

# RESEARCH AND INNOVATION IN FOOD FOR HEALTH

PLUS D'INFORMATIONS :



 Beauvais

 English

## AIM OF THE PROGRAMME / CONTENT AND GOALS

- Students will gain knowledge by discovering the challenges of research and innovation in food for health. This program is designed for the students to gain in expertise over the course of the three teaching semesters:
- The 4<sup>th</sup> year, fall semester programme covers all the scientific knowledge from nutrition to physiology and epidemiology. Students will be able to understand and anticipate the relationships between nutrients in the food and development of non-communicable chronic diseases.
- The 4<sup>th</sup> year, spring semester programme covers the methodological approach to research in general and health investigation in particular. During their semester, students will be able to know how to design, carry out and analyze studies aimed at evaluating the impact on our health of the various components of a food matrix.
- The 5<sup>th</sup> year - fall semester programme covers the strategic approach to develop a successful innovation program combining food industry together with academic partners. Students will imagine the construction of a research program, the search for funding or the different channels of valorization of the results obtained.



## KEY SKILLS DEVELOPED

- Systemic view of food and health relationships
- Critical thinking through analysis of scientific articles
- Scientific evaluation, including design and implementation of experimental studies
- Good laboratory and research practices
- Scientific communication using various supports (written, oral, poster)
- Understanding of framework for structural innovation (networking, funding...)
- Management of intellectual property and risk assessment

Each semester includes an application project to put into action the knowledge and skill developed in the different courses.

## DATE OF THE PROGRAMME

1<sup>st</sup> semester: End of August-End of January

2<sup>nd</sup> semester: End of January- Beginning of June

This programme is taught in English both during the Fall & Spring semester

3<sup>rd</sup> semester: Mid September - End of January

## PROGRAMME OVERVIEW\*

### FALL SEMESTER (4<sup>TH</sup> YEAR PROGRAMME – MASTER LEVEL)

MAJOR: INNOVATION AND RESEARCH IN FOOD FOR HEALTH	ECTS
UE 1 - Project	5
UE 2 - Common Core courses (including: Innovation, life cycle analysis and digital culture, Economic intelligence and project management, Management, risk prevention and professional integration)	5
UE 3 - Scientific procedures in Food and Health (including: Applied pharmacology / Applied toxicology / Global evaluation of skills / Introduction to epidemiology / Scientific approach in health and prevention models)	7
UE 4 - Specific needs in Food for Health (including: Early origins of chronic non-communicable diseases / Global evaluation of skills / Health impact of nutrients: mechanistic approach / Neurophysiology of food behavior / Specific dietary needs and nutritional adaptations)	7
UE Minor - What about scientific approach	3
UE Minor - The microbiota at the heart of our health	3
UE 8 - Elementary or Intermediate French	4

## PROGRAMME OVERVIEW\*

### SPRING SEMESTER (4<sup>TH</sup> YEAR PROGRAMME – MASTER LEVEL)

MAJOR: SCIENTIFIC EVALUATION IN FOOD FOR HEALTH	ECTS
UE 1 - Application Project – Experimental approach	4
UE 2 - Common Core courses (including: Management, risk prevention and professional integration / Projects coordination and creativity / Transition, Political Science and Digital)	4
UE 3 - Innovation and clinical research (including: Skill assessment / From nutrigenomic approach to personalized nutrition / Health impact from mechanistic to clinical approach / Therapeutic evaluation and drug life cycle / Innovative and next generation tools for research)	5
UE 4 - Organizational Tools (including: Data Management and Data Analysis / Skill assessment / Good laboratory practices / Project management for innovation and research in food and health)	5
UE Minor - Popularize Science	3
UE Minor - Mastering fermentation: Bioprocesses & Benefits	3
UE 8 - Elementary or Intermediate French	6

**PROGRAMME OVERVIEW\***  
**FALL SEMESTER (5<sup>TH</sup> YEAR PROGRAM – MASTER LEVEL)**

<b>MAJOR: BRIDGING THE GAP BETWEEN AGRORESOURCES AND HEALTH THROUGH INNOVATION</b>	<b>ECTS</b>
<b>UE 1 - Application Project - Innovation Program</b>	<b>6</b>
<b>UE 2 - Common Core courses</b> (Including : Skills assessment / Innovation, digital and CSR / management, prevention and insertion)	<b>4</b>
<b>UE 3 - Translational Innovation</b> (Including : Create and manage a partnership consortium / Global evaluation of skills / Funding a research program / Putting together a research program)	<b>4</b>
<b>UE 4 - Valorisation of Innovation</b> (Including: Global evaluation of skills / Management applied to innovation / Scientific dissemination and industrial property / Technological and scientific maturation)	<b>4</b>
<b>UE Minor - Ethics and research</b>	<b>3</b>
<b>UE Minor - Scientific writing : systematic review</b>	<b>3</b>
<b>UE 7 - Working and communicating in a French-speaking environment</b>	<b>6</b>