

Licentiate in Chemistry – 6 years
High School and University/ College Teacher of Chemistry- 5 ½ years

Objective

To train students in the study of matter transformations which involve energetic changes (such as the passage from one phase to another) and changes in systems composition (chemical reactions). Graduates are prepared to determine the conditions in which these changes can occur and the speed at which these transformations take place. Modern Chemistry is a highly multidisciplinary science and, together with other basic sciences, it is of fundamental importance for the formulation of new materials, new industrial and pharmaceutical products so as to understand the molecular basis of biological processes in the generation of new types of energy that cause less pollution.

Contents

The course of studies starts with a cycle of basic training that allows students to focus on problems of instrumentation, industry and application. The course is completed with subjects focused on different approaches to chemistry.

In order to obtain the Teaching degree, students have to pass 17 subjects common to the Licentiate degree and 7 subjects of pedagogical training.

Job Opportunities

Various industries demand the participation of graduates in jobs concerning chemical processes involved in their businesses: petrochemistry and food industries are only some of the most important examples. Licentiates in Chemistry work, among other things, in the determination of the composition of substances, establishing their level of pollution, and in establishing which additives are apt for food preservation. They also analyse of the speed of reactions in certain chemical phenomena in order to accelerate it or slow it down; and study the use of electrical flows for the generation of chemical reactions applicable to industrial production. Besides, graduates who pass the subjects in the Orientation in Biological Analysis can request a professional License that allows them to carry out analysis of that kind.

These and other similar jobs can be done in the public or private area. Licentiates in Chemistry can carry out research and teach in Universities. Teaching in High Schools is generally done by Teachers of Chemistry.