

Chemical Engineering MS Program

Program Educational Objectives

To prepare graduates that:

I	<i>Will successfully apply their skills to the professional practice of Chemical Engineering including project organization, innovation, management and assuming leadership positions.</i>
II	<i>Will use the methods, concepts and models of Chemical Engineering in the research, design, development and application of new products and processes to produce advanced solutions in a wide range of business sectors.</i>
III	<i>Will efficiently share information to diverse audiences and be able to develop their professional activities in multidisciplinary teams.</i>
IV	<i>Will practice their profession as Chemical Engineers with a deeply-held sense of ethics, responsibility, respect for the environment and proper understanding of the impact of their work on sustainable, social and global economic development.</i>
V	<i>Will pursue additional educational activities for their proper professional development.</i>

Student Outcomes

Graduates of our Chemical Engineering MS program acquire the knowledge and develop the skills shown below:

1	<i>They can identify, formulate and solve complex Chemical Engineering problems by applying principles of engineering, science, and mathematics.</i>
2	<i>They can apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.</i>
3	<i>They can communicate effectively with a range of audiences, both orally and in writing.</i>
4	<i>They recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of Chemical Engineering solutions in global, economic, environmental, and societal contexts.</i>
5	<i>They can function effectively on teams whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.</i>
6	<i>They can develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.</i>
7	<i>They understand the need for life-long learning, acquire and apply new knowledge as needed, using appropriate learning strategies.</i>