Code	INI316	Prerequisites	INM377 INI392
Name	Industrial Safety and Hygiene	Co-requisites	None

Credits	Contact Hours
02	22
Categorization of credits	
Math and basic science	
Engineering topic	X
Other	

Coordinator's name	Fabio Sanchez

Text book
Asfahkl, C.R. (s/f) Industrial Safety and Health (4th edition). Prentice-Hall.
Other supplemental materials
Blake, R.P. (s/f). Industrial Safety. Edit. Diana Friar Cantalejo, D. (s/f). Safety and Health. Professional Risks (Volumes I and II). Social Service for Occupational Health and Safety. Ministry of Labor of the Dominican Republic. RD Occupational Safety and Health Regulations, 522-06. Ministry of Labor. Prevention of Occupational Risks, Master's Manuals taught by Universidad La Coruña-Intec.

Description	
This course will give the necessary tools so that the student can understand, develop and implement an Occupational Risk Prevention system in any type of business activity. Through it, the student will develop the ability to design, implement, manage, evaluate and improve Industrial Safety and Hygiene systems in search of that all employees of a company can know correctly how to face the Occupational Risks. This will motivate each employee to join the Preventive Activity, thereby reducing the Incidence Rate of Accidents and Occupational Diseases.	
Type of course	Required ☒ Elective ☐

Specific goals for the course	
Outcomes of instruction	1. Identifies needs and converts them into goals, criteria and design constraints 2. Generates alternatives supported in engineering sciences, social sciences, economics among others, selecting the best. 3. Creates specifications, prototypes or other means of design communication. 4. Develops solutions according to the current reality, taking into account ethical and professional responsibility.

	5. Evaluates the consequences of the impact of engineering decisions in contexts (economic, environmental and social) at global, regional and local levels. 6. Recognizes copyright in the particular solutions developed. 7. Plan strategies for meeting goals. 8. Interact with team members, open to the opinions of others. 9. Identifies your role as a member within the work team for the achievement of the objectives. 10. Identifies the need to acquire new knowledge, relating them to a learning strategy. 11. Uses various methods and tools to obtain information relevant to new knowledge.
Student outcomes	SO2. Apply and use the engineering design process to produce solutions that meet specific needs, taking into consideration public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors. 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.CG4- SO7. Acquire and apply new knowledge using appropriate learning strategies.

Topics
Unit I. Conceptions of Work and Health
Unit II. Industrial Hygiene
Unit III. Prevention of Occupational Risks
Unit IV. Causes and Consequences of Accidents and Incidents
Unit V. Risks of losing health in occupations
Unit VI. Use of Personal Protective Equipment
Unit VII. Fire: Causes and Consequences
Unit VIII. Signage as a fundamental tool of preventive activity
Unit IX. Study of Manual 522-06 on Safety and Health at Work