

# Master of Environmental Management

Master of Social Science  
Environmental Management Honours  
Prevention and Management of Environmental Alterations Studies

*This course explores the Environment field from protecting and managing unspoilt settings (protected areas, marshlands etc.) to restoring significantly damaged settings (ailing areas, brownfields, contaminated sites). It targets students from a variety of backgrounds (hard science, social science, engineering) attracted by the fields of environment and territorial development in terms of both research and operations.*

*The Master is co-accredited by five Lyon University establishments:*

- > Jean Monnet University (JMU), Saint-Étienne
- > École des Mines de Saint-Étienne (EMSE)
- > Lyon 2 Lumière University
- > Lyon 3 Jean Moulin University
- > L'École Normale Supérieure de Lyon

*There are three courses available.*

- **PMEA (Prevention and Management of Environmental Alterations)** Jean Monnet University Saint-Etienne – Ecole des Mines de Saint-Etienne – Ecole Nationale Supérieure d'Architecture de Saint-Etienne
- **GRAINE (InteGrated management of natuRal, dynAmic and envlronmeNtal rESources)** – Lyon 2 University
- **Environmental Geosystems** - Lyon 3 University

*All three have the same classes in the 1st semester. Course specialisation begins in semester 2 (placement or research dissertation) and isn't consolidated until the M2 as enrolment in the M1 provides the same access to all three courses.*

**Direct access to the M2 is available to Social Science and Earth Sciences M1 graduates and people who have completed a Master's course in the same fields or have equivalent qualifications.**

## Objectives

The Master of **Environment Management** is designed to provide all-encompassing knowledge of the concepts and practices related to the environment and its management on the basis of pluri-disciplinary training pairing social science skills with earth sciences (architecture, biology, law, ecology, economy, geoarchaeology, geography, history, environmental engineering etc.).

**Prevention and Management of Environmental Alterations** explores the issues of environmental damage (water, soil, atmosphere and sound pollution) and the territorial, economic, technological and architectural issues involved in managing and restoring spaces. It is designed to address both the issue of the prevention and management of urban and industrial activities as well as the redevelopment of ailing spaces. The course is provided by several JMU partners (UFR SHS, UFR Sciences et Techniques) and other schools (Ecole des

Mines de Saint-Etienne, Ecole des Mines d'Alès, École Nationale Supérieure d'Architecture de Saint-Étienne, Ecole Normale Supérieure de Lyon).

**What sets the course apart** is its all-encompassing training in environmental alterations with diverse fields of environmental expertise from observation of physical parameters and consideration of sociological and economic aspects to the architectural and territorial approach to these spaces. Supported by several research structures (UMR 5600 CNRS EVS "Environment City Society", Labex IMU-Intelligence of Urban Worlds, **GIS Pilot**) and fuelled by contact with the professional world, students on this course are trained by top specialists with sound expertise in the field of project management for the redevelopment of ailing spaces or research into environmental alteration issues.

The course involves:

- > Theory and thought-provoking content about the environment and associated concepts (landscape, nature, protection, restoration, recovery, resources, management, debate etc.)
- > Knowledge of the quaternary and contemporary aspects of continental settings (processes, evolutions/changes, crises, alterations, forms of exploitation, measurement and analysis methods)
- > Training in managing and redeveloping current environments (regulations, policies, development, prospective, assessment, physical and immaterial resource management, ecological economy, environmental economy)
- > Knowledge of tools to study, portray and manage the space as well as environmental information, their processing and limitations (metrology, GIS, remote sensing, terrain, documentary databases, archives, modelling tools etc.)

## Who's it for?

### Target audience

Students from a range of backgrounds (hard science, social science, engineering); *research* professionals a complement to qualifying training, higher or continuing education.

### Pre-requisites

#### Compulsory:

This Master's course is available to students with a Bachelor's degree in human sciences (geography and development, history, archaeology, ethnology, anthropology), world science (geology, biology, ecology, agronomy), social science, engineering science, architecture or courses with environmental skills (landscaping etc.).

#### Recommended:

- > Very good knowledge of French (written, spoken)
- > Good knowledge of English
- > Good ability to draft summary documents
- > Good aptitude for field work, ability to produce graphic and cartographic documents, interest in lab work, archives or field metrology

### Entry requirements

- > Prepare your Master application
- > Application terms

## Skills

- > Understand cross-disciplinary knowledge and its use in the field of environment and planning
- > Build a line of thought based on a systematic and all-encompassing approach incorporating life and social sciences

> Apply a scientific process (collect and analyse relevant information, conduct an analytical reasoning, present diagnoses) Handle

analysis tools (field study, geomatics, statistics, modelling)

> Act in a multi-disciplinary context (science and social: users, politicians, planning structures)

> Communicate, write, work in teams

## What's next?



### Continuing education

PhD thesis in partnership with the professional world (regional observatories, territorial collectivities, research bodies, companies etc.)

### Prospects

Environmental and territorial engineering (territorial collectivities, devolved ministerial departments, design office, consultancy firm, associations, regional observatories): project manager, design manager, project leader, expert or consultant, sector-specific technical executive etc.

Additional training for preparing for the civil service exam and for continuing education