

Licentiate in Surveying

Surveyor Engineer – 5 ½ years

Objectives

Surveyors are the professionals that study, plan, run and carry out the territorial and lots information systems and that participates in the decision making of areas requiring the mentioned information.

Surveying is the discipline that deals with the location, identification, delimitation, measurement, representation and valuation of spaces and properties, whether public, private, rural or urban, regarding its area and depth. Surveyors are also concerned with the location and geometric control of works, organizing and making land registries.

In other words, Surveying is a field that deals with the relation between human beings and the earth in its technical, legal and economic aspects. Its aim is the cartographic knowledge of the earth and of the works carried out on the surface or the underground granting through measurement the legal determination of the lot state so as to reinforce and improve the territorial order which is necessary to protect rights.

Contents

Surveying requires topographic and geodesic knowledge as well as the handling of specific instruments. The syllabus includes, as a consequence, subjects of basic scientific training (Mathematic Analysis, Physics, and Algebra) and subjects connected to the fieldwork (Topographic Drawing, Means of representation). Given that measurement implies making evaluations of different nature, the course of studies also provides Economic and Geography knowledge; Legal Measuring, Physical Geography and Geology, among others.

Job opportunities

Graduates are qualified to:

- a) Carry out the recognition, determination, measurement and representation of the territorial space and its characteristics.
- b) Carry out the determination, demarcation, verification and extension of territorial limits and river lines
- c) Carry out the determination, demarcation and verification of political and administrative jurisdictions, of existing territorial areas, possessed areas and of dividing walls and fences.
- d) Carry out the determination, demarcation and verification of property and lots and their affectations
- e) Study, plan, register, direct, execute and inspect:
 - A. Territorial, property and/or lot surveys to make land registries and massive valuations
 - B. Divisions, subdivisions in horizontal properties, unifications, annexations, concentrations and property re compositions
- f) Certify and register the lot state and the territorial surveys
- g) Carry out and interpret topographic, hydrographical and photometric surveys with geometric, graphic and analytic representations
- h) Carry out morphological, photometric interpretations and analyses of air and satellite images.
- i) Study, plan, execute and run geometric systems and complementary measurements for the study, planning and re-analysis of works
- j) Study, plan, apply and run trigonometric and multimeteric systems of precision.