

Course Syllabi

1. PPFS-00067 WORK PRACTICES I

2. Instructor:

- Gonzalo Javier Astudillo Ochoa

3. Bibliography

- Instructivo de prácticas pre profesionales de la Facultad de Ciencias Químicas,, PRACTICAS PREPROFESIONALES, 2022
- Reglamento de régimen académico,, CONSEJO DE EDUCACION SUPERIOR, 2020

4. Specific Course Information

- a. Pre-professional practices and internships in third-level careers are learning activities oriented to the application of knowledge and/or the development of professional skills. These practices will be carried out in organizational, institutional, business, community or other environments related to the professional field of each career, public or private, national or international. Pre-professional practices are subdivided into two components: Labour practices, of a nature Professional and community service practices. Pre-professional practices may be carried out throughout career training, whether continuous or not; through plans, programmes and/or projects the scope of which will be defined by the University of Cuenca. The practices must be consistent with the learning results and the graduation profile of the careers and programs; and they may be registered and evaluated according to the mechanisms and requirements established by the university. This subject has as its objective the planning, execution and monitoring of all activities for the correct performance of the students of the Chemical Engineering degree. The subject is aligned with the learning results in: 4. Perform chemical analyses several operating laboratory equipment, using updated analytical techniques and applying good laboratory practices, to provide 6. Control experiments and processes in the field of chemical engineering, considering transport phenomena, unitary operations, chemical processes, to obtain relevant information and meet previously defined objectives. 10. Implement quality and safety management systems by applying the corresponding technical standards.

b. Prerequisites:

- INGE-00031 Op II extraction and absorption
- INDU-00034 Applied mining
- INDU-00032 Engineering Reactions III
- INGE-00030 Op II evap, dest y cris
- INDU-00044 Chemistry analit. water-foods
- EDCA-00233 Industrial economy
- INGE-00025 Environmental management and technology

5. Learning Objectives of the Course

- a. Apply the theoretical-practical knowledge acquired by the student during his or her academic training within a working environment. - Support the different processes and activities within the field of Chemical Engineering in the company and thus complement his or her academic training. - Validate the comprehensive training of the student through the results achieved during the practical phase.

b. Learning Outcomes

1. Implements technologies related to the physical and chemical transformation of materials, effectively, incorporating technological improvements or innovations.

2. Performs various chemical analyses by operating laboratory equipment, using up-to-date analytical techniques and applying good laboratory practices, to provide reliable analytical results.
3. It controls experiments and processes in the field of chemical engineering, considering transport phenomena, unitary operations, chemical processes, to obtain relevant information and meet previously defined objectives.
4. It simulates chemical industrial processes and operations, using computational tools, to establish relationships between variables that allow the making of appropriate decisions.
5. Implements quality management, safety and industrial hygiene systems, applying the corresponding technical standards of quality and safety (iso, osha and others), to comply with regulations inherent in the production processes and other chemical engineering activities.

6. Course Topics

1. Planning of activities of the practical phase
2. Implementation of the practical phase
3. Follow-up to the practical phase.
4. Completion of the practical phase