Teaching format
On-site training, in Besançon (main place of instruction) and in Dijon

Language of teaching
80% in English, all supports and exams in English

ECTS
120

Hourly volume
720h

Number of available places
16 students in M1, 16 in M2

Academic level after graduation
Bac+5, equivalent to the status of Engineer

Course
Initial training, continuing education

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Continuing education
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Some information about our city and our region
Centre for Applied Linguistic (CLA): courses (French, English...) and sports and cultural activities organized with other foreign and French students.
http://cla.univ-fcomte.fr/home/

Student life
http://www.univ-fcomte.fr/vie-etudiante

Local naturalistic associations:

Alumni

INTERNATIONAL MASTER
Masters’ degree Conservation Biology

Ecology, Monitoring and Management of Ecosystems (EMME)

http://www.nature-conservation-ubfc.com/emme/fr/

- The Master Ecology, Monitoring and Management of Ecosystems is an international Master from the University of Bourgogne Franche-Comté, France.
- The students are trained to be future scientists in conservation, functional ecology, paleoecology, ecotoxicology and ecoepidemiology as well as managers and policy officers in biodiversity conservation and ecosystem management.

Teaching objectives
To develop abilities to:
- Critically engage with concepts and theory in functional ecology and conservation from interdisciplinary perspectives at an advanced scientific level,
- Critically assess the ability of populations and communities to react, cope with and adjust to environmental changes occurring over different spatial and time scales,
- Appreciate the opportunities offered by new technological developments for the future of research and application in ecosystem monitoring and management,
- Combine theory, hypotheses, methods, data and field work to identify and develop innovative applied or fundamental research questions and designs.

Remark: the Master can help strengthening naturalistic skills (e.g. taxonomic identification) but does not directly aim it. See Bachelor MINA on http://formation.univ-fcomte.fr/licence-professionnelle/metiers-de-la-protection-et-de-la-gestion-de-lenvironnement-metiers-du.

Scientific support
- The Master benefits from the scientific support of the research unit Chrono-environnement (https://chrono-environnement.univ-fcomte.fr/) one of the largest research units in France in ecology and environment and from professionals working in private companies and NGOs in environment and conservation.

Teaching methods
- This training is delivered through lectures, seminars, class tutorials and practical trainings in the field and in the lab. Field courses and personal projects (on top of internships) allow students to apply the methods and concepts presented in the classroom in the field.

International mobility
- The student mobility in M1 and M2, over a year, a semester or an internship is encouraged and facilitated by the teaching organized as weekly blocks over a few weeks each.

University of Bourgogne Franche-Comté, 32 avenue de l’Observatoire, 25000 Besançon, France, www.ubfc.fr
## Syllabus

### Master 1 (1st year)

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory field session (3 ECTS)</td>
<td>Conservation biology and ecosystem management (6 ECTS)</td>
</tr>
<tr>
<td>English or French (3 ECTS)</td>
<td>Population and community ecology (6 ECTS)</td>
</tr>
<tr>
<td>Anthropogenic impacts on ecosystems (6 ECTS)</td>
<td>Ecological, environmental and spatial data processing 1 (6 ECTS)</td>
</tr>
<tr>
<td>Ecological, environmental and spatial data processing 1 (6 ECTS)</td>
<td>Personal and scientific project management (6 ECTS)</td>
</tr>
<tr>
<td>Environmental law and economy (6 ECTS)</td>
<td>Internship (2 to 3 months) (6 ECTS)</td>
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<tr>
<td>Behavioral ecology and sustainable interactions (6 ECTS)</td>
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</tbody>
</table>

### Master 2 (2nd year)

<table>
<thead>
<tr>
<th>Semester 3</th>
<th>Semester 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory field session (3 ECTS)</td>
<td>Internship (4 to 6 months) (30 ECTS)</td>
</tr>
<tr>
<td>Ethics, deontology, history and philosophy of science (3 ECTS)</td>
<td>3 modules among:</td>
</tr>
<tr>
<td>Literature review (3 ECTS)</td>
<td>Management and monitoring</td>
</tr>
<tr>
<td>English or French (3 ECTS)</td>
<td>Ecotoxicology</td>
</tr>
<tr>
<td>Project management and methodological tools (3 ECTS)</td>
<td>Ecohealth</td>
</tr>
<tr>
<td>Taxonomic and methodological specialization (15 ECTS)</td>
<td>Paleoecology</td>
</tr>
<tr>
<td>Molecular Ecology</td>
<td>Taxonomic specialization</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>Spatial analysis and modelling</td>
</tr>
<tr>
<td>From Science to Regulatory Decision Making</td>
<td>Structure and functions of food webs</td>
</tr>
</tbody>
</table>

### Career opportunities

The graduate students can hold various positions (according to the skills profile build during the two years of Master’s degree) in the fields of ecology and conservation (project manager, research or design engineer, environmental engineer, researcher or teacher-researcher) in the administrations, territorial communities, private (consultancy) companies, NGOs...

### Skills

Beyond the naturalistic skills, the Master graduate student is able to:

- Grasp a complex and multidisciplinary environmental issue, in a research or application context,
- Propose protocols, in the field or in the lab, allowing to grasp these issues and to find human, technical and bibliographic resources
- Implement the adequate measurement and/or analysis techniques (or establish the necessary multidisciplinary collaborations), analyse and interpret the data collected, in order to propose management solutions,
- Master project management: assess the required financial, logistic, and human resources; respect the implementation schedule; manage the project in order to achieve the objectives,
- Work independently and/or as a team member or leader, organize and manage the division of tasks within a work team,
- Communicate orally or in writing, in French or in English.

### How and when to apply?

- Applicants have to hold an academic Bachelor’s degree in Biology-Ecology or equivalent. A good English level or at least to be prone to speak English is essential.
- On [http://admission.univ-fcomte.fr](http://admission.univ-fcomte.fr) (GoogleTrad tool on the bottom right of the page to get the site in English) from April 21st to June 21st.

### Application form

- Detailed Curriculum vitae with personal, training, internship, professional, and other information allowing the recruitment committee to assess the quality of the candidacy,
- Evidence of completion of upper secondary school (high school) in the form of final and official diploma and transcripts. Note that the transcripts must specify all coursework completed,
- Cover letter explaining motivation and professional objectives,
- Two letters of recommendation,
- An interview may be required.

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