, computer architecture, operating systems, and the theoretical foundations of the computing discipline.

- Communication and group work skills are emphasized throughout our curriculum. We believe that these skills are best learned when their application is directly connected to computer science projects. In our senior capstone course in software engineering students experience the software lifecycle from requirements gathering through delivery as they collaboratively develop a project for a real client.
- UMW Computer Science uses free or open source software in all of our courses so students do not purchase additional software. All software is supported in Windows, Mac, and Linux environments. UMW provides access to a dedicated computer lab for computer science students Monday-Friday for convenience.
- Many computer science students are interested in minoring in Data Science or Cybersecurity. It can be challenging to complete a minor in addition to the computer science major in four semesters. Students do have the option of taking computer science elective courses related to Data Science and Cybersecurity as requirements for the computer science major. This allows students to explore these fields without completing the full requirements for a minor.

### WHAT IS THE IMPACT ON MY DEGREE OF WORK I HAVE ALREADY COMPLETED?

- **Associate Transfer Degree Completion:** Transfer students with a VCCS AS or AAS degree have completed the UMW general education requirements except second language competency, digital intensive, diverse and global perspectives, after Mary Washington, and beyond the classroom general education requirements. Several of these requirements are integrated into the computer science major. UMW does allow students to satisfy these requirements through qualifying transfer coursework.
- **Dual Enrollment – Completion of Associate Degree in HS:** Students participating in dual enrollment programs are considered as freshman applicants. Dual enrollment courses taken at the high school are treated identically with the same course when taken on a college campus; dual enrollment status does not affect the transferability of the course.
- **Credit for Prior Learning:** UMW accepts credit for AP, IB, CLEP, Cambridge, and other qualifying previous coursework. Equivalencies are provided [here](#). Virginia Community College System courses which receive [guaranteed equivalent credit](#) are provided.
- **Catalog Year:** Students must complete general education requirements associated with the academic year that they enroll at UMW. Students complete major requirements associated with the academic year in which they declare their major.

### IS THIS COLLEGE RIGHT FOR ME?

- Home is precisely what UMW will come to feel like. Our campus is gorgeous, green, and full of opportunity. Join a club sports team. Audition for a musical. Lead the way in Student Government Association. Train with our esports team. Or sit back, relax, and take it all in from the cozy comfort of Ball Circle.
- UMW is a small university located in suburban Fredericksburg, VA. We offer small class sizes and courses are taught by faculty committed to student learning and success.
- UMW offers high impact experiences beyond the classroom. Faculty are committed to collaborating with students on research projects and outreach experiences.

- UMW is located between Washington DC and Richmond, VA in the largest technology corridor in Virginia. UMW students enjoy a multitude of internship opportunities where they can apply their academic knowledge while gaining professional experience. UMW students receive support with resumes and job searches through the department and University resources and can earn academic credit for qualifying internship experiences.
- Learn more about our college at [here](#).

#### DID YOU KNOW THAT...

- UMW has a co-enrollment agreement with Germanna Community College, which allows Germanna students to take up to five courses at UMW to transfer back to their Germanna associate degree program. This allows students to receive UMW course experiences at Germanna tuition rates. Students must submit a [letter of intent](#) after completing 15 credits at Germanna.
- Completing your Associate transfer degree post-high school satisfies all lower division general education requirements and increases the chance of completing your bachelor's degree.
- Exceeding 3 years or 90 credits at your community college means you may have exhausted your financial aid at that college and have limited your future financial aid at UMW.

#### WHAT CAN I DO WITH THIS DEGREE?

Explore possible careers, salaries, and job outlook at Transfer Virginia.

Students earning a BS in Computer Science are highly sought after in one of the fastest growing job sectors in the nation. Graduates are also well prepared for further study in graduate programs in computer science and other related fields.

#### PROGRAM SUCCESSES & HIGHLIGHTS

- UMW graduates work as software developers, computer scientists, data scientists, IT specialists, database administrators, and in other technology roles.
- UMW graduates have excellent success rates for admission to graduate programs for further study.
- All students have the opportunity to conduct research with faculty members. Several students publish and present their work at national conferences each year. Students are competitively selected to participate in the UMW Summer Science institute where they are paid to conduct research alongside faculty members. Additional opportunities for funded research are available.
- UMW is committed to diversity and inclusion and funds all students interested in attending the Capital Region Celebration of Women in Computing each year.

#### WHAT ARE MY CHANCES FOR GETTING ACCEPTED?

- With an associate's degree and a 3.0 minimum cumulative GPA, you may qualify for UMW's Guaranteed Admissions Agreement with the Virginia Community College System (VCCS) and Richard Bland College. Additional details are available [here](#).
- Each fall, UMW enrolls approximately 300 students from the Virginia Community College System and other schools inside and outside of Virginia.

#### DO MORE WITH YOUR DEGREE!

- Most students have an internship at some point during their years at UMW. The University and department support students in their job search through resume workshops, individual consultations, and campus job fairs.
- The UMW computer science department has many opportunities to be involved outside of class including hack-a-thons, data thons, capture the flag contests, and a programming contest team. We also have clubs for students interested in data science, cybersecurity, and promoting and encouraging diversity within the computing field.
- UMW has accelerated master's degree partnerships with Virginia Tech and George Mason University which allow students to count some courses toward both their UMW BS in Computer Science degree and their master's degree. Additional details of these agreements are available [here](#).

#### OTHER THAN CLASSES, ARE THERE OTHER PROGRAM REQUIREMENTS?

- Students must earn at least 30 credits at UMW as a degree-seeking student (not including physical education credits).
- Students must earn a GPA of 2.0 in both their major and overall coursework in order to complete their degree.