

Course Syllabi

1. INDU-00029 QUALITY MANAGEMENT

2. Instructor:

- Isabel Cristina Leon Jaramillo

3. Bibliography

- Calidad total y productividad, Gutiérrez Pulido, Humberto, 2010
- Gestión de la calidad Conceptos, enfoques, modelos y sistemas., Camisón, César, 2007

4. Specific Course Information

- a. The Quality Management course provides students with the theoretical and practical foundations necessary to understand, apply and continuously improve quality processes in industrial environments. It focuses on the principles of quality management, methodologies of continuous improvement and understanding of quality management systems based on international standards. The Quality Management course provides the following numerals of the Chemical Engineer's Egress Profile: 10. Implements systems of quality management, safety and industrial hygiene, applying the corresponding technical standards of quality and safety (ISO, OSHA and others), to comply with regulations inherent in the production processes and other activities of chemical engineering. 14. Act with professional ethics, considering the social and economic impact of their professional practice, in the normative areas related to quality, health and safety and the environment. 2. Communicate effectively in oral and written form using the appropriate technical language, whether working individually or in interdisciplinary and/or multi-ethnic teams.

b. Prerequisites:

- EDCA-00233 Industrial economy
- INGE-00025 Environmental management and technology

5. Learning Objectives of the Course

- a. The overall objective of the subject is to train students to understand and apply quality management to improve processes in industrial/business environments, by developing theoretical and practical skills that allow them to use basic quality principles and tools and promote continuous improvement in their future professional practices. - Apply continuous improvement and risk-based thinking through the creation and evaluation of planning in eq uipo. - Analyze opportunities for improvement and problems, and propose solutions using continuous improvement methodologies and basic quality tools. - Understand the basics of quality management, including the PHVA cycle, the process-based approach and risk-based thinking. - Familiarize with standardization concepts and quality management systems based on ISO 9001:2015, as well as understand generalities of integrated management systems.

b. Learning Outcomes

1. Students analyze problems and propose solutions using basic quality tools
2. The student develops a project in which he applies the principles of quality management
3. The student applies the methodology of continuous improvement and risk-based thinking when planning.
4. The student is familiar with concepts about standardization and quality management systems.
5. The student understands the basics of quality management.
6. The student is familiar with concepts about standardization and quality management systems.

7. Students analyze problems and propose solutions using basic quality tools

6. Course Topics

1. Introduction to quality management
2. Continuous improvement
3. Standardisation and quality management system based on iso 9001 standard
4. Draft
5. Basic quality tools
6. Quality management