

## Want to study abroad in Europe? Come to Nancy !



- ✓ An urban area of 400 000 inhabitants and 50 000 students (Université de Lorraine and 10 Engineering schools)
  - ✓ Easy access from Paris by TGV (high speed train), and close to Germany, Belgium, and Luxembourg
  - ✓ Nancy has a great architectural history (part of the UNESCO World Heritage) including the *Art Nouveau* period, and is surrounded by forests and hills ideal for recreational activities
  - ✓ Many cultural and entertainment events all year round (e.g. *NJP Jazz festival*, *le Livre sur la Place* book fair)
- More info at: [www.nancy-tourisme.fr](http://www.nancy-tourisme.fr)

## Support research departments

- ♦ **Silva**, UL-INRAE-AgroParisTech
- ♦ **Bureau d'Economie Théorique et Appliquée**, INRAE-CNRS-AgroParisTech-UL-UniStra
- ♦ **Biogéochimie des Ecosystèmes Forestiers**, INRAE
- ♦ **Laboratoire d'Inventaire Forestier**, I.G.N.

## European/International partnerships

- ✳ **Université de Lorraine, AgroParisTech and INRAE are members of the NFZ forest network** (Nancy–Freiburg–Zürich) for higher education and research ([www.nfz-forestnet.eu](http://www.nfz-forestnet.eu))
- ✳ **AgroParisTech belongs to the consortium Erasmus Mundus MSc European Forestry** and offers the major *Forests and their Environment* as the educational support for the 2<sup>nd</sup> year (<http://www.uef.fi/en/web/mdp-europeanforestry>)
- ✳ **INRAE and AgroParisTech are members of the European Forest Institute (EFI)**
- ✳ International network opportunities further arise from international research collaborations at Université de Lorraine, AgroParisTech and INRAE



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Agrosciences, Environnement, Territoires, Paysage, Forêt

## FORESTS AND THEIR ENVIRONMENT

### A 2<sup>nd</sup>-year international MSc major Nancy, FRANCE

*Decipher the functioning and dynamics of temperate forest ecosystems and develop quantitative tools for their sustainable management in a context of global environmental changes...*

Joint MSc program of  
Université de Lorraine &  
AgroParisTech





## Forests and their Environment

### Concept and objectives

This MSc major (M2) offers a broad perspective and in-depth training on the functioning and dynamics of European forests, providing a basis to address challenges arising from environmental constraints and forest management.

The objective is to prepare for 1) **professional careers in R&D or expert positions in the environmental diagnosis and management of forest ecosystems** in private/public national/international institutions, 2) **scientific careers in research institutions conducting programs in forest ecology and management**.

✓ **An introductory session** gives an overview of European forests and the major issues related to their management.

✓ The core of the major provides **fundamental and applied knowledge on the functioning and dynamics of forest ecosystems** and communities, including tree physiology, biogeochemistry and ecology.

✓ **A “tools & methods” session** provides knowledge and training on the **main quantitative tools used in ecosystem diagnosis and experiment analysis**, including GIS, statistics, and modelling.

### Institutional framework and connection to research

The MSc program provides a **research-driven approach** to the understanding and management of forest ecosystems. The teaching staff includes more than 30 professors and senior scientists from 9 research labs at Université de Lorraine (UL), AgroParisTech and Institut National de Recherche Agronomique (INRAE, [www.nancy.INRAE.fr](http://www.nancy.INRAE.fr)).

In addition to the balance between fundamental and practical knowledge, **practitioners from organizations involved in forest management and R&D** will also provide a connection to forest management issues, and ensure both a professional and academic education.



### Master curriculum

The **first semester (S9)** includes **9 training units** for a total of **30 ECTS credits**. Training units are as follows:

#### Fundamental and applied knowledge

- 1 *European forests, sustainable forest management, certification*
- 2 *Understanding tree structure and functions*
- 3 *Biogeochemical cycles in forest ecosystems*
- 4 *Dynamics of forest plant and tree communities*
- 5 *Forests and forestry in a context of global change*

#### Tools and methodology

- 1 *Project in forest management*
- 2 *Advanced statistics or GIS for forest science and forest ecology*
- 3 *Models in forest management*
- 4 *Forestry wood-chain tour*

The **second semester (S10)** consists of an **internship of a duration of >20 weeks** evaluated through a written dissertation and an oral defence for **30 ECTS credits**. The internship takes place either in a research laboratory or in institutions, companies or associations of relevant fields of application. Internships can be proposed by students.



## Application and Admission

The *Forests and their Environment* major seeks to recruit 15-20 students on selective bases.

Depending on their education, applicants should justify a **1<sup>st</sup>-year MSc level (M1) or a master's degree or equivalent (M2)**, as acknowledged in the EHEA (European Higher Education Area), and educational background in the fields of **forestry, plant science, ecology, ecophysiology, or environmental science**.

A **B2 level in English** is required. See the self-assessment grid of Common European Framework of Reference (CEFR) at: <https://europass.cedefop.europa.eu/en/home>. Equivalent qualifications are: IELTS >5, TOIEC >700, TOEFL IBT > 90, or Cambridge FCE.

Applications should include 1) the **Europass documents** (<https://europass.cedefop.europa.eu/en/home>), 2) **marks** obtained in the **previous educational year**, 3) a **letter of application**, and 4) **one letter of recommendation from a senior professor/scientist** of earlier educational courses/internships.

### Contacts & Informations

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