ICS3013 PROJECT EVALUATION

Credits and contact hours: 10 UC Credits /10 hours (2:40 hours lectures; 1:20 hours assistantship and 6 hours individual work hours per week)

Instructor’s name: Andueza Patricio, Cifuentes Luis, Cruz Alfonso, Cruzat Raimundo, Del Sol Patricio, Menchaca Fernando, Saavedra Felipe

Course coordinator’s name: Cifuentes Luis


Course Catalog Description: The course teaches students the last year of the Civil Engineering Industry how to evaluate a company projects in line with its strategy. The more decisions are irreversible project involves a greater effort should be allocated to the valuation of its alternatives. This course shows how to evaluate projects using traditional financial methods of discounted cash flows, valuations incorporating strategic considerations, and making use of all available information. Along with mastering the theoretical issues related to the subject, students are expected to close knowledge of the practical difficulties involved in carrying out such studies.

Prerequisite Courses: (ICS3413 y ICS3313) o (IEE3913 y ICS1513) o (IEE3913 y EAE105A) o (IEE2913 y ICS1513) o (IEE2913 y EAE105A)

Co-requisite Courses: None

Status in the Curriculum: Required

Course Learning Outcomes:

1. To train students in the final year of studying Civil Engineering Industries in the formulation and strategic evaluation.
2. Develop in students the ability to work in teams on complex problems.
3. To prepare students to exhibit their work in public.
Relation of Course to ABET Criteria:

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
i. Recognition of the need for, and an ability to engage in life-long learning
j. Knowledge of contemporary issues
k. Techniques, skills, and modern tools for engineering practice.

Topics covered:

1. Formulation of an investment project.
   1.1. Identification of strategic decisions.
   1.2. Identification of the scarce resources of the company that assesses the feasibility of the project.
2. Evaluation of strategic decisions.
   2.1. Positioning analysis.
   2.2. Analysis of support.
   2.3. Flexibility analysis.
   2.4. Sensitivity analysis.
3. Preparing presentations and reports.
   3.1. Intermediate and final presentations.
   3.2. Preparation of final report.