

# FOOD TECH PROJECT

**LEVEL:** MASTER 1

**PERIOD:** SEMESTER 2

**LANGUAGE:** EN

**ECTS:** 6

**TEACHER/COORDINATOR:** VINCENT DUMORTIER/EMMANUELLE MARTIN



## 1-Main objectives

- › Mobilize knowledge and skills in food science to resolve a concrete technical issue presented in a professional setting. The project will be presented in the form of a problem arising in an industrial context (either an exterior sponsor or at ISA with a link to an external study).

## 2-Skills developed

- › Work in a team with colleagues and in collaboration with the school or partner firm and use project management tools.
- › Produce results in a rigorous and professional manner.

## 3-General content

- › Group work – Learning by technical case study – A project is completed successfully by a group of 3-4 students, supervised by a permanent teacher. Five main topics on food could be proposed: Analytic – Method – Raw Materials or Ingredients – Microbiology or Sensory
- › The overall work period for a project is approximately 150 hours linked with 12 full project days during the semester. As a general rule, every Tuesday for 8 weeks, plus one full week reserved especially for projects.
- › After a session for presenting the projects and training in project management, the work is completed autonomously (conception of experiments) with technical supervision (pilot food plant or laboratory).
- › Bibliographical study/latest developments on the project; proposition of an action plan and a methodology for addressing the issue; Experiment design; Critical analysis of results, summary report of work done
- › Examples of project: Limit of the Brix Method for the determination of dry material – Dosage of sugar by HPLC – Enzymes and fruit juice – Reserve osmosis – Feasibility study of putting into kegs – Candying – Egg whites/ Meringue – Tomato sauce: effects of texturizers – Study of the Maillard reaction – Study on biofilms – Setting up a new sensory analysis test.

## 4- Evaluation

Presentation and report or other deliverable for the partner firm.