

## ORGANISATION OF THE PROGRAM

### First year

The teaching program of the first and second semesters are essentially common with a 4 months industrial internship.

### Second year :

The teaching program of the two semesters are basically made of options of choice by candidates to specialize on with a 6 months of industrial project work. The options are:

1. Industries for fermented beverages : Semester 3 MPGIF-OPB1
2. Industries for dairy fermented products : Semester 3 MPGIF-OPL1
3. Industries for primary and secondary metabolites fermented products : Semester 3 MPGIF-OPMPS1
4. Industries for obtaining enzymes by fermentation : Semester 3 MPGIF-OPEA1

## OPPORTUNITIES

The opportunities are: Company Manager, Plant Manager, Production Manager, QHSE Manager, Project Chief of Staff, Expert Consultant, Project Engineer, Supply Chain and Logistics Manager, Research and Development, etc

## ADMISSION CONDITIONS

This program is open to candidates having :

- A bachelor's degree in Chemistry, Biochemistry, or Bachelor's degree in Biotechnology and Food Industries, Environmental Engineering or any other equivalent degree with at least a "C" grade. The duration of the training is two (2) years, Or a "Diplome Universitaire de Technologie" (DUT) diploma subject to a minimum of five (05) years.
- Professional experience and a certificate of validation of professional achievements deemed equivalent to a bachelor's degree and issued by a competent authority.

- A Master of Engineering degree in Agro-Food process Industries, or Industrial Chemistry and Environmental Engineering. The program in this particular case will be redesigned accordingly to last one year,
- A diploma of Agronomy with skills justified by the validation of professional achievements by a competent commission in the required field,
- The training will also be open online to qualified professionals who are not able to take lectures directly in class.
- Admission is by study of candidate's file.

## COST OF TRAINING

The cost of the training is one million three hundred thousand (1,300,000) CFA francs per student, thus 650,000 CFA francs per year

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# PROFESSIONAL MASTER

## Process and Management of Fermentation Industries

### ( PGIF )



Fermentation at the heart of  
clinical products, alcoholic  
beverages, dairy products  
and chemicals



## OBJECTIVES OF THE PROGRAM

This program targets:

- To equip students according to their choices, with a solid basis in the fundamental scientific and technological principles and their applications in the context of fermentation industries in general, and particularly, fermented and unfermented beverage industries, dairy fermentation industries, primary and secondary metabolite fermentation industries of food and health order, fermentation industries for microbial enzymes, chemical fermentation industries and conversion of renewable plant biomass to liquid and gaseous fuels.
- To develop knowledge and understanding of business and management. Learn the underlying principles, concepts, relevant theories and methods of definition, the current state of knowledge and opportunities for future development of industries.
- To Grasp the global, regional and local contexts of each industry ...



## LEARNING OUTCOMES AND PERSONAL ABILITIES

### 1 Commercial and Professional industrial practices

The students highly recommended to undertake industrial placements in years 1 & 2  
Adopt a mature and professional attitude and skills linked to their professional aspirations

### 2 Autonomy, responsibility and working with others

Take responsibility for personal and professional development  
Efficient management of work and time both as an individual and as part of a group

### 3 Digital communication and information technology

Efficient written, oral and Communication at all levels  
Development of critical analytical, digital skills, both general and subject-specific

## THE EXPECTED ACHIEVEMENTS OR COMPETENCES OF LEARNERS

### 1 Understanding, knowledge and cognitive skills

Learners will be expected to have:

- A detailed knowledge and understanding of the fundamental materials and topics that are essential to acquire the wide range of expertise required for the processes and management of fermentation industries, including, but not limited to, raw material science and technology, microorganism science, microbiology, biochemistry, process technology, business studies, management, food safety, quality control and quality assurance, flavour assessment and analytical chemistry.
- A good understanding and knowledge of policy, legislative, ethical, health and safety issues that concern the design, manufacture, marketing and sale of the various products from the fermentation industries and for raw materials, processing aid, by-products and industrial waste.

### 2 Search of Information and Research

- Manage data and information effectively and efficiently. Use a range of techniques for presentation at work: written, processed, spreadsheets, presentation kits.
- Take responsibility for their learning and become more independent as learners.
- Work effectively alone and as a team.
- Carry out a detailed documentary survey and be competent and expert in the collection, organization and presentation of information from www, library, journals, books. Make critical judgment and assessments.
- Efficiently perform process operations of fermentation industries on a pilot scale, including planning recipes, quantities, process parameters.