Code	ING211	Prerequisites	INI301 ING210
Name	Project formulation	Co-requisites	None

Credits	Contact Hours
04	40
Categorization of credits	
Math and basic science	
Engineering topic	X
Other	

Coordinator's name	Víctor González Germán. Mildred Sena. Humberto Grullón

Text book
Other supplemental materials
Izar, J.M. (2016) Project management and evaluation. (1 ed.) Mexico: Cengage Learning. General Law on Environment and Natural Resources, Law 64-00. Government of the Dominican Republic (2000). McPherson, M. (2004). Guidance For Conducting Social Impact Assessments Within The Environmental Impact Assessment Process. Dominican Republic: Secretary of State for Environment and Natural Resources Santo Domingo. Ministry of Economy, Planning and Development MEPYD (2013) General Methodological Guide for the Formulation and Evaluation of Public Investment Projects. Miranda Miranda, J. J. (2015) Project Management. Identification, Formulation, Evaluation, Financial, Economic, Environmental. Bogota, Colombia: MM Editors. Sapag Chain, N., Sapag Chain, R. (2014). Project Preparation and Evaluation (6th edition). McGraw Hill.

Description
The program is structured to provide students with the basis for the correct Formulation and Evaluation of a project, starting from the identification of a problem or opportunity, analyzing its components: technical, administrative-legal, economic/financial, environmental and social.

The content includes construction of a Project Profile, Diagnosis of the current situation (Pre-feasibility Analysis) and Evaluation of alternatives generated in all aspects of the axes of project evaluation (Feasibility Analysis). Alternatives are generated to meet the needs expressed in the problem or opportunity (Profile) quantified in the stage of Pre-feasibility and Selected as the best option in the stage of Evaluation.

Type of course	Required ☒ Elective ☐

Specific goals for the course	
Outcomes of instruction	EG1.1. It defines the problem by answering the key questions of problem analysis, and its importance and influence on the quality of life of people in its area of influence. EG1.2. It determines the causes of the problem, being able to analyze which are the symptoms and causes that generate it through a “tree of symptoms and causes of the problem”. EG1.3. It proposes solutions to the problem applying principles of Engineering, Science and/or Mathematics implementing the “tree of objectives” technique. EG1.4. It argues the selected solution demonstrating choice based on the present constraints of the project (scope, time, cost, resources, quality and stakeholders).
Student outcomes	CG1. Identifies, formulates and solves complex Engineering problems, applying the principles of Engineering, Science and Mathematics. (1)

Topics
Unit I. Overview of the project Unit II. Pre-Investment Stage: Project Profile Unit III. Pre-Investment Stage: Pre-feasibility of the project Unit IV. Pre-Investment Stage: Project Evaluation - Technical Studies Unit V. Alternative Selection Method