

Course Syllabi

1. INGE-00015 CORPORATE ENVIRONMENTAL MANAGEMENT

2. 96 credits hours.

3. Bibliography

- Manual de gestión y control ambiental / https://sgb.ucuenca.edu.ec/cgi-bin/koha/opac-detail.pl?biblionumber=152770&query_desc=kw%2Cwrdl%3A%20GESTI%C3%93N%20AMBIENTAL, Fernando Bustos Ayoví, 2016
- PRODUCCIÓN MÁS LIMPIA: PARADIGMA DE GESTIÓN AMBIENTAL, VAN HOOF BART, 2012
- GESTIÓN INTEGRAL DE RESIDUOS SÓLIDOS, TCHOBANOGLOUS, George THEISEN, Hilary VIGIL, Samuel, 2012
- Manual de gestión ambiental/ https://sgb.ucuenca.edu.ec/cgi-bin/koha/opac-detail.pl?biblionumber=15182&query_desc=kw%2Cwrdl%3A%20GESTI%C3%93N%20AMBIENTAL, Franklin Bucheli García, Iván Coronel Coronel, Eduardo Idrovo Murillo y Angel Espinoza Veintimilla, 2000
- LOS PROCESOS INDUSTRIALES Y EL MEDIO AMBIENTE. UN NUEVO PARADIGMA, MENDEZ DELGADO, FERNANDO, 2017

4. Specific Course Information

- Environmental Management in an organization analyzes and applies solutions to environmental problems arising from the processes of production of goods and services. It translates into decision-making and actions on those aspects that can affect the environment. It focuses on the prevention, mitigation, correction and remediation of environmental impacts, which are generated in productive activities. In the practical application of the contents, the course of Environmental Management brings to the profile of eg Resocio del estudiante en desarrollar resultados de aprendizaje associated with: Identifying, formulating and solving complex engineering problems applying engineering, science and mathematics principles (RDA 1 ABET) Recognize ethical and professional responsibilities in engineering situations to make informed judgments that should consider the impact of engineering solutions in global, economic, environmental and social contexts (RDA 4 ABET). Work in a team whose members as a whole provide leadership, create a collaborative and inclusive environment, set goals, work plans and achieve goals effectively (RDA 5 ABET)
- Prerequisites:
 - INGE-00020 ENERGY TECHNOLOGY
 - INDU-00019 OCCUPATIONAL HEALTH AND SAFETY

5. Learning Objectives of the Course

- To know the appropriate methodologies and techniques to protect and conserve the environment, through the rational use of natural resources in industrial and service activities.
 - To develop in the student an attitude of care and preservation of the renewable and non-renewable resources used in the processes of production of goods and services.
 - To know the environmental legal framework that governs at a global, national and local level.
 - To identify the techniques for the prevention, mitigation and remedy
 - Understand the principles of an environmental management system for production industries and service companies.

b. Learning Outcomes

- Know the appropriate techniques for the prevention, reduction, mitigation or remediation of environmental pollution that could generate a system of production of goods and/or services, applying engineering, science and mathematics principles to identify and solve industrial environmental problems. (rda abet 1)
- Learn about business environmental management tools for collaborative work to propose clean and environmentally friendly production designs (rda abet 5)
- Know the appropriate techniques for the prevention, reduction, mitigation or remediation of environmental pollution that could generate a system of production of goods and/or services, applying engineering, science and mathematics principles to identify and solve industrial environmental problems. (rda abet 1)
- It identifies the environmental requirements that a production system must meet according to the applicable environmental legal framework, recognizing ethical and professional responsibilities in the making of engineering decisions for the development of production processes, in the current environmental context. (rda abet 4)

6. Course Topics

- Introduction to environmental care
- Solid waste
- Industrial waters
- Pollution of the air
- Environmental management in enterprises