

Department: Mining Engineering

Division: Rock Mechanics

Level and Major: MSc, Rock Mechanics

Course Title: Advanced Strength of Materials

Number of Credits: 2

Lecturer: Dr. Saeid Nikoosokhan

Course Goals and Objectives

The purpose of this course is to enable students to understand the fundamental issues of solid mechanics and its application in mining engineering.

Course Topics

- Review of stress and strain conversions
- Mohr circle and in situ stresses
- Review and complete the beam bending and deflection
- Buckling
- Energy methods
- Frame analysis