UDLAP®

Licenciatura in Industrial Engineering

Program Curriculum 2006

The program of Licenciatura in Industrial Engineering at Fundacion Universidad de las Américas Puebla develops professionals capable to design, improve and install integrated systems of individuals, machinery, information, materials and energy to specify, to predict and to evaluate the results obtained by such systems. The program also prepares the students to become professionals responding to the challenges imposed by the future, enriched with cultural and social sensibility values.

Program Educational Objectives

The Program Educational Objectives for the Industrial Engineering Program are aligned with the mission of its Department by providing, to the students, strong knowledge bases, abilities and skills required to their successful integration to national and international labor market so that they can contribute in the development or improvement of industrial engineering solutions. During the initial years of their careers, UDLAP industrial engineering graduates will:

- Optimize the operation of systems integrated by men, machines and supplies, acting with social responsibility, leadership and ethics.
- Choose the solution that is best suited to a specific need.
- Assure the best performance of integrated systems.

Initial profile

The candidates should demonstrate that:

- Enjoy knowing how things work.
- Think about new or better ways to do things.
- Take one element apart and put it back together with fewer parts (Most efficient).

- Have predilection for mathematics and other sciences.

Student outcomes

The Student Outcomes for the Industrial Engineering Program at Universidad de las Americas Puebla are:

a) An ability to apply knowledge of mathematics, science, and engineering for solving industrial engineering problems.

b) An ability to design and conduct experiments, as well as to analyze and interpret results obtained from them.

c) An ability to design integrated systems to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability

d) An ability to achieve effective and efficient results through teamwork with people from different backgrounds.

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

f) An understanding of professional and ethical responsibility

g) An ability to communicate effectively with industrial engineers and people with different backgrounds.

h) The broad education necessary to understand the impact of industrial engineering solutions in a global, economic, environmental, and societal context

i) Commitment to their ongoing forming as an industrial engineer.

j) A knowledge of contemporary issues, both in their professional field and in other areas.

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