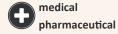
## For Juhom?

The MAN-IMAL training programme is intended for:









The pluridisciplinary balance of the group is assured by the selective student screening during the application process.

## ... By whom?

This innovative programme has been developed in partnership by:

Oniris, the Nantes-Atlantic National College of Veterinary Medicine, Food Science and Engineering: animal health, biological and chemical food safety, veterinary public health and food-processing engineering.

The Faculties of Medicine in Nantes and Angers:

human health, nutrition and public health.

The ESA Group (The Angers Higher Education Institute of Agriculture): agricultural and food engineering, and the development of sustainable agricultural and food systems.

## professional opportunities

#### **Public sector**

- Consultants and experts for local governments, decentralised services of the Ministry of Health and in Agriculture, agencies dedicated to the assessment of health risks in France and in Europe.
- Senior Scientists in public and parapublic health organisations or for public health sanitary risk assessment, both nationally and internationally (EFSA, Anses, InVS, OIE, FAO...).
- Health and Nutritional Risk Managers in the national civil service and local governments.
- Researchers in the fields of zoonosis, human nutrition, animal and human health.



## How to apply?

#### **ADMISSION CRITERIA**

In order to be eligible for the MAN-IMAL 2nd-year Master's, candidates must have completed at least one year of post-graduate studies (60 ECTS credits) in pharmaceutical or biological sciences, medical and veterinary studies, in food-processing engineering or agriculture.

#### APPLICATION PROCEDURE

The application form can be found on the MAN-IMAL website: www.man-imal.fr and must be completed online ("Apply now").

- 1st session: the complete application file must be sent by 21st of March. 2014.
- 2<sup>nd</sup> session: the complete application file must be sent by 6th of June. 2014.

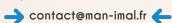
The MAN-IMAL 2nd-year Master's tuition fee is 270 euros\*.

All students wishing to apply to another programme, in parallel with the MAN-IMAL 2nd-year Master's, must contact their institution of origin regarding the tuition costs and requirements for the award of a joint degree.

#### STUDENT FINANCIAL AID

Grants are available to students with outstanding academic achievements and who are in need of financial aid. Requests for aid must be completed via the online application form.

You can send your questions about the MAN-IMAL programme to:



# www.man-imal.fr/en



ww.facebook.com/MANIMALprogram



The programme is supported by the French government via the National Research Agency, under convention ANR-11-IDFI-0003



Pioneering training programme based on the "One World, One Health" concept promoted by the WHO, FAO and OIE

# 2<sup>nd</sup>-year Master's

Animal - Man - Food:

Transdisciplinary Management of Global Health and Nutritional Safety



#### In partnership with









An IDEFI Lauréat programme (Initiatives for Excellence in Innovative Training)

## 2nd-year Master's... Why?

#### **Background and Objectives**

The MAN-IMAL programme was created in response to a major change in society. Today, productions chains are becoming more and more complex due to globalisation, industrialisation and the increase in stakeholders and regulations. Our modes of consumption directly influence the totality of production systems, from animal nutrition to food preservation and composition.

It is thus necessary to adopt a comprehensive and cross-sector approach, integrating human health, animal health and food production at a global level

With this in mind, new professional profiles are needed: agents who are capable of working in transdisciplinary teams in order to tackle these new public health and food safety stakes which have economic, environmental and social consequences.



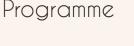
The overall objective of the MAN-IMAL Master's programme is to offer veterinary, medical, pharmaceutical, food engineering and biology students **senior executive training**. Over the course of one year, students work together in order to acquire the same shared culture as well as to share their specific knowledge, in order to respond effectively to the growing needs and challenges of the health and agri-food sectors.

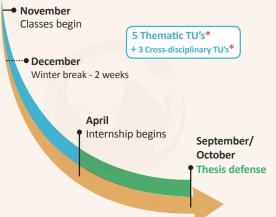
## Examples of possible

#### Private sector

- Senior Scientists of Evaluation and Health/Nutritional Risk Assessment, for agricultural or health organisations, animal husbandry health and quality organisations, producer groups, the Chamber of Agriculture.
- Consultants et experts in food processing and pharmaceutical sectors, research and development offices.
- Senior level executives and Risk Managers in food processing, pharmaceutical and insurance companies.
- Researchers and Executives in the field of R&D.

Subject to change according to the annual index.





The first semester (30 ECTS), from November to March, is dedicated to acquiring theoretical knowledge, tools and methods via five thematic teaching units (TU). It is completed via three cross-disciplinary teaching units allowing for students to develop team work and the skills to identify the complementary partners required for case solving.

management systems, hazard analysis, evaluation and prevention of health and nutritional risks, health crisis resolution.

The second semester, from April to August is dedicated to the completion of an internship in a professional environment, followed by the completion and defense of a Master's thesis whose subject is directly related to a MAN-IMAL theme.

Choosing the internship is based upon the professional motivation of each student. Some options include: private businesses, organisations dedicated to risk assessment and management, or complementary training with a recognized research team. The internship may be completed in France or

# Organisation of the Programme



**Examples of expertise and skills:** production and risk

abroad.

### Life scientists

Acquire

transdisciplinary

expertise

- Agriculture and **Food-Processing Engineers**
- Medical Doctors
- Veterinarians
- Pharmacists

**Optimise** food and health

security

**Analyse** and

diagnose

Manage health crises

2<sup>nd</sup>-year Master

- with a team

## ... How?

Over 80 people form part of the MAN-IMAL pedagogical team. Comprised of teacher-researchers from various disciplines (agronomy, medicine, veterinary studies, life sciences, pharmacy, law, economy...), the pedagogical team brings together numerous industry professionals (over 40% of the programme).

The MAN-IMAL course strongly emphasizes the pedagogical use of ICTE\* allowing for maximum, individual progression within the programme and the learning processes.

Due to the international focus of the programme, all courses are taught in English and students, as well as professors, from all over the world are welcome. As such, the programme offers a rich exchange amongst different cultures and an international perspective on public health topics.



Monitor

and prevent

**Propose** and

implement

solutions

Risk Management agencies and consulting

Human health and veterinary enterprises

Public, parapublic, national and international

Testing and analysis certifying and accrediting

Research and scientific development

Food-processing industry

Pharmaceutical industry

Urban and regional authorities

administrations

Insurance

Actuary

bodies

Social health

### (4 ECTS) (4 ECTS)

Production

chains

(2 ECTS)

Case scenario (4 ECTS)

**Biological** and

chemical risks

(4 ECTS)

Risks and

nutritional

transfers

(2 ECTS)

thematic TU's

cross-disciplinary TU's

#### Theme days/Seminars (2 ECTS)

Knowledge, concepts, tools and methods

Structure.

organisation

and sanitary

policies (2 ECTS)

Tutored project (4 ECTS)

Case scenario

#2

Food-borne

### 2<sup>nd</sup> Semester

1<sup>st</sup> Semester

**Epidemiology** 

(2 ECTS)

Case scenario

**Internship 5-6 months - Thesis** and its defense (30 ECTS)

## Evaluation methods



- Ongoing evaluations:
  - > Individual: contribution and foundational knowledge
  - > Group: case scenario group work and tutored project
- Internship evaluation: completion and defense of a thesis.

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Information and communication technologies in education