

**Department:** Mining Engineering

**Division:** Mining Exploitation

**Level and Major:** MSc, Mining Exploitation

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**Course Title:** Ground Control and Support System

**Number of Credits:** 2

**Lecturer:** Dr. Ebrahim Farrokh

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### **Course Goals and Objectives**

An introduction toward the various ground control and support systems and their design procedure.

### **Course Topics**

- Ground support types
- Ground support design methods
- Empirical design methods
- Ground reaction curve
- Rock bolt
- Shot Crete
- Slope stability and ground reinforcement-steel support
- Concrete support

### **Reading Resources**

- Support of underground excavations in hard rock By E. Hoek, P.K. Kaiser, W.F. Bawden