### Required Courses:

**Foundational Courses:**
- GEOG/GEOL 103 Dynamic Earth OR GEOL 111 The Earth OR METR 121 Introduction to Meteorology (with lab)*
  - 3
- GEOG 110 World Regional Geography*
  - 3
- GEOG 280 Introduction to Environmental Science and Sustainability (with Lab)*
  - 4

**Sustainability Course:**
- GEOG 380 Global Sustainability* OR GEOG 480 Sustainable Cities
  - 3

**Technical Courses:**
- GISC 316 Fundamentals of GIS (with Lab)
  - 4
- GISC 317 Geographic Information Systems (with Lab)
  - 4
- GEOG 300 Writing in the Geosciences*
  - 3
- GEOG 391 Spatial Data Analysis (with Lab)
  - 4

**Professional Preparation:**
- GEOG 452 Study Abroad OR GEOG 475 Special Course OR GEOG 495 Research/Internship
  - 3
- GEOG 499 Professional Preparation
  - 1

**Elective Courses:**
Coursework selected from any GEOG, GISC, METR, or GEOL 200-400 level course with advisor approval. Up to six hours may be taken outside of the geoscience discipline with advisor approval.

**PROGRAM TOTAL HOURS:** 53

- 120 Hours total are required for the WKU degree, with 42 hours at the 300/400 level.
- Summer courses, including Study Abroad, Field Camps, and other independent research opportunities, can reduce the number of hours required in the regular semesters.
- Any of the courses can be moved from semester to semester to take advantage of courses when offered.
- The WKU Colonnade Program requires a minimum of 39 hours, with several required courses in the ESGS program that can be double-counted. Courses marked * count for Colonnade Credit.
- Colonnade Connections courses are restricted to Juniors/Seniors, unless 21 credit hours of Colonnade Explorations and Foundations courses have already been completed. Three disciplines are required for Connections credit (METR, GEOG, GEOL, and GISC count as separate disciplines).

**REQUIRED IN THE MAJOR (53 hours):**
- CORE COURSES = GEOG/L 103* or GEOL 111* or METR 121*, GEOG 110*, GEOG 280*, GEOG 380* or GEOG 480, GEOG 300*, GISC 316, GISC 317, GEOG 391, GEOG 452* or 475 or 495, GEOG 499 (32 hours); ELECTIVES = any 21 hours of approved GEOG/GEOL/GISC/METR or equivalent coursework in the program specialty area;
- PLUS MATH 116* and MATH 183*

For more details and courses offered in the Colonnade General Education program visit the website (https://www.wku.edu/colonnade/).