Industrial Engineering

Institutional mission statement

Provide quality higher technological education, developing well-rounded proficient professionals, with high sense of social responsibility, solid education in science, technology and innovation, who contribute to the sustainable development of the country.

Program Educational Objectives (PEO's)

After few years of graduation the alumni are able to:

PEO 1: Successfully perform in the workplace, based on an intense practice of their skills and a continuous improvement of the learning process.
PEO 2: Designs, implements, administrates and improves sustainable processes and systems, solving problems in the workplace in interaction with other entities.
PEO 3: Leads and effectively works in multidisciplinary teams in the workplace, in an ethic and professional way.

Student Outcomes:

(a) An ability to apply knowledge of mathematics, science, and engineering.

(b) An ability to design and conduct experiments, as well as to analyze and interpret data.

(c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.

(d) An ability to function on multidisciplinary teams.

(e) An ability to identify, formulate, and solve engineering problems.

(f) An understanding of professional and ethical responsibility.

(g) An ability to communicate effectively.

(h) The broad education necessary to understand the impact of engineering solutions in a

global, economic, environmental, and societal context.

(i) A recognition of the need for, and an ability to engage in life-long learning.

(j) A knowledge of contemporary issues.

(k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

COURSES OF THE STUDY PLAN

Year 1- Semester 1	
Research Fundamentals	Intellectual Skills Workshop
Ethics Workshop	Chemistry
Differential Calculus	Industrial Drawing
Year 1 - Semester 2	
Industrial Electronic and Electrical	Statistics and Probability
Material Properties	Analysis of the National Reality
Integral Calculus	Leadership Workshop
Systems Engineering	
Year 2 - Semester 3	
Metrology and Normalization	Inferential Statistics
Linear Algebra	Work Study I
Vector Calculus	Complementary Activities
Economics	
Year 2 – Semester 4	
Manufacturing Processes	Inferential Statistics II
Physics	Work Study II
Algorithms and Programming Languages	Industrial Health and Safety
Operations Research I	
Year 3 – Semester 5	
Projects Management	Quality Statistical Control
Cost Management	Sustainable Development
Operation Management I	Ergonomics
Operations Research II	Community Service
Year 3 – Semester 6	
Research Workshop I	Maintenance Management
Engineering Economics	Marketing
Operation Management II	Automotive Industry Requirements
Simulation	
Year 4 – Semester 7	
Research Workshop II	Logistics and Supply Chain
Financial Planning	Quality Systems Management
Facility Planning Design	Quality Engineering
Manufacturing Systems	
Year 4 – Semester 8	
Projects Formulation and Evaluation	Computer Manufacturing Systems
Industrial Relations	New Technologies Seminar
Advanced Simulation	Competitiveness Seminar
Advanced Manufacturing Systems	
Year 5 – Semester 9	
Internship	

STATISTICS OF THE PROGRAM:

Year	Freshman Enrollment	Program Enrollment	Awarded
2010	446	1464	175
2011	375	1561	168
2012	410	1552	235
2013	354	1636	203
2014	304	1640	212
2015	522	1826	288
2016	-	-	-
Numbers under enrollment correspond to the semester August-December; awarded correspond to totals in the year			