Code	INI319	Prerequisites	INI378 INI395 ECO322
Name	Industrial Engineering Project	Co-requisites	None

Credits	Contact Hours
04	44
Categorization of credits	
Math and basic science	
Engineering topic	X
Other	

Coordinator's name	George Miranda

Text book
Gido, J., Clements, J.P. (2007). Successful project management. (5th ed.). Mexico City: Cengage Learning. Heizer, J., Barry, R., & Isabel, Pérez de Lara Choy, María. (2014). Operations Management Principles. Pearson Education. Chain, S.N. (2000). Preparation and Evaluation of Projects - 4b: Edition (Spanish Edition). McGraw-Hill Interamericana. Chapman, M. (2006). Planification and control of the production. Pearson Education. Meyers, F.E., & Stephens, MP (2005). Manufacturing Facilities Design and Material Handling. Prentice Hall. Krick, E.V. (2005). Engineering Methods / Methods Engineering (Spanish Edition). limousine Industrial engineering: standard methods and work design. (2009). McGraw-Hill Education. Creole, R.G. (2005). Work study. McGraw-Hill Education. Zornoza, CC, & Cruz, GFR (2006a). Quality management. Pearson Education.
Other supplemental materials

Description	
This subject focuses on the development and implementation of the concepts and skills of project management in the solution of problems within the field of action of Industrial Engineering. It includes the processes of identification and selection of projects. The study material will integrate management issues, integration of work teams, so that the student develops the necessary skills to successfully solve Industrial Engineering projects.	
Type of course	☒ Required ☐Elective _

Specific goals for the course

Outcomes of instruction	1. Define the problem and its causes, identifying all its key aspects. 2. Identify the client's needs to transform them into objectives, criteria and restrictions with a high level of compatibility and using tools, methods and/or engineering systems. 3. Generate and select the best alternatives with a high level of correlation with the established criteria and restrictions, in accordance with the engineering sciences and considering health, well-being and safety. 4. Justify the selected alternative based on arguments consistent with the established criteria. 5. Prepare reports and transmits oral messages in a clear, coherent and judicious way, classifying the ideas of the topic it deals with, using graphics and appropriate language, fully retaining the attention of its audience. 6. Prioritize engineering decisions before the impact of their consequences in the contexts (economic, environmental and social) with local, regional or global scope. 7. Participate in the planning of objectives and their follow-up until compliance and with efficiency. 8. Interact with team members appropriately, encouraging and considering the ideas of other members while avoiding, mediating and/or resolving conflicts. 9. Assume appropriate roles within the team based on their abilities and what has been agreed upon, fulfilling commitments within the established deadlines and with adequate quality.
Student outcomes	SO1. Identify, formulate, and solve complex engineering problems by applying principles of Engineering, Science, and Mathematics. SO2. Apply the engineering design process to produce solutions that meet specific needs taking into account public health, safety and welfare, as well as global, cultural, social, environmental and economic factors. SO3. Communicate effectively with a variety of audiences. SO4. Recognize ethical and professional responsibilities in engineering situations and makes informed judgments considering the impact of engineering solutions in global, economic, environmental and social contexts. SO5. Function effectively in a team whose members together provide leadership, create a collaborative and inclusive environment, set goals, plan tasks and meet objectives.

Topics
Unit I. Theoretical Foundation Unit II. Project Progress Reports Unit III. MS Project Unit IV. Final project