ROWAN GEOLOGY BS DEGREE

Step 1 – Build a solid foundation: Take each specified course or an elective that fulfills the specified requirement

Rowan Core
- COMP 01111 College Composition I
- COMP 01112 Composition II
- CMS 04205 Public Speaking
- Any Artistic Literacy
- Any Global Literacy
- Any Humanistic Literacy
- Either STAT 02260 Statistics I or MATH 01130 Calculus I
- Either BIOL 01104 Introduction to Evolution and Scientific Inquiry or PHYS 00211 Physics II
- Broad-Based Literature Attribute
- Writing Intensive Attribute
- Rowan Seminar Attribute

Non-Geology Requirements
- Either STAT 02260 or MATH 01130 whichever was not taken for Rowan Core
- MATH 01131 Calculus II
- CHEM 06100 Chemistry I
- CHEM 06101 Chemistry II
- PHYS 00210 Physics I

Foundational Geology Courses
- GEOL 01101 Physical Geology
- GEOL 01102 Earth Through Time
- GEOL 01201 Mineralogy and Petrology
- GEOL 01210 Invertebrate Paleontology
- GEOL 01230 Paleoecology
- GEOL 01240 Introduction to Field Methods in Geology
- GEOL 01320 Sedimentology and Stratigraphy
- GEOL 01340 Structural Geology and Tectonics
- GEOL 01400 Practical Experience in Geology
- GEOL 01450 Senior Seminar in Geology
- GEOL 01460 Current Research in Geology
- GEOL 01470 Research Experience in Geology
Step 2 – Gain a well-rounded experience: Take one course of your choice at or above the 200 level from each of the three topical course banks
*Selection must be compatible with your concentration selection in Step 3*

**General Geology Course Bank**
- GEOL 01120 Earthquakes and Volcanoes
- GEOL 01150 Voyager: The Exploration of Space
- GEOL 01301 Advanced Field Methods
- GEOL 01321 Basin Analysis
- GEOL 01350 Advanced Petrology
- GEOL 01353 Geochemistry
- GEOL 01431 Hydrogeology
- GEOL 01440 Geochronology and Thermochronology
- GEOL 01462 Cosmochemistry

**Paleontology Course Bank**
- GEOL 01110 Dinosaurs and Their World
- GEOL 01111 Edelman Fossil Park Experience
- GEOL 01112 Motion of Life
- GEOL 01310 Paleontology Laboratory Techniques
- GEOL 01311 Vertebrate Paleontology
- GEOL 01312 Dinosaur Paleontology
- GEOL 01303 Breathing Life into Fossils: The Science of Paleoart
- GEOL 01410 Taphonomy
- GEOL 01411 Paleoecology
- GEOL 01412 Macroevolution in the Fossil Record
- GEOL 01413 Paleobiology

**Global Climate Change Course Bank**
- GEOL 01131 Earth in Transition: The Science Behind Global Climate Change
- GEOL 01133 Climate, Catastrophes, Civilization, and Collapse
- GEOL 01136 Water Planet: Exploring the Hydrosphere
- GEOL 01250 Ocean-Atmosphere Interactions
- GEOL 01331 Climate Change and the Cryosphere
- GEOL 01430 Climate Variability and Diagnostics
- GEOL 01435 The Ice Ages and Quaternary Geology
Step 3 – Select and complete a concentration: Select one of three concentrations and complete the required courses listed below

**General Geology Concentration**
- Take any 12 credits from any topical course bank(s)
- The following courses can also be counted towards this concentration:
  - GEOL 01105 Selected Topics in Geology
  - GEOL 01303 Advanced Topics in Geology

**Paleontology Concentration**
- Take GEOL 01311 Vertebrate Paleontology
- Take three of the following courses:
  - GEOL 01310 Paleontology Laboratory Techniques
  - GEOL 01312 Dinosaur Paleontology
  - GEOL 01410 Taphonomy
  - GEOL 01411 Paleoecology
  - GEOL 01412 Macroevolution in the Fossil Record
  - GEOL 01413 Paleobiology

**Global Climate Change: A Geologic Perspective**
- Take GEOL 01131 Earth in Transition: The Science Behind Global Climate Change
- Take GEOL 01133 Climate, Catastrophes, Civilization, and Collapse
- Take a minimum of 6 credits from the following list of courses:
  - GEOL 01250 Ocean-Atmosphere Interactions
  - GEOL 01303 Advanced Topics in Geology
  - GEOL 01430 Climate Variability and Diagnostics
  - GEOL 01435 The Ice Ages and Quaternary Geology
  - GEOL 01462 Research Experience in Geology

Step 4 – Earn a total of 120 credits at Rowan: Take any 2-3 courses of your choice offered at Rowan to reach the graduation requirement of 120 credits

Step 5 – Celebrate your BS in Geology with friends and family at Rowan’s Graduation Ceremony!
ROWAN GEOLOGY BA DEGREE

Step 1 – Build a solid foundation: Take each specified course or an elective that fulfills the specified requirement

**Rowan Core**
- COMP 01111 College Composition I
- COMP 01112 Composition II
- CMS 04205 Public Speaking
- Any Artistic Literacy
- Any Humanistic Literacy
- GEOG 16100 Earth, People, and the Environment
- STAT 02260 Statistics I
- CHEM 06100 Chemistry I
- Broad-Based Literature Attribute
- Writing Intensive Attribute
- Rowan Seminar Attribute

**Non-Geology Requirements**
- CHEM 06101 Chemistry II
- PHYS 00210 Physics I
- BIOL 01104 Introduction to Evolution and Scientific Inquiry
- MATH 01123 College Algebra

**Foundational Geology Courses**
- GEOL 01101 Physical Geology
- GEOL 01102 Earth Through Time
- GEOL 01201 Mineralogy and Petrology
- GEOL 01210 Invertebrate Paleontology
- GEOL 01230 Paleoclimatology
- GEOL 01240 Introduction to Field Methods in Geology
- GEOL 01320 Sedimentology and Stratigraphy
- GEOL 01340 Structural Geology and Tectonics
- GEOL 01450 Senior Seminar in Geology
- GEOL 01460 Current Research in Geology
ROWAN GEOLOGY BA DEGREE

**Step 2 – Diversify:** Select 49 credits of electives of your choice. These can be any course in geology or other subject. You have the freedom to mix and max which courses complete your degree.

**Step 3 – Earn a total of 120 credits at Rowan:** Make sure you’ve taken enough credits to reach the graduation requirement of 120 credits.

**Step 4 – Celebrate your BA in Geology with friends and family at Rowan’s Graduation Ceremony!**
ROWAN 4+1 GEOLOGY BA and MASTERS IN STEM EDUCATION DEGREES

Step 1 – Complete the required courses specified for the Geology BA degree

Step 2: Take the following courses as part of the 49 free elective credits of the BA degree

- PSY 09210 Adolescent Development
- FNDS 21230 Characteristics of Knowledge Acquisition OR PSY 22215 Educational Psychology
- HLTH 00103 Health and Wellness OR a Biology Course
- SEMED 60550 Schools & Society, Foundation for Secondary Teaching*
- STEM 60501 STEM Teaching and Research Methods I*
- READ 30520 Content Area Literacy*
- STEM 60510 Teaching STEM in Diverse Settings*
- EVSC 01120 Oceans in Crisis
- EVSC 01101 Planet in Peril
- ASTR 11100 Introductory Astronomy: Stars & Galaxies, ASTR 11200 Introductory Astronomy: Solar System & Exoplanets, OR ASTR 11120 Introduction to Astronomy (Lecture and Lab)

Step 3: Take an additional 18-19 credits of free electives to reach the graduation requirement of 120 credits

Step 4: Take the following required courses for the Masters in STEM Education

- Courses in Step 2 with an asterisk double count here
- SELN 60576 Inclusive Instruction in STEM Classrooms
- STEM 60504 Professional Seminar for STEM Educators
- STEM 60512 STEM Education Residency I
- STEM 60513 STEM Education Residency II
- STEM 60522 STEM Teaching & Research Methods: Science II
- STEM 60523 STEM Teaching & Research Methods: Science III

Step 5 – Celebrate your BA in Geology and MA is STEM Education with friends and family at Rowan’s Graduation Ceremony!