

Partager



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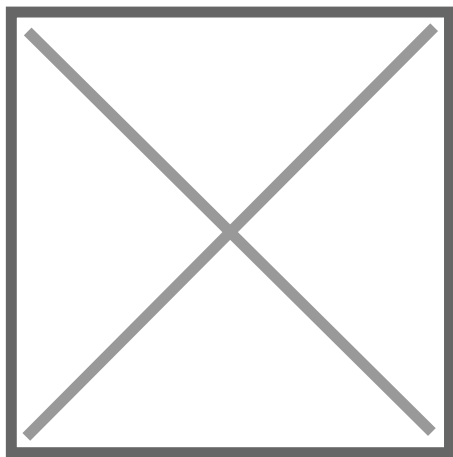
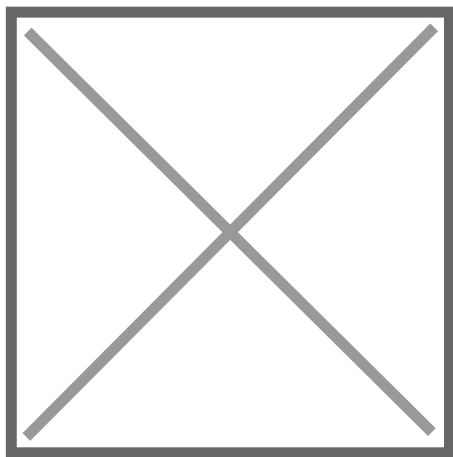
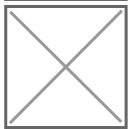
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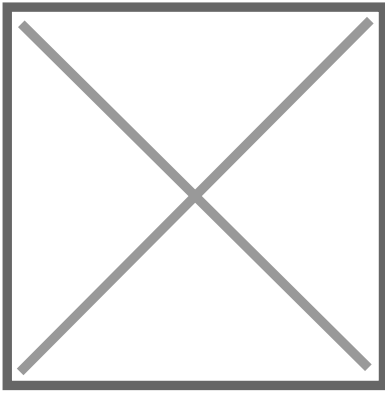
Une erreur est survenue. Merci de réessayer ultérieurement

Le mail de partage a bien été envoyé.

Ajouter au comparateur

M1 FIPDes (Food Innovation and Product Design)





Master
Mention Nutrition et Sciences des aliments
Régime(s) d'inscription
Formation initiale
Langue(s) d'enseignement
Anglais

FIPDes est un master international Erasmus Mundus en deux ans sur l'innovation alimentaire :
www.fipdes.eu

Pour aborder le défi d'une production et consommation durables d'aliments, FIPDes adopte une approche interdisciplinaire, intégrant les sciences et technologies alimentaires, l'ingénierie et l'entrepreneuriat. FIPDes forme des talents internationaux capables de développer des solutions alimentaires durables, saines et accessibles pour les générations futures à l'échelle locale et globale.

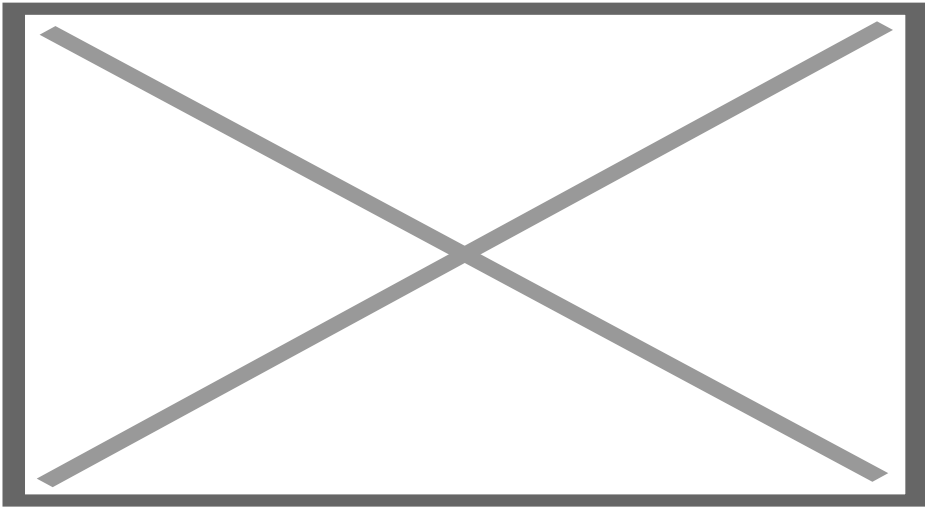
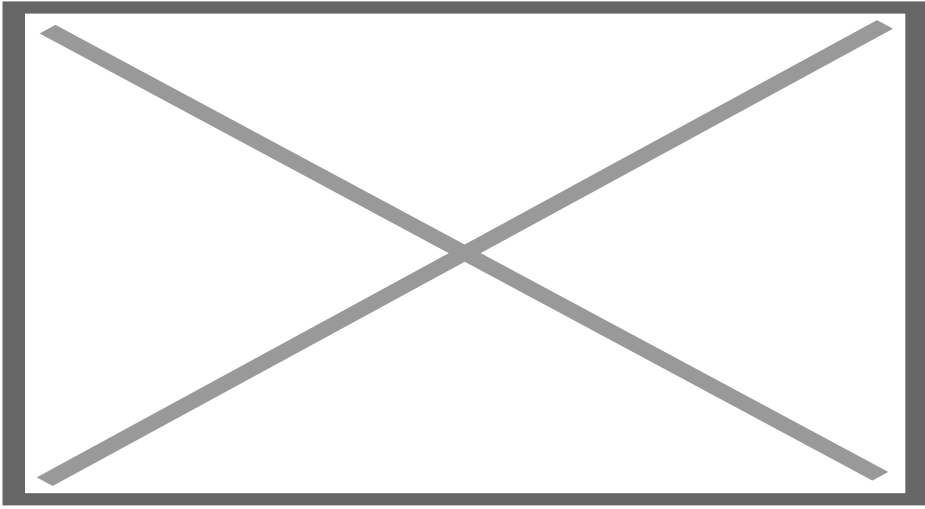
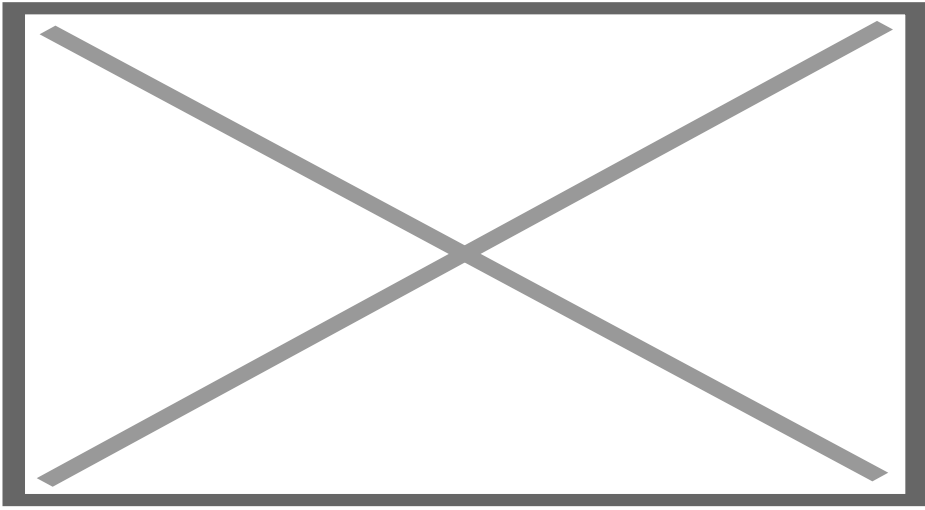
FIPDes est un master interdisciplinaire en deux ans avec mobilité internationale obligatoire.

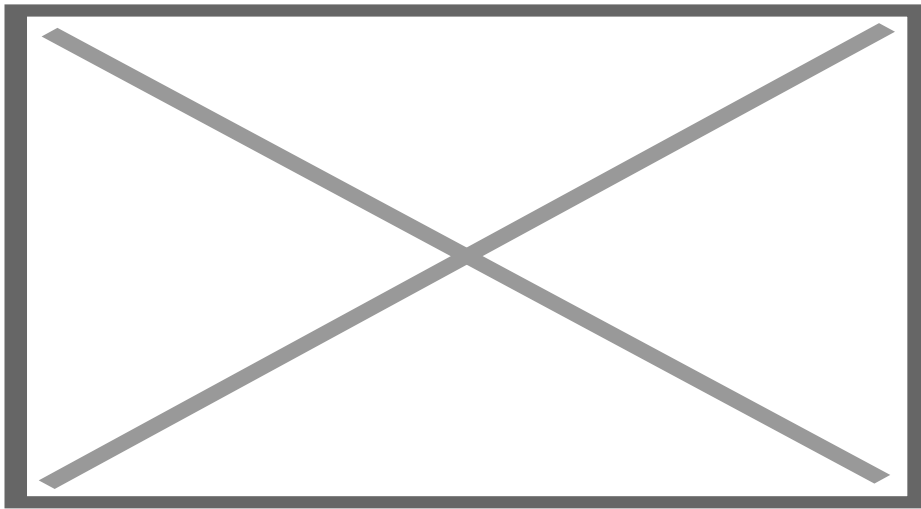
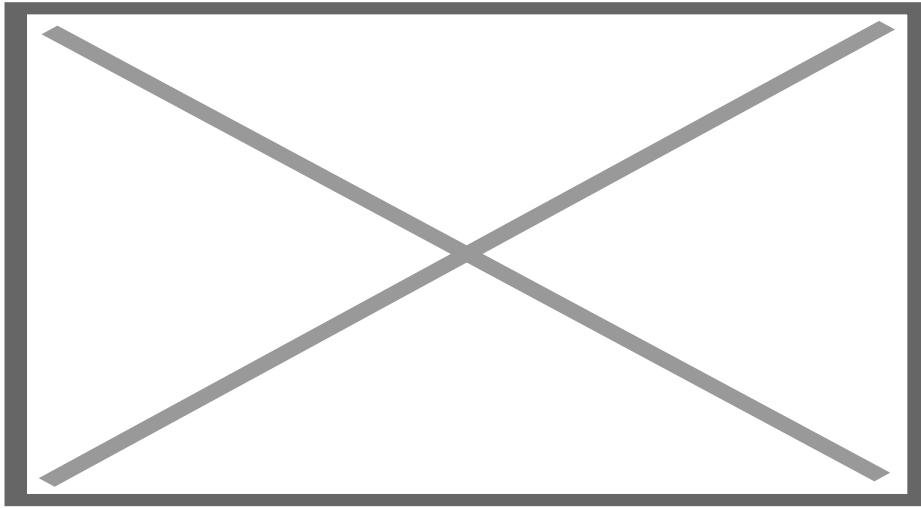
FIPDes est porté par quatre universités européennes : AgroParisTech (France), Technological University Dublin (Irlande), Université de Naples Federico II (UNINA, Italie) et Université de Lund (LU, Suède). La première année couvre des matières clés telles que les sciences et technologies alimentaires, l'alimentation durable, l'ingénierie de la formulation, le marketing et l'innovation culinaire, grâce à des cours dispensés à Paris et à Dublin. La deuxième année propose 3 parcours spécialisés dans des domaines clés de l'innovation :

- Food Design & Engineering (AgroParisTech, FR)
- Food Packaging Design & Logistics (LU, SE)
- Healthy Food Design (UNINA, IT)

FIPDes a un site web dédié (www.fipdes.eu) où trouver toute information ainsi que de témoignages sur les activités internationales et le devenir d'anciens élèves.

[Télécharger la fiche détaillée](#)
[Je candidate](#)





■ ■

Informations

- [Présentation](#)
- [Admission](#)
- [Programme](#)

Présentation

Compétences

- Intégrer et d'appliquer avec succès des connaissances issues de différentes disciplines et systèmes culturels.
- Mener des projets variés en collaboration avec divers partenaires et acteurs publics et privés (e.g. universités internationales, industriels, écosystèmes d'entrepreneuriat).
- Approfondir les compétences techniques tout en explorant les capacités créatives.
- Renforcer les capacités d'adaptation et d'entrepreneuriat.
- Développer un réseau international d'acteurs afin d'être prêt à relever de nouveaux défis professionnels à l'échelle locale et mondiale.
- Développer des compétences non techniques très recherchées telles que la gestion d'équipe, le leadership et la communication en anglais vers différents types d'auditoires.

Objectifs pédagogiques de la formation

A l'issue de la première année de FIPDes les étudiants seront capables de:

- Comprendre les enjeux scientifiques, sociétaux et techniques du développement de produits alimentaires durables dans un contexte d'innovation globale.
- Intégrer et appliquer avec succès des connaissances issues de différentes disciplines (science et technologie des aliments, science de la consommation, innovation culinaire) et de systèmes culturels différents.
- Appliquer des compétences techniques (développement de nouveaux produits) et des transversales (intelligence interculturelle, créativité, leadership, gestion de projet, communication scientifique).
- Raisonner avec un esprit critique et scientifique.

Admission

Voie d'accès

Sciences et technologies

Capacité d'accueil

Places

25

Public visé et prérequis

Le calendrier et les modalités de candidatures sont disponibles ici : <https://fipdes.eu/?FIPDes-application-Calendar-Deadlines>

La procédure de sélection est disponible ici : <https://fipdes.eu/?Selection-Procedure-52>

- Profil: étudiants avec une licence ou diplôme équivalent d'au moins 180 ECTS ou équivalent en sciences et technologies alimentaires, biotechnologie, génie des procédés, biochimie, nutrition ou domaines liés à l'alimentation, avec un certain nombre de prérequis (par exemple, chimie, biotechnologie, technologie/génie des procédés, biochimie, mathématiques, statistiques) représentant au moins trois années d'études dans un établissement d'enseignement supérieur étranger.
- Les candidats doivent être intéressés par une expérience universitaire véritablement internationale et viser une carrière internationale.
- Maîtrise de l'anglais (niveau « B2 » selon le CECR, avancé) démontrée de l'une des manières suivantes : TOEFL avec un score minimum de 575, TOEFL sur Internet avec un score minimum de 90, IELTS avec un score minimum de 6,5, Cambridge Certificate of Proficiency (FCE avec niveau B2, CAE ou CPE).
 - Ou :
 - Étudiants dont l'anglais est la langue maternelle (une copie du passeport est nécessaire pour le prouver)
 - Ou :

- Étudiants ayant obtenu (ou en passe d'obtenir) un diplôme d'enseignement supérieur avec l'anglais comme langue d'enseignement (un certificat de l'université est nécessaire pour le prouver)
- Ou :
- Séjour de plus d'un an dans un pays anglophone (un certificat de l'employeur ou autre, le cas échéant, ou une copie de la page du passeport indiquant le visa d'entrée et de sortie du pays anglophone est nécessaire pour le prouver).
- Des exemptions peuvent être accordées à titre exceptionnel aux étudiants exceptionnels ayant un niveau d'anglais inférieur.

Période(s) de candidature

Plateforme Inception

Du 25/10/2025 au 19/01/2026

Pièces justificatives

Obligatoires

Lettre de motivation.

Tous les relevés de notes des années/semestres validés depuis le BAC à la date de la candidature.

Curriculum Vitae.

Facultatives

Autres diplômes.

Dossier VAPP (obligatoire pour toutes les personnes demandant une validation des acquis pour accéder à la formation) <https://www.universite-paris-saclay.fr/formation/formation-continue/validation-des-acquis-de-lexperience>.

Document justificatif des candidats exilés ayant un statut de réfugié, protection subsidiaire ou protection temporaire en France ou à l'étranger (facultatif mais recommandé, un seul document à fournir) :

- Carte de séjour mention réfugié du pays du premier asile
- OU récépissé mention réfugié du pays du premier asile
- OU document du Haut Commissariat des Nations unies pour les réfugiés reconnaissant le statut de réfugié
- OU récépissé mention réfugié délivré en France
- OU carte de séjour avec mention réfugié délivré en France
- OU document faisant état du statut de bénéficiaire de la protection subsidiaire en France ou à l'étranger.

Programme

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
Summer programme	3	Semestre 2									
■											

Summer programme

ECTS : 3

Semestre calendaire : Semestre 2

Détail du volume horaire

Projet tutoré 30

Langue d'enseignement

Anglais

Enseignement à distance

non

Programme / plan / contenus

To be established by each student and validated by the course manager.

Objectifs d'apprentissage

The summer programme aims at giving a perspective on different food topics that will complement and strengthen knowledge, understanding, skills and abilities from other courses. A further aim is the improvement of students' soft skills.

Organisation générale et modalités pédagogiques

Tutored project

Compétences

- Communicate effectively in the professional environment
- Assess ethical implications in the food field
- Consider safety requirements
- Collaborate and contribute effectively in team work

Nature de l'évaluation

Evaluation Continue non Intégrale

[Non compulsory Summer Internship](#)

5

Semestre 2

Non compulsory Summer Internship

ECTS : 5

Semestre calendaire : Semestre 2

Langue d'enseignement

Anglais

Enseignement à distance

non

Programme / plan / contenus

The summer internship is an optional module that terminates the first year of the FIPDes Erasmus Mundus Master. programme. Possible topics of the summer internship are not restrictive. The content should be in the framework of food innovation and product design topics. It is preferred if the internship offers a practical work in labs, companies, organisations, offices. However, a bibliographic work, a survey, etc directed by a scientific supervisor is accepted.

Objectifs d'apprentissage

The aim of the summer internship is for the student to initiate/develop/reinforce professional skills and abilities such as:

- the ability to identify, formulate and manage complex issues;
- the ability to participate in research or development work and in so doing, contribute to the development of knowledge;
- the ability to plan and with scientific and engineering methods, carry out qualified assignments within specified limits;
- the ability to critically and systematically integrate the knowledge acquired in key and qualifying courses in the Programme;
- the ability to, on both national and international levels, clearly report and discuss his or her conclusions and the knowledge and arguments on which they are based;
- independently identify relevant sources of information, perform information searches, evaluate the relevance of the information and use proper referencing techniques.

Compétences

- ability to identify, formulate and manage complex issues;
- ability to participate in research or development work and in so doing, contribute to the development of knowledge;
- ability to plan and with scientific and engineering

S1 AgroParisTech - Tronc commun

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
Transversal Innovation Project (I): Ideation and co-creation	1.5	Semestre 1	0	18							

Transversal Innovation Project (I): Ideation and co-creation

ECTS : 1.5

Semestre calendaire : Semestre 1

Détail du volume horaire

Cours magistraux : 0

Travaux dirigés : 18

Projet tutoré 9

Apprentissage autonome : 10

Langue d'enseignement

Anglais

Enseignement à distance

non

Programme / plan / contenus

During creativity workshops, students will use different creativity approaches and tools to develop for cocept ideation linked to their prototype.

Several interactive and experiential intercultural sessions are organized throughout the semester, in order to: discuss culture and identity; cover different aspects of French culture, including how to adapt to a French academic environment; develop intercultural communication skills; discover how to make the most of this unique FIPDes experience both at the personal and professional levels.

Objectifs d'apprentissage

This module consists of 2 transversal topics: intercultural intelligence, and creativity.

Objectives:

With this triple module, students will learn how to:

- implement creativity-fostering practices and tools.
- develop reflexivity and cultural sensitivity; explore some cultural differences; discover some intercultural tools and strategies to try and make the most of working across cultures.
- apply these tools and strategies while working on concrete cases: the Innovation project in Dublin (S2).

Organisation générale et modalités pédagogiques

tutorials

workshops

teamwork

challenges

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
<u>Comprehensive Food Science and Analysis</u>	5	Semestre 1	21	27	3						

Comprehensive Food Science and Analysis

ECTS : 5

Semestre calendaire : Semestre 1

Détail du volume horaire

Cours magistraux : 21

Travaux pratiques : 3

Travaux dirigés : 27

Apprentissage autonome : 9

Langue d'enseignement

Anglais

Enseignement à distance

non

Prérequis

Food biotechnology or food science

Programme / plan / contenus

The courses present

i) the main mechanisms for structuring food products (gelation, thickening, crystallization, foaming, emulsification, etc.) considering the different macronutrients (protein, polysaccharides, lipids). It considered also the method to characterize the properties

ii) the mechanism for controlling organoleptic properties such as colour and flavour through formulation and chemical reactivity

iii) the strategies to analyse food product composition and structural properties and sensorial perception

iv) the bioprocess such as fermentation considering the kinetics of growth and metabolism of microorganism to develop properties such as structure or aroma.

v) The main risk (microbiology and chemical) that should be assessed and the legislation.

Objectifs d'apprentissage

- **Explain the reactivity and functionality of food components** (protein, carbohydrate, lipids), in relation with their structure
- Explain the microbial processes related to **fermentation and** Quantify the kinetics of microbial growth and production of fermented food and bioproducts by microorganisms
- Be able to explain the overall principle of the **main food characterization** methods (rheology, spectral

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
Experimental approaches to valorize emerging ingredients	2	Semestre 1	6		21						
■											

Experimental approaches to valorize emerging ingredients

ECTS : 2

Semestre calendaire : Semestre 1

Détail du volume horaire

Cours magistraux : 6

Travaux pratiques : 21

Apprentissage autonome : 9

Langue d'enseignement

Anglais

Enseignement à distance

non

Objectifs d'apprentissage

-Explore the diversity and the potential of emerging food ingredients

- evaluate and improve their properties in different food applications.

Be able to measure relevant textural, functional, sensorial and chemical key properties.

Organisation générale et modalités pédagogiques

Courses

Tutorials

Experimental project

Modalités pédagogiques particulières

Team project

Nature de l'évaluation

Evaluation Continue non Intégrale

[Introduction to](#)

[Formulation](#)

[Engineering](#)

[Applied to Food](#)

[Products](#)

1.5	Semestre 1	9	3	3
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Introduction to Formulation Engineering Applied to Food Products

ECTS : 1.5

Semestre calendaire : Semestre 1

Détail du volume horaire

Cours magistraux : 9

Travaux pratiques : 3

Travaux dirigés : 3

Projet tutoré 6

Langue d'enseignement

Anglais

Enseignement à distance

non

Programme / plan / contenus

Principles of formulation engineering, from the methodology to the definition of the statement of work/specifications (cahier des charges). Towards the industrialization goals: from recipe to pilot scale: which challenges, which tricks?

Formulation of food flavourings, technological frame and practical work: which solution for which problem?

Approaches and examples of nutritional food formulation.

Application examples of statistical tools for formulation.

The module is based on a balanced distribution of lectures, practicals and teamwork. The lectures will be given by experts on their topics from the research or the industrial field. Part of the course is based on project work, where the students should analyse a case study and propose solutions concerning a formulation issue. The output of the project will be assessed at the end of the module as the main evaluation deliverable together with the active involvement of each student.

Objectifs d'apprentissage

Provide the students with the basic knowledge, methodologies and the most recent tools for approaching a food formulation problem at research or industrial scale.

Organisation générale et modalités pédagogiques

Lectures-Courses

Tutorials

Visit

Practical workshops

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
<u>Food Process Engineering</u>	4	Semestre 1	10	29	12						

Food Process Engineering

ECTS : 4

Semestre calendaire : Semestre 1

Détail du volume horaire

Cours magistraux : 10

Travaux pratiques : 12

Travaux dirigés : 29

Langue d'enseignement

Anglais

Enseignement à distance

non

Programme / plan / contenus

The course is based on 13 sessions, each session including a short lecture on theoretical aspects coupled to tutorials on practical problems. The final exam consists of classical problems encountered in food engineering, to resolve in a limited time.

Objectifs d'apprentissage

The purpose of this course is to give students an introduction to basic food process engineering principles.

Compétences

Knowledge and understanding

The student must have understood the interest of using basic process engineering principles in order to dimension rationally the unit operations of a fabrication line in the field of food and bio-products. Three unifying concepts will be specifically presented and illustrated: unit operations, mass and energy balances and dimensionless numbers. Thermal unit operations (sterilization, cooling...) and/ or operations involving mass transfer (drying, evaporation) will be used as example and practice problems. For each practice problem, the simplifying assumptions which have to be made in order to simplify the mathematical formulation of phenomena of concern will be precisely discussed. A stress will also be put on fundamental physic principles underlying the methods presented in the course.

Skills and abilities

For passing grade the student must:

- be fluent with common engineering units and be able to check the dimensional consistency for a given equation
- be able to adopt a systemic approach when dealing with a practical situation
- be able to write a macroscopic mass and enthalpy balances on a closed or open system
- be able to understand the basics of physical principles underlying thermal conduction, mass diffusion, thermal

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
Introduction Module: FIPDes Week	1.5	Semestre 1									
■											

Introduction Module: FIPDes Week

ECTS : 1.5

Semestre calendaire : Semestre 1

Langue d'enseignement

Anglais

Enseignement à distance

non

Programme / plan / contenus

The philosophy behind the EMJM-FIPDes will be presented. Introductory lectures on the main challenges of the food innovation will be given by the teaching staff of Consortium institutions and by guest lecturers from the professional sector and foreign universities. Round tables about interculturality and food culture will be also organised in order to introduce students with European food culture, society and R&D issues. A scientific international workshop and the diploma ceremony are also organised during this week. A visit of a food factory (or of a Food Group R&I centre) will close the week.

Objectifs d'apprentissage

The introduction module is designed to welcome EM students, to present the teaching staff from the whole FIPDes Consortium institutions. This module will give all practical tips for stay and to catalyse team building.

Compétences

Develop personal, interpersonal and professional communication skills.

Understand the cutting-edge trends of the food innovation and product design at a global scale.

Develop personal, interpersonal and professional communication skills.

Understand the cutting-edge trends of the food innovation and product design at a global scale.

Evaluate and analyse the key missions and organisation of a multinational food firm factory.

Nature de l'évaluation

Evaluation Continue non Intégrale

[illegible]

Research and Development Project

ECTS : 9

Semestre calendaire : Semestre 1

Langue d'enseignement

Anglais

Enseignement à distance

non

Programme / plan / contenus

This module concerns the different steps and issues of R&D projects.

Groups of 5 students will be in charge of a precise mission in order to answer to a specific industrial question on product/process issues (e.g. reformulation issues, eco-conception of product or processes, etc.). Students' work will be divided among literature review, propose a roadmap, define the missions, planning and conduct the experimental part (if applicable), technical and scientific reporting (oral and written).

Objectifs d'apprentissage

The purpose of the course is to put the students into a project management situation working on a practical case issued from an industrial/R&D food design topic.

Students gathered in teams will be in charge of analysing, find a strategy, and solve a practical case.

Organisation générale et modalités pédagogiques

Students will follow classes in project management and interculturality in order to better complete this module.

The team will hold follow-up meetings with the industrial partner and academic tutors.

Compétences

Knowledge and understanding For a passing grade the student must:

- evaluate and describe the global issues of Research and Development

Skills and abilities For a passing grade the student must:

- identify and reformulate the requirements of the industrial commitment into a technical specification
- Identify and prioritise actions for the good realization of the project in a given timeframe and in function of the available resources (machines, project members, experts, materials...).

- acquire the methodology of teamwork

- Mobilise previous and on-going knowledge and be able to share it within the team.

- search, analyse and summarise scientific and technical

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
<u>French Language or Foreign Language for French Speaking Students</u>	2	Semestre 1		36							

French Language or Foreign Language for French Speaking Students

ECTS : 2

Semestre calendaire : Semestre 1

Détail du volume horaire

Travaux dirigés : 36

Langue d'enseignement

Français

Enseignement à distance

non

Programme / plan / contenus

Levels groups will be formed at the first week, to suit better for the student.

Cultures, civilization and news offer extensive range of options to make alive and interactive courses.

- History of French life and culture
- How to integrate French culture
- Local mentality
- first aid kit
- company culture
- How to make CVs
- How to make a cover letter
- How to manage a job interview

Objectifs d'apprentissage

Activate, consolidate and expand their knowledge, develop autonomy and fluency in the language, a level of autonomy (B1 / B1 + CEFR / European Framework) or operability (B2 / B2 +) to make courses or studies in French speaking countries if the student wishes.

For students who are French speaker, they will have the same courses with same aims and purpose, and materials but for a foreign language.

Compétences

- Write a correct CV and cover letter
- Understanding French life, culture and some keypoint of history
- Understanding French company culture
- Interculturality
- Communication
- Share with another culture
- Open-minded

Nature de l'évaluation

Evaluation Continue non Intégrale

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
<u>Introduction to Sustainable Development of Food Systems</u>	1.5	Semestre 1	8	6							

Introduction to Sustainable Development of Food Systems

ECTS : 1.5

Semestre calendaire : Semestre 1

Détail du volume horaire

Cours magistraux : 8

Travaux dirigés : 6

Projet tutoré 6

Apprentissage autonome : 7

Langue d'enseignement

Anglais

Enseignement à distance

non

Programme / plan / contenus

Theoretical lessons on sustainable issues in European food sector. Initiation on the Life Cycle Assessment method and its use for the eco-design. PhD presentations of their research subjects and of their results in connection with some of the different sustainable issues. Industrials and associations illustrations given by some members of these organizations.

Objectifs d'apprentissage

Identify sustainable issues of food production, distribution and consumption. Discovery of major tools, methods and concepts associated with the topic.

Compétences

- Knowledge and understanding :
Identify strategic sustainability issues for food companies. Having knowledge to mobilize models solutions / improvements to products and organizations.
- Skills and abilities
Understanding of LCA functioning and aims. Being able to enter in progress initiatives companies (operational product / site or strategy) companies.
New approach of the complex systems and of their modeling.

Nature de l'évaluation

Evaluation Continue non Intégrale

[Statistics Applied to Food Science and Technology](#)

2

Semestre 1

Statistics Applied to Food Science and Technology

ECTS : 2

Semestre calendaire : Semestre 1

Langue d'enseignement

Anglais

Enseignement à distance

non

Programme / plan / contenus

Chi-square test, Z test, Student's t test, simple linear and multiple regressions, variance analysis and descriptive statistics.

Objectifs d'apprentissage

The programme is designed to give participants an understanding of the concepts and techniques needed for the statistical analysis of experimental data, and why these methods are necessary in experimental sciences.

Compétences

Knowledge and understanding: For a passing grade the student must:

Understand the skills necessary for statistical tests and multivariate analysis.

Skills and abilities: For a passing grade the student must:

Demonstrate a clear understanding of the theory and practice of data analysis.

Demonstrate a clear understanding of the theory and practice of data analysis.

Bibliographie

R. Gordon, M. Pickering, D. Bisson

"Uncertainty Analysis - the 'Worst Case' Method"

J. Chem. Educ. 1984, 61, 780-781

J. C. Miller, J. N. Miller

Statistics for Analytical Chemistry

New York : Ellis Horwood PTR Prentice Hall, 1993. ISBN

0-13-030990-7

Nature de l'évaluation

Evaluation Continue non Intégrale

S2 TU Dublin - Tronc commun

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
<u>Marketing Communication and Consumer Behaviour</u>	5	Semestre 2	24								

Marketing Communication and Consumer Behaviour

ECTS : 5

Semestre calendaire : Semestre 2

Détail du volume horaire

Cours magistraux : 24

Langue d'enseignement

Anglais

Enseignement à distance

non

Programme / plan / contenus

The module will provide the theoretical underpinning and practical application of Marketing communications and consumer behaviour which is central to the successful operation of any enterprise in the food and culinary arts related industries. The Marketing Communications component of the module addresses a number of current perspectives and schools of thought in the marketing communications arena pertaining to integrated marketing communications, branding, on-line communications and ethical considerations. The Consumer Behaviour component addresses the nature of consumers in terms of behaviour, attitudes, consumption and culture. The module also assesses the relevance and application of these perspectives in the marketplace. This module will be delivered by way of lectures and presentations followed by class discussion. Other learning resources may include nominated websites. Guest lecturers may also contribute where applicable. Throughout the module the students are encouraged to undertake independent reading to supplement and consolidate what is being learnt in lectures and to broaden their individual knowledge and understanding of the subject.

Objectifs d'apprentissage

The aim of this module is to introduce graduate students to the principal concepts and applications of marketing communications and consumer behaviour. Students will be encouraged to engage with the theory in a critical manner and to develop appropriate analytical skills which may be applied to various business and consumer situations.

Compétences

Knowledge and understanding In order to pass the student must:

- Demonstrate a systematic understanding of the theoretical and practical aspects of marketing communications.
- Critically evaluate the role of

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
<u>New Food Business Creation</u>	5	Semestre 2	24								

New Food Business Creation

ECTS : 5

Semestre calendaire : Semestre 2

Détail du volume horaire

Cours magistraux : 24

Langue d'enseignement

Anglais

Enseignement à distance

non

Programme / plan / contenus

This module focuses on providing the knowledge and the interrelated skills required to commercially develop a new food/beverage business product and idea from concept to fruition. The teaching strategies will be learner centred and include a variety of approaches including: debates Lectures; Case Studies; Guest Lecturers, site visits and seminars.

Objectifs d'apprentissage

To develop a systematic understanding and awareness of the issues, tools and techniques involved in developing a new Food/ beverage product.

Compétences

Knowledge and understanding In order to pass the student must: • Display a systematic knowledge and understanding of the key ingredients of creating a new business venture in both small medium and large enterprises • Demonstrate a critical awareness of the risks and rewards associated with food product development business ventures Skills and abilities In order to pass the student must: • Evaluate the key drivers of change within an organization • Construct a business product plan for a 3-5 year time frame • Develop further their intellectual and personal qualities • Facilitate and advance their own learning • Display a systematic knowledge and understanding of the key ingredients of creating a new business venture in both small medium and large enterprises • Demonstrate a critical awareness of the risks and rewards associated with food product development business ventures • Evaluate the key drivers of change within an organization • Construct a business product plan for a 3-5 year time frame • Develop further their intellectual and personal qualities • Facilitate and advance their own learning

Nature de l'évaluation

Evaluation Continue non Intégrale

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
Food Law and the Regulatory Environment	5	Semestre 2	24								
■											

Food Law and the Regulatory Environment

ECTS : 5

Semestre calendaire : Semestre 2

Détail du volume horaire

Cours magistraux : 24

Langue d'enseignement

Anglais

Enseignement à distance

non

Nature de l'évaluation

Evaluation Continue non Intégrale

[Advanced](#)

[Molecular](#)

[Gastronomy](#)

5	Semestre 2	12	24	64
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Advanced Molecular Gastronomy

ECTS : 5

Semestre calendaire : Semestre 2

Détail du volume horaire

Cours magistraux : 12

Travaux pratiques : 24

Projet : 64

Langue d'enseignement

Anglais

Enseignement à distance

non

Programme / plan / contenus

Indicative syllabus covered in the module and / or in its discrete elements • Introduction to MG module • Lecture: Overview of Molecular Gastronomy • Lecture: Introduction to Hydrocolloids • Kitchen: Practical application of Agar and Alginate • Lecture: Maltodextrin, Xanthan and Hemicellulose • Kitchen: Practical application of Maltodextrin, Xanthan • Lecture: Liquid Nitrogen and Dry Ice • Practical: Practical application of Liquid Nitrogen • Lecture: Formalisms and Precisions • Kitchen: Precisions • Kitchen: Sous-vide • Lecture: Note-by-Note • Kitchen: Note-by-Note Demo • Students to work on Assignment

Objectifs d'apprentissage

- Critically evaluate the fundamental scientific and gastronomic theories of Molecular Gastronomy.
- Produce a novel and innovative dish/cocktail using ingredients and techniques associated with Molecular Gastronomy.
- Develop new skills to a high level including novel techniques

Organisation générale et modalités pédagogiques

1 hour lecture followed by 2 hour kitchen class (in most weeks). Lectures delivered by Culinary Scientist (Róisín Burke) and Kitchen practicals by Culinary Arts lecturer (Pauline Danaher) and Culinary Scientist (Róisín Burke). The module runs over 12 weeks in Semester 2 in TU Dublin.

Bibliographie

This, H. (2014). Note-by-Note Cooking: The Future of Food. Colombia Press

This, H. (2013) Molecular Gastronomy: Exploring the Science of Flavor. Colombia Press

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
<u>Transversal innovation project (II): Food prototype development and evaluation</u>	10	Semestre 2	4		44					52	

Matières	ECTS	Semestre	Cours	TD	TP	Cours- TD	Cours- TP	TD- TP	A distance	Projet	Tutorat
■											

Transversal innovation project (II): Food prototype development and evaluation

ECTS : 10

Semestre calendaire : Semestre 2

Détail du volume horaire

Cours magistraux : 4

Travaux pratiques : 44

Projet : 52

Langue d'enseignement

Français

Enseignement à distance

non

Programme / plan / contenus

This module focuses on the development of a new food product and is a synthesis of the theoretical and applied knowledge in developing a new food product. Prototype development, formulation and use of production equipment. Shelf life and Consumer sensory testing.

Objectifs d'apprentissage

The aim of this module is to deepen the skill and knowledge base required to produce a successful new food product.

Compétences

Knowledge and understanding In order to pass the student must: • Integrate the theoretical and practical skills of product development • Develop and deepen their critical analysis in the evaluation of scientific and technical data • Facilitate and advance their own learning

Skills and abilities In order to pass the student must: • Take significant responsibility for the development of a new food product • Manipulate food ingredients and additives to ensure effective development of a food product • Communicate results of a new product development • Take significant responsibility for the development of a new food product • Manipulate food ingredients and additives to ensure effective development of a food product • Communicate results of a new product development

Nature de l'évaluation

Evaluation Continue non Intégrale

Lieu(x) d'enseignement

PALAISEAU

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Secrétariat

Liens

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<http://www.universite-paris-saclay.fr/formation/master/nutrition-et-sciences-des-aliments/m1-fipdes-food-innovation-and-product-design>