

Info

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Enrollment:

2016

<http://apps.iica.int/iica-sagarpa/>**Starting:**

January 16, 2017



BIOTECHNOLOGY AND ITS APPLICATION IN AGRICULTURE

ENROLLMENT

This course is free; you must fill the form of registration to participate on the website: <http://apps.iica.int/iica-sagarpa/>

DURATION

The duration of the course Biotechnology and its Application in Agriculture is eight weeks, distributed in 6 modules, estimating a dedication of two hours per day.

ABOUT THIS COURSE

This course is the result of a very important effort to share knowledge and practices of last generation from the Center for Research and Advanced Studies of the National Polytechnic Institute of Irapuato (CINVESTAV) Mexico, to promote its application in projects of development biotechnology in their countries.

It is a not tutored course, in which participants will study the different themes of each module, and they will make the interactive activities, and will answer the on line examination of each module.

In this document we share an overview and a description of the composition of the training programme.

CONTENT

The course Biotechnology and its Application in Agriculture consists of six modules:

- Entering the world of biotechnology
- Fundamentals of the biotechnology
- The soil and its micro-organisms
- Genetics and molecular tools
- Biotechnology in agriculture
- Biotechnology for the safety food

OBJECTIVE

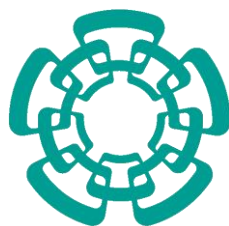
To empower graduates, agricultural technicians, agricultural producers and agricultural leaders from 21 countries of Central America and the Caribbean, to recognise biotechnology as a modern and effective tool of economic and productive development, and to be able to apply biotechnologies for the improvement of agricultural production and the conservation of biodiversity, and promote decisions in their countries for research and development in biotechnology

AIMED TO

Technicians and graduates in biology, agronomy, food or related sciences with experience in the academic area, extension, technical assistance, research and production in the field of agriculture.

Programme for strengthening of national technical capacities of the agricultural Sector

The international technical cooperation program of the Secretariat of Agriculture, Livestock, Rural Development, Fishing and Food (SAGARPA) of Mexico and the Inter-American Institute for Cooperation on Agriculture (IICA) has the objective of sharing the experience and the technical capacity of the Mexican institutions of education and research in the agricultural field; through programmes of training and direct technical assistance to agriculture, to contribute to the improvement for the quality of life of farmers and rural inhabitants of the countries of the continent.



Cinvestav
Unidad Irapuato

CINVESTAV was created in 1961 by Presidential Decree as a decentralized public institution. Its founding director, Dr. Arturo Rosenblueth, prompted an academic requirement that has resulted in the success of the institution. It has with twenty-eight departments of research, that are distributed by the nine campuses throughout the Republic Mexican.

www.ira.cinvestav.mx

LEARNING ACQUIRED AT THE END OF THE COURSE

Biotechnology as an option of productive and economic improvement for agricultural producers.

- To analyze the scientific fundamentals of the biotechnology to identify the sheds of its application in agriculture
- To identify the structure of agricultural soils and their microorganisms, to evaluate options of enrichment of its content of organic matter
- To understand the nature of the DNA and the importance of the knowledge of its sequencing and modification, to identify options for improvement, registration, identification of pathogens and transformation of crops
- To apply biotechnology for sustainable agricultural production, the increase in production and integrated pest and disease management
- To assess the contribution of biotechnology for the production systems of the region, in the context of climate change, regulatory framework, and the contribution to national development

METHODOLOGY

The focus of the course consists of promoting the knowledge of biotechnology as an innovative field, the understanding of the foundations and fundamentals of Microbiology, and the application of biotechnologies in the field of agriculture. This implies that the method of evaluation is referred to the critical analysis of how the learning can represent an alternative for your community and for your country. For this the evaluation is made depending on being innovative in the field of the biotechnology in the agriculture, to be competent in the solution of problems to local and national level in the region of Central America and the Caribbean.

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