

**Department:** Mining Engineering

**Division:** Mining Exploitation

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

---

**Course Title:** Advanced Underground Mining

**Number of Credits:** 3

**Lecturer:** Dr. Kourosh Shahriar

---

### **Course Goals and Objectives**

Assessment and comparison of different underground exploitation methods.

### **Course Topics**

- Significance of mining industry from previous to present
- Comparison of surface and underground exploration methods
- Dilution preparation and opening of mines
- Longwall exploitation method
- Mechanization in underground mines
- Auger exploitation method
- The exploitation of nearby and thick layers of coal
- Sublevel caving