

MSc. AETPF

Agronomy sciences, Environment, Territories,
Landscape and Forests

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MSc. AETPF : *Agronomy sciences, Environment, Territories, Landscape and Forests*

5 tracks:

BIPE : Plant-environment interactions

DiaGeCoE : Natural ecosystem conservation and restoration

ECOSAFE : Forest and farm ecosystem management

FB : Wood, forest and sustainable development

FEN : Forests and their ENvironment (FEN) (in English)





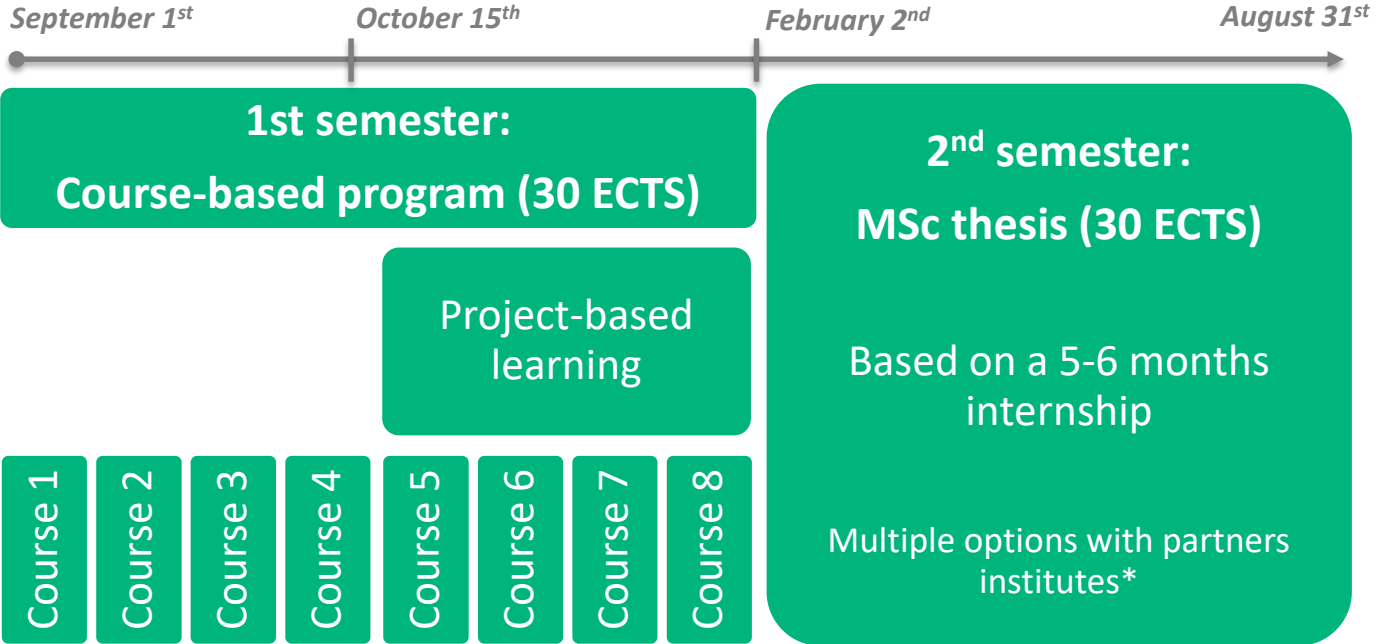
FEN's objectives

Train experts in assessment and monitoring of forest ecosystems to support climate change adaptation and multifunctional management of forests.

FEN provides :

- the **knowledge** to understand the functioning and dynamics of temperate forests
- Strong **skills** in data management and ecological modelling
- the **expertise** required to adress the challenges posed by the changing environment and social pressures facing forest management.
- **scientific background** for the student who want to carry on with a PhD.

FEN's 2nd year schedule



+ French courses

(*) Any forest- or environment-related institute (research institutes, forest management company, government, NGO...) in France, Europe or elsewhere



Teaching approach

The academic organization of the MSc FEN comprises three components : knowledge, tools and methods, and training. They are organized over 2 semesters



1ST SEMESTER : COURSES & PROJECTS

FUNDAMENTAL AND APPLIED KNOWLEDGE

- ✓ Introduction to forest economy and ecosystem services
- ✓ Dynamics of forest plant and tree communities
- ✓ Understanding tree structure and functions
- ✓ Biogeochemical cycles in forest ecosystems
- ✓ Forests and forestry in a context of global change
- ✓ Temperate forest silviculture and industry

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TOOLS AND METHODS

- ✓ Managing collective innovation projects
- ✓ Advanced statistics
- ✓ GIS for forest science and forest ecology
- ✓ Models for forest research and management
- ✓ 5 weeks of research or professional project : an interdisciplinary approach

2



2ND SEMESTER : TRAINING

- ✓ 5-6 months research- or professional- oriented internship
- ✓ Conducted in forestry or environment fields, research laboratory, public organisation, private company, NGOs
- ✓ Leading to a written MSc thesis and defense in front of a Jury

3



1 week in Germany
(Freiburg), 1 in France

Teaching approach

1st semester : fieldcourses !

- Dynamics of forest plants and tree communities



- Temperate forest silviculture and industry





FEN's schedule

1st semester :

24 ECTS = 8 courses of 3 ECTS (out of 10 options)

+ 1 course of 6 ECTS called « project »

= professional and creative skills in project mode

➤ Learning by doing, project management skills.

2 OPTIONS

Individual work

- 6 weeks in a research lab.
- Daily life of scientists
- Developing the student own skills working with a researcher
- Defining a research approach (like in the beginning of a thesis)

Team work (3 to 5 students)

- Questions suggested by a supervisor (impacts of climate change, innovative management, changes in policies...)
- Field work, data processing, contact with researchers, practitioners and local policies
- Developing teamwork skills

PROJECT WRITTEN REPORT AND ORAL DEFENSE

Project: training highlights (5 weeks project)

PROFESSIONAL PROFILE (Team)



Forest ecology, dendroecology and climatic change: Mountains under the context of recent climatic change : tree growth trend in the Vosges.

Co-design of technical itineraries for forest renewal in Living Lab project mode: Implementation of the planning phase

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Decision sciences : Co-design of technical itineraries for forest renewal in Living lab project mode.



FEN's schedule

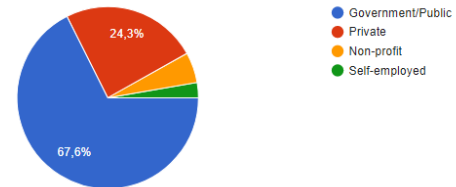
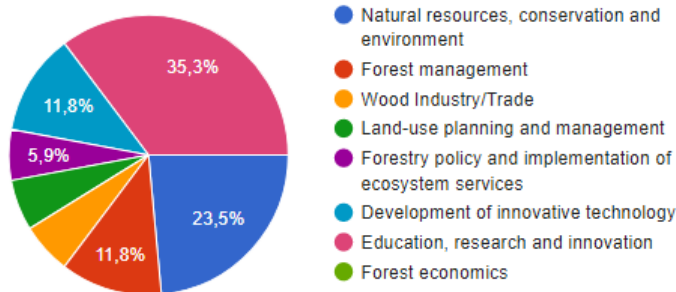
2nd semester : MSc thesis & internship

- The MSc thesis is associated to a 5 to 6 month internship
- Students are free to find their supervisor and host structure
- Admin aspects (in France): the internship is a « job offer »
 - With gratification
- Requirements are :
 - The proposed internship involves to solve problems using innovative thinking and methods (at MSc level)
 - Students are supported by an AgroParisTech referent teacher with regular meetings.

100% Succes (2019-2022)

Job opportunities

- Duration of search for first job
 - Less than 2 m (36%); 2 - 6 mois (38%)
- Field of activity of first job (2019-22)



Where are you working?



- **Area of employment** : Consultancies, NGOs, UN (FAO), Universities, Research Institutes, Ministry in charge of Agriculture / DRAAF PACA, Centre National de la Propriété Forestière (CNPF); Conseil départemental de Meurthe et Moselle; chargé d'études/d'affaires environnement, Research, ONF-CRPF, local associations, startups,...



Originality of the MSc AETPF-FEN:

- International students welcome
- Combining ecology with a quantitative approach and social sciences to address today's issues and stakeholders.
- A large international partnership ... and we are looking to increase it!



IFSA International Association of Forest Students



Questions ?