Department: Mining Engineering **Division:** Mineral Processing

Level and Major: Ph.D., Mineral Processing

Course Title: Advanced Modeling and Simulation of Mineral Processing Systems

Number of Credits: 3 Lecturer: Dr. Ali Akbar Abdollahzadeh

Course Goals and Objectives

Familiarity with mathematical models of mineral processing plants.

Course Topics

- Modeling and simulation of the particles size distribution
- Modeling and simulation of mineral liberation
- Modeling and simulation of particle size classification
- Modeling and simulation of grinding
- Modeling and simulation of liquid-solid separation
- Modeling and simulation of gravity separation
- Modeling and simulation of magnetic separation
- Modeling and simulation of flotation

Reading Resources

• Up-to-date articles