

UNOFFICIAL SEMESTER BY SEMESTER GUIDE  
Please use this in conjunction with the catalog 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 2024-2025 academic year date of entry.*

Fall Semester		Spring Semester	
<b>First Year</b>			
Pathways Concept 1F Course <sup>1</sup>	3	Pathways Concept 1F Course <sup>1</sup>	3
WATR 2004 Water, Environment, and Society	3	BIOL 1106 Principles of Biology (Pathways 4)	3
GEOG 1524 Introduction to Earth's Climate	3	BIOL 1116 Principles of Biology Lab	1
MATH 1025 Elem. Calculus (Pathways 5F) <sup>2</sup>	3	MATH 1026 Elem. Calculus (Pathways 5F) <sup>2</sup>	3
Pathways Concept 6A Course	3	AAEC 1005 Econ. of Food & Fiber (Pathways 3) <sup>3</sup>	3
Free elective ( <i>Suggested: WATR 1984 First Year in Water</i> )	1	Pathways Concept 2 Course	3
	<b>16</b>		<b>16</b>
<b>Sophomore Year</b>			
CHEM 1035 General Chemistry (Pathways 4)	3	PHYS 2205 General Physics	3
CHEM 1045 General Chemistry Lab	1	PHYS 2215 General Physics Lab	1
Water Restricted Elective Course <sup>4</sup>	3	Pathways Concept 2 Course	3
Pathways Concept 3 Course	3	Water Restricted Elective Course <sup>4</sup>	3
Pathways Concept 7 Course	3	Water Policy Specialization Course <sup>5</sup>	3
Free Elective ( <i>Suggested: CHEM 1034 Chemistry Recitation</i> )	1 <sup>6</sup>	Geospatial Technology and Informatics Course <sup>7</sup>	3
	<b>14</b>		<b>16</b>
<b>Junior Year</b>			
WATR 3104 Principles of Watershed Hydrology	3	STAT 3615 Biological Statistics (Pathways Concept 5A) <sup>8</sup>	3
ENSC 3604 Fundamentals of Environmental Science	3	WATR 4464 Water Resources Policy & Economics	3
Water Law and Planning Course <sup>9</sup>	3	Water Science Specialization Course <sup>10</sup>	3
Water Science Specialization Course <sup>10</sup>	3	Water Policy Course <sup>5</sup>	3
Water Policy Specialization Course <sup>5</sup>	3	ENGL 2784 or ENGL 3764 (Pathways Concept 1A)	3
	<b>15</b>		<b>15</b>
<b>Senior Year</b>			
WATR 3754 Watersheds and Water Quality Monitoring	3	WATR 4614 Watershed Assessment, Mgt, & Policy	2
GEOG 4134 Issues & Ethics in Water Resources	3	WATR 4244 Hydroinformatics	3
Water Science Course <sup>10</sup>	3	Water Science Specialization Course <sup>10</sup>	3
Water Policy Specialization Course <sup>5</sup>	3	Pathways Concept 6D Course	3
Free Elective	3	Free Elective	3
	<b>15</b>		<b>15</b>
<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.

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

<sup>2</sup> Students choose MATH 1025 or 1225 and MATH 1026 or 1226

<sup>3</sup> Students choose AAEC 1005 or ECON 2005

<sup>4</sup> Students complete 6 credits of Water Restricted Elective courses. See catalog for course options.

<sup>5</sup> Students complete 12 credits of Water Policy courses; 9 credits from a single specialization. See catalog for course options.

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

<sup>7</sup> Students choose course from approved list: FREC 4114, FREC 4214, GEOG 2084, GEOG/GEOS 4354.

<sup>8</sup> STAT 3005 Statistical Methods is an acceptable substitution for STAT 3615.

<sup>9</sup> Students choose course from approved list: AAEC 3314, UAP 3354, UAP 4344, UAP 4374. See catalog for details.

<sup>10</sup> Students complete 12 credits of Water Science courses; 9 credits from a single specialization. See catalog for course options.

### Pathways Requirements (45 Credits)

#### Pathways Concept 1: Discourse – 9 credits required

##### 6 Credit Hours of Approved Foundational

- Choose Concept 1f Course<sup>11</sup> (3 credits)
- Choose Concept 1f Course (3 credits)

##### 3 Credit Hours of Advanced/Applied

- Choose ENGL 2844 Introduction to Professional Writing (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

- STAT 3615 Biological Statistics was added for Pathways 5a

#### 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)<sup>12</sup>

<sup>11</sup> 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.

<sup>12</sup> A course taken to satisfy another area of Pathways that is also listed within Concept 7 will satisfy the Concept 7 requirement simultaneously.