Program's Educational Objectives

Chemical Engineering

Our chemical engineers graduates will be able to:

1. Apply basic principles of science and engineering to modern chemical technology.
2. Apply problem solving skills, design and conduct experiments, and analyze and interpret data.
3. Design systems, components, or processes within realistic constraints such as economic, social, ethical, environmental, and health and safety.
4. Communicate effectively in a bilingual setting and function in multi-disciplinary teams.
5. Build upon their undergraduate education, expand and adapt their knowledge and skills into their chosen career path.

Civil Engineering

After their graduation from UPRM, our Civil Engineering

1. Graduates will meet the expectations of employers of Civil Engineers.
2. Qualified graduates will pursue advanced studies if they so desire.
3. Graduates will assume/undertake leadership roles in their communities and/or profession.

Computer Engineering

1. Become educated citizens who, as computer engineers, contribute by applying, ethically, their specialized knowledge to the educational, cultural, social, technological and economic development of their societies.
2. Demonstrate a combination of analytical, computational, and experimental knowledge and skills to make them competitive within the computer engineering practice.
3. Demonstrate communication skills in Spanish and English that enable them to effectively participate and contribute in both linguistic environments.
4. Value the importance of lifelong learning as demonstrated by pursuing graduate studies, being involved in professional societies, or pursuing professional advancement and success.

Electrical Engineering

1. Become educated citizens who, as electrical engineers, contribute by applying, ethically, their specialized knowledge to the educational, cultural, social, technological and economic development of their societies.
2. Demonstrate a combination of analytical, computational, and experimental knowledge and skills to make them competitive within the electrical engineering practice.
3. Demonstrate communication skills in Spanish and English that enable them to effectively participate and contribute in both linguistic environments.
4. Value the importance of lifelong learning as demonstrated by pursuing graduate studies, being involved in professional societies, or pursuing professional advancement and success.

Industrial Engineering

The Industrial Engineering undergraduate program has four educational objectives. These are:

1. Be known as assertive, ethical, and independent critical thinkers
2. Make contributions to their organization based on experience that builds on their IE education
3. Adapt to changing needs in their profession
4. Achieve leadership roles in their organizations

Mechanical Engineering

The following general skills and competencies are required of our graduates during the first five years after graduation, these are:

1. Interact and function in a multicultural and multidisciplinary environment.
2. Address the challenges of fast moving changes and newly emerging areas in the profession.
3. Provide quality and ethical contributions to the profession, society and engineering knowledge base.
4. Become leaders and team-builders.
5. Be self-motivated to pursue lifelong learning.