

**Department:** Mining Engineering

**Division:** Mining Exploration and Mineral Processing

**Level and Major:** BSc, Mining Exploration and Mineral Processing

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**Course Title:** General Geology

**Number of Credits:** 2

**Prerequisite:** -

**Lecturer:** Dr. Ardeshir Hezarkhani

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### **Course Goals and Objectives**

General Geology reviews as an application to understand the earth's characteristics.

### **Course Topics**

- Definition of geology and engineering geology, and recognition of the technical characteristics of the earth
- Understanding the geological history of their formation environment and understanding tectonic processes and structures
- Understand the dangers of geology
- Historical geology
- Mines, drilling of deep wells (petroleum, gas and geothermal)
- Geological structures
- Earth dynamics

### **Reading Resources**

- Earth Science by Edward J. Tarbuck, Frederick K. Lutgens and Dennis Tasa (Mar 7, 2008)
- Essentials of Geology (11th Edition) by Frederick K. Lutgens, Edward J. Tarbuck and Dennis Tasa (Jan 7, 2011)
- Rocks and Minerals (Dk Pocket Nature) by Monica Price (Mar 3, 2005)