### Fall Semester | Spring Semester
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**First Year**
ENGL 1105 First-year Writing (Pathways Concept 1a) | 3 | ENGL 1106 First-year Writing (Pathways Concept 1a) | 3
MATH 1225 Calculus I (Pathways Concept 5f) | 4 | MATH 1226 Calculus II (Pathways Concept 5f) | 4
GEOG 1004 Human Geography (Pathways Concept 3) | 3 | GEOG 1014 World Regions (Pathways Concept 3) | 3
GEOG 1514 Intro to Meteorology | 3 | GEOG 1504 Survey of Meteorology | 1
Pathways Concept 2: Critical Thinking in Humanities | 3 | GEOG 1084 Digital Planet | 3
**Total:** 16 | 14

**Sophomore Year**
GEOG 2505 Weather Analysis I | 3 | GEOG 2506 Weather Analysis II | 3
GEOG 1104 Physical Geography | 3 | GEOG 3314 Cartography (Pathways Concept 6d) | 3
PHYS 2205 General Physics | 3 | PHYS 2206 General Physics | 3
PHYS 2215 General Physics Lab | 1 | PHYS 2216 General Physics Lab | 1
GEOG 2314 Maps and Mapping | 3 | MATH 2214 Differential Equations | 3
MATH 1114 Linear Algebra | 2 | Pathways Concept 7: Identity and Equity in the US | 3
**Total:** 15 | 16

**Junior Year**
GEOG 3515 Dynamic Meteorology | 3 | GEOG 3516 Dynamic Meteorology | 3
GEOG 4354 Intro to Remote Sensing | 3 | GEOG 4554 Remote Sensing of the Atmosphere | 1
GEOG 2084 Principles of GIS | 3 | GEOG 3504 Severe Weather | 3
STAT 3604 or STAT 3615 (Pathways Concept 5a) | 3 | Pathways Concept 2: Critical Thinking in Humanities | 3
Human Systems Requirement | 3 | Physical Science Requirement | 3
Free Elective | 3 | **Total:** 15 | 16

**Senior Year**
GEOG 4504 Synoptic Meteorology | 3 | GEOG 4524 Physical Meteorology | 3
GEOG 4084 Modeling in GIS | 3 | Physical Science Requirement | 3
Physical Science Requirement | 3 | Pathways Concept 6a: Critique and Practice in Arts | 3
Pathways Concept 1a: Advanced/Applied Discourse | 3 | Free Elective | 3
MTRG Field Experience (may occur in summer) | 3 | Free Elective | 3
**Total:** 15 | 15

**NOTE:** MTRG students planning to double major in Geography, must complete at least 12 hours of GEOG coursework that is not being used to complete either major. In addition, students must complete two distinct 3 credit field experiences that apply to each major for a total of 15 additional credits.

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1. Students choose ENGL 1005/1006 First-Year Writing OR COMM 1005/1106 Communication Skills
2. Students choose PHYS 2205/2215 and 2206/2216 OR PHYS 2305 and PHYS 2306
3. Students choose MATH 1114 OR MATH 2114
4. A course taken to satisfy another area of Pathways that is also listed within Concept 7 will satisfy the Concept 7 requirement simultaneously
5. See checksheet for list of options
Pathways to General Education Requirements

Pathways Concept 1: Discourse (9 credits)
Pathways 1f: Approved Foundational (6 Credits)
_____ ENGL 1105 First-Year Writing OR COMM 1015 Communication Skills (3 credits)
_____ ENGL 1106 First-Year Writing OR COMM 1016 Communication Skills (3 credits)

Pathway 1a: Advanced/Applied (3 Credits)
_____Choose University Approved Concept 1a Course (3 credits)

Pathways Concept 2: Critical Thinking in the Humanities (6 credits)
_____Choose University Approved Concept 2 Course (3 credits)
_____Choose University Approved Concept 2 Course (3 credits)

Pathways Concept 3: Reasoning in the Social Sciences (6 credits)
The Meteorology major satisfies this concept with completion of GEOG 1004 and GEOG 1014.

Pathways Concept 4: Scientific Reasoning and Discovery (8 credits)
_____PHYS 2205/2215 General Physics (4 credits) OR _____PHYS 2206/2216 General Physics (4 credits)
_____PHYS 2305: Foundations of Physics (4 credits) OR _____PHYS 2306 Foundations of Physics (4 credits)

Pathways Concept 5f: Foundational Quantitative and Computational Thinking (8 credits)
_____MATH 1225 Calculus of a single variable (4 credits)
_____MATH 1226 Calculus of a single variable (4 credits)

Pathways Concept 5a: Advance/Applied Quantitative/Computational Thinking (3 credits)
_____STAT 3604 Statistics for Social Science OR STAT 3615 Biological Statistics (3 credits)

Pathways Concept 6: Critique and Practice in Design (6d) and the Arts (6a) (6 credits)
Pathways 6d: Design (3 Credits)
_____GEOG 3314: Cartography

Pathways 6a: Art (3 Credits)
_____Choose University Approved Concept 6a course ______________________

Pathways Concept 7*: Critical Analysis of Identity and Equity in the US (3 credits)
_____Approved course ______________________

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

Foreign Language: A sequence of two (2) foreign language courses is required for graduation unless two (2) high school credits of the same foreign language or six (6) transfer credit hours of foreign language have been earned. These credits do not count toward graduation. See catalog section on “Graduation Requirements.”

Students do NOT need to follow this plan exactly. This is only a SUGGESTED plan.

Students have the option to take courses during the summer at VT or as approved transfer credit with a grade of C or better.