

UNOFFICIAL SEMESTER BY SEMESTER GUIDE
Please use this in conjunction with the [official checksheet](#) and DARS.
You do not have to follow this plan exactly. This is a sample plan.

College of Natural Resources and Environment
Department of Forest Resources and Environmental Conservation
Water: Resources, Policy, and Management Major
This guide is for students with a 2023-2024 academic year date of entry.

Fall Semester		Spring Semester	
First Year			
Pathways Concept 1F Course ¹	3	Pathways Concept 1F Course ¹	3
MATH 1025 Elem. Calculus (Pathways 5F) ²	3	BIOL 1106 Principles of Biology (Pathways 4)	3
WATR 2004 Water, Environment, and Society	3	BIOL 1116 Principles of Biology Lab	1
Pathways Concept 2 Course	3	MATH 1026 Elem. Calculus (Pathways 5F) ²	3
Pathways Concept 3 Course	3	AAEC 1005 Econ. of Food & Fiber (Pathways 3) ³	3
		Pathways Concept 2 Course	3
	15		16
Sophomore Year			
CHEM 1035 General Chemistry (Pathways 4)	3	PHYS 2205 General Physics	3
CHEM 1045 General Chemistry Lab	1	PHYS 2215 General Physics Lab	1
Pathways Concept 6A Course	3	Water Restricted Elective Course ⁴	3
Water Restricted Elective Course ⁴	3	Water Restricted Elective Course ⁴	3
Water Restricted Elective Course ⁴	3	Water Policy Specialization Course ⁵	3
Free Elective (<i>Suggested: CHEM 1034 Chemistry Recitation</i>)	⁶	Geospatial Technology and Informatics Course ⁷	3
	14		16
Junior Year			
ENSC 3604 Fundamentals of Environmental Science	3	WATR 3104 Principles of Watershed Hydrology	3
Water Law and Planning Course ⁸	3	WATR 4464 Water Resources Policy & Economics	3
Water Science Specialization Course ⁹	3	Water Science Specialization Course ⁸	3
Water Policy Specialization Course ⁵	3	Water Policy Course ⁵	3
ENGL 3534 or ENGL 3764 (Pathways Concept 1A)	3	Water Restricted Elective Course ⁴	3
	15		15
Senior Year			
WATR 3754 Watersheds and Water Quality Monitoring	3	WATR 4614 Watershed Assessment, Mgt, & Policy	2
Water Science Course ⁸	3	Water Science Specialization Course ⁸	3
Water Policy Specialization Course ⁵	3	Pathways Concept 6D Course	3
Pathways Concept 7 Course	3	Free Elective	4
Pathways Concept 5A Course	3	Free Elective	3
	15		15
<i>Total credits required for graduation = 120</i>			

Notes: See the Timetable of Classes in HokieSPA and [CNRE course offerings guide](#) for course availability. Some classes have prerequisites. Consult with your advisor about course sequencing.

¹ Students should choose COMM 1015/1016 Communication Skills or ENGL 1105/1106 First-Year Writing.

² Students choose MATH 1025 or 1225 and MATH 1026 or 1226

³ Students choose AAEC 1005 or ECON 2005

⁴ Students complete 15 credits of Water Restricted Elective courses. See checksheet for course options.

⁵ Students complete 12 credits of Water Policy courses; 9 credits from a single specialization. See checksheet for course options

⁶ The Chemistry Recitation 1 credit does not apply towards the 120 credit minimum required for graduation

⁷ Students choose course from approved list: FREC 4114, FREC 4214, FREC/WATR 4244, GEOG 2084, GEOG/GEOS 4354.

⁸ Students choose course from approved list: AAEC 3314, UAP 3354, UAP 4344, UAP 4374.

⁹ Students complete 12 credits of Water Science courses; 9 credits from a single specialization. See checksheet for course options.

Pathways Requirements (45 Credits)

Pathways Concept 1: Discourse – 9 credits required

6 Credit Hours of Approved Foundational

- Choose Concept 1f Course¹⁰ (3 credits)
- Choose Concept 1f Course (3 credits)

3 Credit Hours of Advanced/Applied

- Choose ENGL 3534 Literature and the Environment (3 credits) or ENGL 3764 Technical Writing (3 credits)

Pathways Concept 2: Critical Thinking in the Humanities – 6 credits required

- Choose Concept 2 Course (3 credits)
- Choose Concept 2 Course (3 credits)

Pathways Concept 3: Reasoning in the Social Sciences – 6 credits required

- AAEC 1005 Economics of Food & Fiber Systems or ECON 2005 Principles of Economics (3 credits)
- Choose Concept 3 Course (3 credits)

Pathways Concept 4: Reasoning in the Natural Sciences – 6 credits required

- BIOL 1106 Principles of Biology (3 credits)
- CHEM 1035 General Chemistry (3 credits)

Pathways Concept 5: Quantitative and Computational Thinking – 9 credits required

6 Credit Hours of Approved Foundational

- MATH 1025 Elementary Calculus (3 credits) or MATH 1225 Calculus of a Single Variable (4 credits)
- MATH 1026 Elementary Calculus (3 credits) or MATH 1226 Calculus of a Single Variable (4 credits)

3 Credit Hours of Approved Advanced/Applied

- Pathways 5A (3 credits) *Suggested: FREC 4354 Forest Soil and Watershed Management*

Pathways Concept 6: Critique and Practice in Design and the Arts – 6 credits required

6 Credit Hours from Approved Pathways Courses: 3 Design and 3 Art Credits

- Choose DESIGN Course (3 credits)
- Choose ARTS Course (3 credits)

Pathways Concept 7: Critical Analysis of Identity and Equity in the United States – 3 credits required

- Choose Concept 7 Course (3 credits)¹¹

¹⁰ Students should select either COMM 1015/1016 Communication Skills or ENGL 1105/1106 First-Year Writing to have the necessary prerequisites for their Pathways 1a requirement.

¹¹ A course taken to satisfy another area of Pathways that is also listed within Concept 7 will satisfy the Concept 7 requirement simultaneously.