



HARNESS THE POWER  
OF KNOWLEDGE

## Geology for non-geologists

TRAIN



**Introduction:**

This comprehensive 5-day professional training course will provide you with a foundational understanding of geology and its relevance to various fields, including engineering, environmental science, urban planning, and business.

Designed for individuals with no prior background in geology, this course will equip you with the essential knowledge and terminology to effectively interact with geologists and appreciate the significance of geological concepts in your professional endeavors.

**Course Objectives:**

By the end of this course, you will be able to:

- Grasp the fundamental principles of geology and its role in shaping our planet
- Identify and classify major rock types, including igneous, sedimentary, and metamorphic rocks
- Understand the processes of rock formation and the forces that shape Earth's surface
- Recognize geological features such as faults, folds, and mountains
- Comprehend the principles of plate tectonics and its impact on geological formations
- Apply basic geological knowledge to real-world scenarios such as construction, environmental impact assessment, and resource exploration

**Course Agenda:****Day 1: Introduction to Geology**

- Overview of geology and its branches
- The Earth's structure and composition
- Mineral identification and classification
- Rock formation processes and the rock cycle

**Day 2: Igneous, Sedimentary, and Metamorphic Rocks**

- Characteristics and formation of igneous rocks
- Processes and environments of sedimentary rock formation
- Metamorphism and the transformation of rocks
- Identifying and classifying rocks in the field

**Day 3: Plate Tectonics and Geological Structures**

- The theory of plate tectonics and its impact on Earth's dynamics
- Formation of major geological structures such as mountains, faults, and folds
- Earthquakes, volcanoes, and other geological hazards
- Geological maps and cross-sections

**Day 4: Geology and the Environment**

- Geological factors affecting groundwater resources and quality
- Geological hazards such as landslides, earthquakes, and coastal erosion
- Impact of human activities on geological processes
- Sustainable practices and geological considerations in environmental management

## **Day 5: Geology in Engineering, Urban Planning, and Business**

- Applications of geology in construction and engineering projects
- Geological considerations in urban planning and infrastructure development
- Geology and its role in mineral resource exploration and environmental impact assessment
- Understanding geological risks and uncertainties for business decisions

### **Who Should Attend:**

This course is designed for:

- Individuals with no prior background in geology who want to gain a basic understanding of the subject
- Professionals from various fields such as engineering, environmental science, urban planning, and business who need to interact with geologists or apply geological concepts in their work
- Anyone interested in expanding their knowledge of the natural world and the forces that shape our planet

### **Course Benefits:**

- Acquire a fundamental understanding of geology and its relevance to various fields
- Enhance your ability to communicate effectively with geologists and appreciate their expertise
- Develop critical thinking skills to analyze geological information and apply it to real-world scenarios
- Gain insights into the importance of geology in environmental management, resource exploration, and sustainable practices
- Expand your knowledge of the natural world and appreciate the interconnectedness of geological processes and human activities.