

Department: Mining Engineering

Division: Rock Mechanics

Level and Major: MSc, Rock Mechanics

Course Title: Advanced Statistics and Probability

Number of Credits: 3

Lecturer: Dr. Parviz Maarefvand

Course Goals and Objectives

Application of different statistical tools in engineering research.

Course Topics

- Review of statistics
- Linear regression
- Multiple regression
- Principal Components Analysis (PCA)
- Analysis of variance (ANOVA)
- Discriminant Factor Analysis
- Hierarchical analysis
- Correspondence analysis
- Nonlinear regression