



# MICROBES IN THE AGRI-FOOD CHAIN: THEIR POSITIVE ROLES

8 hours

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### Course aims

Microorganisms are widely used in various applications throughout the agri-food chain as fermentation starters, probiotics, protective cultures, cell factories, bio-fertilizers and bio-pesticides, bio-degraders etc. The course provides an overview of the major beneficial roles of microorganisms in food production and sustainable agriculture, with a focus on safety assessment and regulatory issues.

#### METHODOLOGY

The course will be developed through lectures and discussions with students. Students' grades will be based on their class active involvement.

### **COURSE DESCRIPTION**

Microorganisms in the food and feed chains:

- 1. Microbial approaches in fermentations for production and preservation of foods.
- 2. Microorganisms and functional foods

Microbial Bio-agents in Sustainable Agro-Ecosystems:

- 1. Pest control agents
- 2. Plant growth promoters

# RECOMMENDED TEXTS

Reading materials will be provided (posted on the web) during the class.