

Date: _____

Student initials: _____

Academic advisor: _____

ID number: _____

Advising Guide for Pathways Requirements

Go to frec.vt.edu/waterdegree to find checksheets for your year of graduation and additional course planning information. This unofficial guide is a suggestion only. The courses you take will depend on any credits you have, course availability, etc.

Freshman Year - Fall 2019

Course	Credits	✓
Pathways 1 Foundational Course (Select from University Approved List)	3	
CHEM 1035 General Chemistry (Pathways 4 Requirement)	3	
CHEM 1045 General Chemistry Lab (Major Requirement)	1	
MATH 1025 Elementary Calculus (Pathways 5F Requirement) ¹	3	
AAEC 1005 Econ. of Food & Fiber (Pathways 3 Requirement) ²	3	
GEOG 2004 Water, Environment, and Society (Major Requirement)	3	
Total credits	16	

Freshman Year - Spring 2020

Course	Credits	✓
Pathways 1 Foundational Course (Select from University Approved List)	3	
BIOL 1106 Principles of Biology (Pathways 4 Requirement)	3	
BIOL 1116 Principles of Biology Lab (Major Requirement)	1	
MATH 1026 Elementary Calculus (Pathways 5F Requirement) ³	3	
AAEC 1006 Econ. of Food & Fiber (Pathways 3) ⁴	3	
Pathways Concept 2 Course (Select from University Approved List)	3	
Total credits	16	

Sophomore Year - Fall 2020

Course	Credits	✓
Pathways Concept 7 Course (Select from University Approved List) ⁵	3	
PHYS 2205 General Physics (Major Requirement)	3	
PHYS 2215 General Physics Lab (Major Requirement)	1	
GEOG 2084 Principles of GIS (Option for Major Requirement) ⁶	3	
Choose course from major requirements (Suggested: Policy) ⁶	3	
Choose course from major requirements (Suggested: Restricted Elective) ⁶	3	
Total credits	16	

¹ Students can choose MATH 1025 (3 credits) **or** MATH 1225 (4 credits)

² Students can choose AAEC 1005 Economics of the Food & Fiber **or** ECON 2005 Principles of Economics

³ Students can choose MATH 1026 (3 credits) **or** MATH 1226 (4 credits)

⁴ Students can choose AAEC 1006 Economics of the Food & Fiber **or** ECON 2006 Principles of Economics

⁵ A course taken to satisfy another area of Pathways that is also listed within Concept 7 will satisfy the Concept 7 requirement simultaneously

⁶ Students can choose from approved list on checksheet

Pathways Concept 1: Discourse – 9 credits required

6 Credit Hours of Approved Foundational

- Choose Approved Concept 1 Course (3 credits)
- Choose Approved Concept 1 Course (3 credits)

3 Credit Hours of Advanced/Applied

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

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

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

Suggested: FREC 2554 Leading Global Sustainability or HIST 3144 American Environmental History

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)
- AAEC 1006 Economics of Food & Fiber Systems or ECON 2006 Principles of Economics (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

- Choose Approved Concept 5 Course (3 credits)⁷

Suggested: FREC 3004 Environmental Informatics or 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 or 6 Integrated Credits

- Choose Approved 3-credit DESIGN or INTEGRATED Course (3 credits)
- Choose Approved 3-credit ARTS or INTEGRATED Course (3 credits)

Suggested: FREC 4554 Creating the Ecological City

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

- Choose Approved Concept 7 Course (3 credits)⁸

⁷ Students should consult their advisor before selecting an advanced Concept 5 course in their first three semesters

⁸ A course taken to satisfy another area of Pathways that is also listed within Area 7 will satisfy the Area 7 requirement simultaneously