

## Master in Ecotechnology

### Introduction

Since the 70's in the twentieth-century, the environmental concern has been in place in both the public agenda and the academy. The crisis of our civilization represented in global environmental problems, is evident in their different ecological, cultural and economic impacts.

From the ecological point of view, excessive use of resources, its inappropriate forms of extraction, its poor usage and waste generation, have caused serious and irreversible damage to terrestrial, aquatic and marine environments. In the social sphere, development models focused on industrial growth create vulnerabilities in unsustainable societies. Finally, in the economic aspect, production of consumer goods and services associated with the use of polluting technologies and materials has produced chemical and biological toxic waste that directly affect the quality of life of the population.

In contrast to traditional technologies, the letter from Rio (1992), sees green technology as an effective strategy for sustainable economic growth, by reducing pollution processes, reduction in consumption rates and use of raw materials; promotes industrial processes with minimal or no impact, and finally, reuse and recycle materials. This ultimately allows the coexistence of nature with the sustainable development. As explained in the agenda XXI, green technologies "are not just individual technologies, but total systems which include know-how, procedures, goods, services and equipment, as well as organization and management procedures."

### Information

The Master in Ecotechnology is offered as a research master focusing on two main lines of interest:

1. Water, sanitation and cleaner production Line
2. Agricultural production and ecological restoration Line.

The education is based upon these two lines of research taking into account the development of concepts and skills associated with green technologies especially related to the industry, ecological sanitation, biotechnology (bioremediation, phytoremediation), recovery of ecosystems and energy sources.

The curriculum also has electives with an end complementary to the Objectives of the Master.

### Title Awarded

## Master of Science in Ecotechnology

### Objectives

- Be a researcher with high human and ethical sense, with strong technical criteria to analyze, propose, design and project environmentally friendly technological solutions.
- Promote research processes in environmentally friendly or eco-technologies with emphasis on water resources, agriculture, forests and cleaner production.
- Rescue productive traditional technologies in Latin America to provide alternative solutions to their most pressing environmental problems.
- Encourage the theoretical development of environmental technology.
- Promote the Masters in Ecotechnology interaction with political and social structures in the region, seeking their participation in strategic decision making for the future of the region.

Fuente: <http://www2.utp.edu.co/english/masters/115/master-in-ecotechnology>



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