

Course Syllabi

1. INGE-00025 ENVIRONMENTAL MANAGEMENT AND TECHNOLOGY

2. Instructor:

- Ana Lucía Astudillo Aleman

3. Bibliography

- Química Ambiental Environmental chemistry, Baird C, Cann M, 2014
- Introducción a la ingeniería medioambiental , Gilbert M. Master y Wendell P. Ela , 2008
- Química medio ambiental , Spiro, Tomás G. Stigliani, William M. Madrid Albarrán, Yolanda trad., 2004
- Elementos de la Gestión Ambiental , Juan Carlos Páez Zamora, 2013
- Ingeniería ambiental: fundamentos, sustentabilidad, diseño , Mihelcic J, Zimmerman J., 2013

4. Specific Course Information

- a. Environmental Management and Technology will enable students to identify environmental problems and impacts arising from human activities, including the theoretical foundations on the characteristics and mobility of pollutants, to understand and implement strategies and management tools for pollution prevention and technologies available for waste treatment, taking into account the national regulatory framework. the subject will contribute to the achievement of the following achievements of learning the career: 1. To act with respect and commitment to the environment, applying management practices and technologies, that allow it to minimize the environmental impact generated by the productive activities. 2. To apply the basic fundamentals of the research. formative, at an exploratory and diagnostic level, in an appropriate way, for the development of experiments, for the search, selection and evaluation of information, preparation of bibliographical essays and academic articles and for the communication of findings.

- b. Prerequisites:

- INGE-00032 Industrial health and safety
- INDU-00023 Instrumental analysis

5. Learning Objectives of the Course

- a. To contribute to the continuous improvement of the environmental performance of the industries in order to comply with the current environmental legislation and protect the environment. - To work as a team, effectively, researching and carrying out laboratory experimentation - To understand the potential environmental impact of the different human activities, with emphasis on the productive sectors. - To apply environmental management practices within the framework of the current environmental legislation. - To understand the theoretical foundations of technologies applied to waste treatment and control.

- b. Learning Outcomes

1. He works as a team, effectively, researching and conducting laboratory experimentation.
2. It comprises the theoretical foundations of technologies for waste treatment, effluents and gaseous emission control.
3. It applies environmental management practices within the framework of existing national legislation.
4. It understands the potential environmental impact of different human activities, with an emphasis on the productive sectors.

6. Course Topics

1. Environment
2. Environmental impact and pollution
3. Legal framework
4. Environmental management
5. Specific environmental management tools
6. Treatment of industrial solid waste
7. Treatment of industrial effects
8. Control of gaseous emissions of industrial origin