

**Department:** Mining Engineering

**Division:** Rock Mechanics

**Level and Major:** MSc, Rock Mechanics

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**Course Title:** Special Topics

**Number of Credits:** 2

**Lecturer:** Dr. Mehdi Irannajad

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### **Course Goals and Objectives**

Thermal treatments in mineral processing- Introduction to advanced techniques and methods in mineral characterizations and processing.

### **Course Topics**

- Definitions
- Generalities
- Sintering
- Calcination
- Roasting
- Pelletizing
- Smelting
- Thermogravimetry
- Evolved gas detection
- Differential Thermal Analysis