

NANOTECHNOLOGY ENGINEERING GRADUATION PROFILE

MISSION

Provide quality education to train professionals in Nanotechnology Engineering, in order to generate comprehensive technical and human skills, to design production processes of nanostructured materials in the laboratory and at an industrial level, based on planning, synthesis and incorporation techniques and applicable regulations for their commercialization. Contribute to technological innovation and / or carry out technological or social entrepreneurship projects, assuming professional and developmental commitments.

VISION

To be the best educational option with recognized prestige for the integral formation of its students in the technical and human aspects; with a high level of relevance; with a perspective of their environment and with the ability to respond according to the new skills that human resources require to face technological changes. Assume the commitment to the labor integration of graduates, sustainability and social responsibility.

GRADUATION PROFILE BY COMPETENCES

GRADUATION ATTRIBUTES

Design production processes of nanostructured materials in the laboratory and at an industrial level, based on planning, synthesis and incorporation techniques and applicable regulations, for their commercialization and contribute to technological innovation.

Basic Sciences. Raise and solve engineering problems based on the principles and theories of physics, chemistry and mathematics, through the scientific method to support decision-making in the scientific and technological fields.

Management. Develop and lead organizations through the ethical exercise of leadership, with a systemic approach to contribute to the achievement of strategic objectives.

English. Communicate feelings, thoughts, knowledge, experiences, ideas, reflections, opinions, in the public, personal, educational and occupational spheres, productively and receptively in the English language according to level B1, independent user, of the European Framework of Reference to contribute in the performance of their functions in their work, social and personal environment.

EDUCATIONAL OBJECTIVES

1. Develop synthesis and incorporation procedures of nanomaterials established for their integration into industrial processes.
2. Characterize and incorporate nanomaterials established for use in industrial processes.
3. Manage and direct chemical analysis laboratories, through administration tools and applicable regulations, to contribute to their control and continuous improvement within the industry.
4. Implement technological entrepreneurship projects based on the advances of new materials.
5. Maintain permanent training by participating in research groups or societies that allows them to update them in the technological advances of their field of work.

▶ PERFORMANCE SCENARIOS

- Research and development centers for advanced materials.
- High-tech production companies and production of nanostructured materials and products.
- Service companies for the characterization of nanostructured materials.
- Their own company of innovation, development and / or application of advanced materials.

▶ PROFESSIONAL OCCUPATIONS

- Researcher specialized in advanced materials.
- Head of advanced materials production laboratory.
- Head of laboratory of characterization of advanced materials.
- Leader of innovation projects and development of new materials.