

University of Mary Washington B.S. in Environmental Science (Natural Science) and Geology

TRANSFER GUIDE

Catalog Years: 2024-2025

Associate Transfer Degree Plan in Environmental Science

COURSE REQUIREMENTS

Complete at VCCS				Complete at University of Mary Washington		
UMW BACHELOR'S DEGREE REQUIREMENT	SATISFIED BY		Notes	BACHELOR'S DEGREE REQUIREMENT	Credits	Notes
Course	Credits	CC Course		Course		
SDV 100 does not transfer.	1-2	SDV 100 College Success Skills or 101 Orientation		BIOL 210 Introduction to Ecology and Evolution (major pre-requisite)	3	Pre-requisites: BIO 101-102 (in that order) and CHM 111. (UMW equivalents are BIOL 121-132 and CHEM 111.)
Writing Intensive Gen Ed	3	ENG 111 College Comp I		Choose 1 Introductory GIS Course: EESC 205, GISC 200, or GISC 250	4	EESC 205 is a Fall offering. GISC 200 or 250 are offered most semesters. EESC 205, GISC 200, and GISC 250 all satisfy UMW's DI Gen Ed requirement.
Writing Intensive Gen Ed	3	ENG 112 College Comp II or 113 Tech Prof Writing		Upper-level Ecology Elective. Choose one from: EESC 418, BIOL 311, BIOL 322, BIOL 426, BIOL 427, or BIOL 428	4	Students must complete BIO 101-102, CHM 111, and then BIOL 210 before taking an UL Ecology course. Most UL ECOL options are offered in the Fall.
Humanities Gen Ed	3	Any UCGS Humanities		EESC 315 Hydrogeology	4	Fall offering. Students must complete physical geology first (EESC 111 at UMW or GOL 105 at VCCS).
Arts & Literature Gen Ed	3	Any UCGS Fine Arts or Literature		Upper-level Chemistry. Choose one from: EESC 325, CHEM 211, CHEM 253, CHEM 254.	4	Pre-requisites: Students must complete CHM 111 and 112 in order (or CHEM 111 and CHEM 112 at UMW). EESC 325 is a spring offering.
Social Science Gen Ed	3	Any UCGS Social or Behavioral Science (not History)		EESC 460 Senior Seminar	2	Spring offering. Speaking intensive in the major. Students must be EESC majors of senior standing.

Natural Science Gen Ed: BIOL 121 (major pre-req)	4	BIO 101 General Biology	All labs must meet in person (labs cannot be virtual). An AP score of 4 or 5 is needed to earn credit for BIOL 121.	EESC Major Electives (approved list avail. online; all students must take 1 Writing Intensive course in the major)	12	See full list of electives at: https://catalog.umw.edu/undergraduate/majors/environmental-science-major-natural-science-concentration/#requirements-text
Quantitative Reasoning Gen Ed	3	MTH 245 Statistics		Additional General Education Courses (to be taken at UMW) <ul style="list-style-type: none"> • After Mary Washington Course (EESC 465 recommended) • Diverse and Global Perspective Course (EESC 230 recommended) Beyond the Classroom Course/Experience		
Social Science Gen Ed-Additional Course	3	Any UCGS History				
Natural Science Gen Ed-Addition course: CHEM 111 (major pre-req)	4	CHM 111 General Chemistry I	All labs must meet in person (labs cannot be virtual). An AP score of 4 is needed to earn credit for CHEM 111; an AP score of 5 earns credit for both CHEM 111 and CHEM 112.			
EESC 110 (major)	4	ENV 121 General Env Science I	Labs must meet in person and cannot be virtual.			
CHEM 112 (major pre-req)	4	CHM 112 General Chemistry II	All labs must meet in person (labs cannot be virtual).			
BIOL 132 (major pre-requisites)	4	BIO 102 General Biology II	BIO 102 must be taken after BIO 101. All labs must meet in person (labs cannot be virtual).			
EESC 120 (major)	4	ENV 122 General Env. Science II	All labs must meet in person (labs cannot be virtual). An AP score of 4 or 5 is needed to earn credit for EESC 120; a score of 3 earns general elective credit toward the 120 needed to graduate.			
EESC 111 (major)	4	GOL 105: Physical Geology	If students have room in their schedule, GOL 105 should also be taken at VCCS. Students should focus on completing ENV 121 and 122, CHM 111 and 112, and BIO 101 and 102			

	3	MTH 154 Quantitative Reasoning or MTH 161 Precalculus I	Choose one of these MTH courses as a pre-requisite to MTH 245 Statistics			
Intermediate Language Proficiency	3-9		See details under "What should I consider when selecting courses" below.			
NOTES: Students should try to complete ENV 121, 122, BIO 101, 102, CHM 111, 112 at VCCS. Otherwise, they will need to be completed at UMW and this may prolong graduation.						
If language requirement is not completed at VCCS, it must be completed at UMW.						
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 Environmental Science program is not required.

- Earn a transfer associate degree
- 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
- All science labs must be completed in person (virtual labs are not accepted at UMW)

Please create an account through the www.TransferVirginia.org portal to indicate your intent to use this guarantee for admission to UMW.

IMPORTANT LINKS & DATES:

- **University Transfer Center:** <https://www.umw.edu/admissions/transfer/>
- **Register Intent to Transfer:** After the first 15 credits, complete this form and submit to admit@umw.edu to receive an application fee waiver: <https://www.umw.edu/admissions/wp-content/uploads/sites/6/2021/01/Letter-of-Intent-VCCS-Sept-2020.pdf> Additional details are available at TransferVirginia.org.
- **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 <https://www.umw.edu/admissions/transfer/>
- **Financial Aid:** <https://www.umw.edu/financialaid/>
- **FAFSA - Free Application for Federal Student Aid:** Apply by April 1 to ensure you receive the maximum aid for which you are eligible. FAFSAs will still be accepted after the April 1 deadline. The required forms are available at 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 at www.TransferVirginia.org
- UMW requires proficiency in a second language as part of the general education requirements. This can be satisfied in several ways, including completing four years of the same language in high school, transferring credits from a community college, or completing a sequence of language courses through the 201 level at UMW. American Sign Language is accepted as a second language. All of the options for satisfying this requirement can be found in the UMW Catalog: <https://catalog.umw.edu/undergraduate/general-education/general-education-course-list/>
- **Laboratories must be completed in person for all lab-based science courses** (e.g., biology, chemistry, environmental science, and geology) taken at community colleges. UMW does not accept labs that were completed virtually.
- Connect with an advisor at your community college and UMW within your first year. College Connect is available in your account at www.TransferVirginia.org

IS THIS DEGREE RIGHT FOR ME?

- Are you concerned about Earth and protecting its environments? Do you enjoy lab work as well as the outdoors? If so, a major in Environmental Science – Natural Track may be just what you are seeking.
- Our curriculum provides a solid foundation in biology, chemistry, geology, and environmental science. Many of our courses involve fieldwork and/or independent projects, with an emphasis on building communication and teamwork skills. Our students learn to convey science to a range of audiences through coursework and independent research.
- All majors in EESC require completion of an introductory GIS course; our EESC 205 *GIS Applications in Environmental Science and Geology* is a popular choice for fulfilling this requirement. Additionally, since GIS skills are important in virtually all environmental careers, many of our environmental science majors choose to complete UMW's GIS Certificate.

- The EESC department also offers a minor in Environmental Sustainability, designed for students from any major (including environmental science) who are passionate about preserving Earth's resources and want to help build a sustainable future.

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

- **Associate Transfer Degree Completion:** Transfer students with a VCCS transferable associate degree have completed the UMW general education requirements except second language competency, digital intensive (DI), diverse and global perspectives (DGP), after Mary Washington (AMW), and beyond the classroom (BTC) general education requirements. Except for second language proficiency, DI, DGP, AMW and BTC requirements can be completed within the Environmental Science-Natural Track major at UMW. 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 to be freshman applicants. Dual enrollment courses taken at the high school are treated as identical to 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: <https://academics.umw.edu/registrar/transfer-information/transferring-credit-ap-ib-or-previous-coursework/> Virginia Community College System courses which receive guaranteed equivalent credit are provided here: <https://academics.umw.edu/registrar/transfer-information/resources-and-publications/babs-transfer-credit-guide/tranferable-credit/virginia-community-college-system-vccs/>
- **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 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 all courses (including labs) 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 centrally 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 building resumes and conducting job searches from the Department and University's career center, and can earn academic credit for qualifying internship experiences.

Learn more about our college at www.TransferVirginia.org

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: <https://www.umw.edu/admissions/adult/our-commitment/#:~:text=Germanna%20Co%2Denrollment%20Agreement,hours%20of%20their%20transfer%20credit>
- 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 www.TransferVirginia.org
- Our Environmental Science – Natural Track major prepares students for careers in environmental and sustainability consulting with private or government agencies, environmental policy and advocacy, the energy-mineral-water resources industries, conservation and wildlife management, or science education (K-12, museums, parks).
- Environmental science majors at UMW earn a BS in Environmental Science and Geology, and are highly sought after in the mid-Atlantic region. Our graduates are well prepared for further study in master's and doctoral programs in Environmental Science and other related fields.
- Check out our departmental website to learn more about our programs at <https://cas.umw.edu/ees/>

PROGRAM SUCCESSES & HIGHLIGHTS

- Recent graduates in environmental science have secured jobs with a variety of private and government agencies, including: Dominion Energy, EDP Renewables, ESRI (GIS software), FEMA, Los Alamos National Laboratory, NASA, and the Virginia Dept. of Environmental Quality.
- Environmental Science graduates have excellent success rates for admission to graduate programs for further study in Environmental Science and other related fields. Recent grads have been accepted at schools such as: American University, Clemson University, NC State University, Oregon State University, and the Lewis & Clark School of Law.
- Motivated students who work well independently typically have the opportunity to conduct research with faculty members. Each year, several students publish and present their work at regional and national conferences. Conference registration fees, transportation costs, and lodging are generally fully funded by the Department and/or University. Students are competitively selected to participate in the 10-week UMW Summer Science Institute, for which students receive room and board and are paid to conduct research with a faculty member. Additional opportunities for funded research are available.
- Our Jepson Science Center is well equipped with state-of-the-art lab instruments and an extensive array of field equipment (incl. a 20 ft. research boat). Unlike larger universities, our equipment is routinely available to our science students—all of whom are undergraduates.

WHAT ARE MY CHANCES FOR GETTING ACCEPTED?

- With an associate's degree and a minimum cumulative GPA of 3.0, 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:

<https://www.umw.edu/admissions/transfer/our-commitment/guaranteed-admission-agreement/>

- Each fall, UMW enrolls approximately 300 students from the Virginia Community College System and other schools inside and outside of Virginia.

Learn more about applying at www.TransferVirginia.org

DO MORE WITH YOUR DEGREE!

- Most students complete an internship at some point during their years at UMW. The University and Department support students in their internship and job searches through individual advising, campus job fairs, and our EESC 465 *Senior Portfolio and Career Preparation* 1-credit course.

- Students who plan to pursue a graduate degree commonly complete one or more research experiences (EESC 491 *Individual Study*) and often participate in our Summer Science Institute.
- Our highest-achieving students may earn Departmental Honors by completing a year-long senior thesis, which includes an oral defense.

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 minimum GPA of 2.0 in both the major and overall coursework to complete their degree.