

Course Syllabi

1. INDU-00007 QUALITY MANAGEMENT

2. 144 credits hours.

3. Bibliography

- Calidad Total y Productividad, Gutiérrez P. Humberto, 2010
- The Complete Guide to Performance Excellence, Defeo, J. A. , 2016

4. Specific Course Information

- a. The Quality Management course allows students to design, improve, organize quality-oriented management systems and models in organizations that manage systems of production of goods and services. In addition, the course aims to identify the elements that make up quality management systems and their interrelations with a circular economy approach. The approach of an analysis of the great changes produced by globalization towards quality, productiv The subject is based on national and international standards such as: ISO 9000, EFQM, models and international quality awards. This subject contributes to the career graduation profile in the ability of the professional: RAbet1. Problem solving: Identify, formulate and solve complex engineering problems by applying engineering, science and mathematics principles. /- It proposes alternatives of problem solving, by using information from production management indicators. RAbet6. Experimentation: Develops and carries out appropriate experimentation, analyzes and interprets the data and uses the criterion of in /- Identify the elements that make up quality management systems and their interrelations with a circular economy approach for value aggregation in a production system. RAbet7. Self-learning: Acquire and apply new knowledge as required, using appropriate learning strategies. /- Identify the development problem where an intervention project will be posed.

b. Corequisites:

- INDU-00021 PRODUCTION CONTROL SYSTEMS

c. Prerequisites:

- INDU-00018 PRODUCTION MANAGEMENT

5. Learning Objectives of the Course

- a. Analyze the constituent elements of a quality management system, using appropriate learning strategies that allow it to solve problems at the business level; in addition, evaluate data with engineering criteria to design, organize, implement, evaluate and improve the management system.
- Analyze basic terms and definitions in quality management.
 - Identify the quality path methodology with the support of some appropriate administrative learning strategies.
 - To generate plans and projects of action aimed at improving the quality, productivity, sustainability and competitiveness of the organizations.
 - To identify global management models in the field of quality.
 - To analyze the regulations established in the field of ISO for its proper implementation.
- b. Learning Outcomes
- Rda4. it identifies and characterizes management indicators to evaluate organizational performance.
 - Rda3. establish a generic methodology to manage quality.
 - Rda2. analyze different business problems and differentiate their causes and potential effects.
 - Rda2. analyze different business problems and differentiate their causes and potential effects.

- Rda1. analyze different scenarios of business life and articulate them with quality.
- Rda5. identify the elements that make up quality management systems and their interrelations with a circular economy approach for value aggregation in a production system.

6. Course Topics

- General quality management
- Quality rule
- Administrative strategies - management tools
- Quality control - measurement of organizational design
- Quality management systems