GEO 6501. Earth Systems. 4 Hours.
Focuses on weather and the pivotal role that the water cycle plays in Earth’s atmosphere. The unique properties of water, heat transfer related to phase changes, and ideal gas laws are used to explore natural phenomena such as rain, snow, dew, and sleet. Examines the role of solar radiation, winds, ocean currents, and geographic location on regional climates in addition to the basic physical and chemical controls of weather.

GEO 6502. The Solid Earth. 4 Hours.
Focuses on the characteristics that describe and the processes that govern the solid Earth. Emphasizes basic Earth and planetary science concepts, including the study of the properties of rocks, minerals, and soils; the dynamics of plate tectonics; surficial processes and landforms; fossils and the fossil record; and geography and the principles of mapping. Offers students an opportunity to learn the fundamental concepts of Earth science by illustrating how these learning standards can be used to address current environmental issues (natural disasters, natural resources, and urban planning) that may elicit and engage the interests of students.

GEO 6505. Geology and Engineering Design. 4 Hours.
Focuses on the role of geology in engineering design. Explores the structure and composition of the Earth, as well as some of the factors that have shaped it, including earthquakes, volcanic eruptions, erosion, and weathering. Offers students an opportunity to learn several ways to depict the Earth’s surface and landforms utilizing different mapping techniques and skills. Investigates engineering principles and how to apply them to mitigate the effect of these changes by analyzing basic building principles and applying them to the design and construction of a model of an earthquake-resistant building.

GEO 6515. Boston Rocks: The Geology of Boston. 4 Hours.
Designed to give students without prior field experience a working knowledge of the bedrock and glacial development of the Boston metropolitan area. Offers students an opportunity to explore Boston’s unique landscape and study the geological contributions of the area to its life and architecture.

GEO 6961. Internship. 1-4 Hours.
Provides students with an opportunity for internship work. May be repeated without limit.

GEO 6962. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

GEO 6970. Seminar. 1-4 Hours.
Offers an in-depth study of selected topics.

GEO 6980. Capstone. 1-4 Hours.
Offers students an opportunity to integrate their course work, knowledge, and experiences into a capstone project.

GEO 6983. Topics. 1-4 Hours.
Covers special topics in earth and environmental sciences. May be repeated without limit.

GEO 6995. Project. 1-4 Hours.
Focuses on in-depth project in which a student conducts research or produces a product related to the student’s major field. May be repeated without limit.