

PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE
COLLEGE OF ENGINEERING
DEPARTMENT OF MINING ENGINEERING
ABET COURSE SYLLABI

IMM3403 MINING PROJECT

Credits and contact hours: 10 UC credits / 10 hours (3 h. Lectures; 1.5h. Assistantship and 5.5h. Independent learning experiences)

Instructor's name: Gustavo Lagos

Course coordinator's name Gustavo Lagos

Textbook: Evaluación y factibilidad de proyectos mineros, Millán Urzúa, Augusto, 1996.

Course Catalog Description: Mining project is the last course for mining students. Knowledge acquired in previous courses is applied and deepened by developing a solution to a real problem in the mining industry.

Prerequisite Courses: IMM2015 Underground Mining, IMM2025 Metallurgical Processes and ICS3532 Finance

Co-requisite Courses: None

Status in the Curriculum: Required

Course Learning Outcomes:

1. Understand Chilean mining legislation.
2. Perform a technical mining prefeasibility project.
3. Perform an economic mining prefeasibility project.
4. Perform real technical-economic project evaluation applying knowledge acquired along the engineering degree.

Relation of Course to ABET Criteria:

- a. Knowledge of mathematics, science and engineering
- b. Design and conduct experiments: analyze and interpret data
- c. Design a system, component, or process
- d. Multidisciplinary teams
- e. Identify, formulate, and solve engineering problems
- f. Professional and ethical responsibility
- g. Effective communication
- h. Broad education necessary for global, economic, environmental and societal context
- j. Knowledge of contemporary issues
- k. Techniques, skills, and modern tools for engineering practice.

Topics covered:

1. Chilean legislation: Mining code; mining laws; natural resources laws; laws affecting Codelco, Enami and Enap; tax legislation in mining and other industries; water laws applied to mining.
2. Technical-economic prefeasibility evaluation of a mining/metallurgic project; review of basic theory for this evaluation; real project evaluation.