

# Department of Environmental Sciences and Engineering (Portugal)

## Institutional Information (Last update at: 18/03/2013)

<b>School/Department name (Native language)</b>	Departamento de Ciências e Engenharia do Ambiente
<b>AESOP reg Number</b>	A-351-03
<b>AESOP Member Status</b>	Associate Member
<b>University</b>	New University of Lisbon
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## Contact persons

### AESOP Contact person

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## School Information

<b>Full time academic staff members</b>	40
<b>Part time staff members</b>	13
<b>Staff members engaged in research</b>	53
<b>Staff members engaged in professional activities</b>	25

## Degree Programmes and Educational Provision

(Post)Graduate/masters or second cycle degree(s) offered at School/department

Environmental Engineering (300 ECTS) 1st/2nd cycle

Number of years normally used to complete this degree(FT)		Environmental Engineering (300 ECTS) 1st/2nd cycle			
Part time option		Yes			
Number years usually required for completing the degree part-time (PT)		10			
Delivery mode		On campus			
Number of ECTS		300			
Teaching languages		Portuguese (partially English when having foreign students)			
		Total studentsNational studentsEU studentsNon EU students			
Number of students graduated 2012		8484			
Specialisation within in this Degree/the curriculum		yes			
The degree requires an assessed period of work in practice		No			
Programme accreditation by a professional body/other institution		yes			
This is an Erasmus mundus programme		No			
Curriculum/approach description		<p>The MIEA is structured in two areas of specialization: a) Sanitary Engineering, focusing in the water, residual waters and waste management and treatment, as well as in sanitary hydraulics and water resources management; b) Environmental Systems Engineering, aiming namely to the environmental management and environmental economy, environmental auditing, information systems and environmental modeling. The curricular organization on the base of the ECTS, allows the students to participate in the Mobility Programs of the European Union. The Master is organized in one cycle of integrated studies during 5 years, representing a global effort of 300 ECTS. At the end of the first cycle it corresponds to 180 ECTS, and the students who accomplish this receive a certification of a Licenciatura in Sciences of Environmental Engineering. At the end of the program the student achieves a Master in Environmental Engineering.</p> <p>This master degree has about 100 ECTS related to planning (<a href="http://www.fct.unl.pt/candidato/licenciaturas-e-mestrados-integrados/mestrado-integrado-em-engenharia-do-ambiente">http://www.fct.unl.pt/candidato/licenciaturas-e-mestrados-integrados/mestrado-integrado-em-engenharia-do-ambiente</a>)</p> <p>Note: The time to end the course depends on the student choice and there are no rigid rules limiting its maximum length.</p>			

#### Sustainable Urbanism and Spatial Planning

<b>Number of years normally used to complete this degree(FT)</b>	2
<b>Part time option</b>	Yes
<b>Number years</b>	

usually required for completing the degree part-time (PT)

Delivery mode On campus

Number of ECTS 120

Teaching languages Portuguese, but whenever the class has a non-Portuguese speaking student lectures are taught in English.

Total studentsNational studentsEU studentsNon EU students

Number of students graduated 201314

Specialisation within in this Degree/the curriculum

The degree requires an assessed period of work in practice No

Programme accreditation by a professional body/other institution yes

This is an Erasmus mundus programme No

Curriculum/approach description

The emergence of new problematics related to the sustainability of the town, the urban environment and the land use, have originated the need for new profiles of specialists with specific training in the area of Sustainable Urbanism, Urban Environment and Land Use. This master has as objective to contribute to the students to acquire competences at the level of concepts and tools necessary for the promotion and evaluation of urban and territorial sustainability, and prepare them with innovative capabilities for the practice and research in the area of urbanism and land use. This emergent area has a new professional public and private market, namely in consulting, project and auditing firms in the area of urbanism, land use, engineering, environment, architecture and economy and management. A two week technical visit to a town (e.g.Barcelona, a joint program with the Universitat Politècnica de Catalunya ) and a field workshop are integrated in the course. This master, in partnership with the Faculty of Social and Human Sciences of UNL, is a whole program related to planning.

NOTE: The time to end the course depends on the student choice and there are no rigid rules limiting its maximum length.

Water Management and Engineering

Number of years normally used to complete this degree(FT) 2

Part time option Yes

Number years usually required for completing the degree part-time (PT) 4

Delivery mode On campus

Number of ECTS 120

**Teaching languages** Portuguese, but whenever the class has a non-Portuguese speaking student lectures are taught in English.

**Total students** **National students** **EU students** **Non EU students**

**Number of students graduated 20113**

**Specialisation within in this Degree/the curriculum**

**The degree requires an assessed period of work in practice**

No

**Programme accreditation by a professional body/other institution**

yes

**This is an Erasmus mundus programme**

No

**Curriculum/approach description**

This master aims to prepare the students to be able to conceptualize, plan, project, manage and implement solutions for issues related to water resources in an integrated way considering the multiple components, namely ecological, social, economic and technological in a sustainable way.

It has about 24 ECTS related to planning (<http://www.fct.unl.pt/candidato/mestrados/mestrado-em-engenharia-e-gestao-da-agua>)

NOTE: The time to end the course depends on the student choice and there are no rigid rules limiting its maximum length.

## Environmental Management and Policy

**Number of years normally used to complete this degree(FT)**

2

**Part time option**

Yes

**Number years usually required for completing the degree part-time (PT)**

4

**Delivery mode**

On campus

**Number of ECTS**

120

**Teaching languages**

Portuguese, but whenever the class has a non-Portuguese speaking student lectures are taught in English.

**Total students** **National students** **EU students** **Non EU students**

**Number of students graduated 20128**

**Specialisation within in this Degree/the curriculum**

**The degree requires an assessed period of work in practice**

No

**Programme accreditation by a professional**

yes

This is an Erasmus mundus programme

No

Curriculum/approach description

This Master (joint programme with the University of Aveiro and University of Évora) aims to equip the students with training in technical and scientific areas of the environment, articulated with International Relations, International Law and Economy. It targets the train professionals to have the capacity to articulate these four areas of knowledge in an innovative and integrative way, able to negotiate in international settings, in issues of extreme and growing complexity connected, directly or indirectly, to the Environmental Policies.

NOTE: The time to end the course depends on the student choice and there are no rigid rules limiting its maximum length.

## Territory, Environment and Sustainable Development

Number of years normally used to complete this degree(FT)

1

Part time option

Yes

Number years usually required for completing the degree part-time (PT)

2

Delivery mode

On campus

Number of ECTS

60

Teaching languages

Portuguese, but whenever the class has a non-Portuguese speaking student lectures are taught in English.

## Total studentsNational studentsEU studentsNon EU students

Number of students graduated 201210

Specialisation within in this Degree/the curriculum

The degree requires an assessed period of work in practice

No

Programme accreditation by a professional body/other institution

yes

This is an Erasmus mundus programme

No

Curriculum/approach description

The main objective of this Advanced Studies (for master, or licenciados pre-Bolonha) a whole program in planning related issues (<http://www.fct.unl.pt/candidato/candidaturas-aos-diplomas-de-estudos-pos-graduados/deg-cidades-sustentaveis>) is to supply additional training in theory and practice to professionals that want to update their knowledge, as well as to Pós-Bolonha masters or Pre-Bolonha licenciados looking for more qualifications that allow them to easily access the work market or to pursue research programmes. This specialization is supported by an integrated vision with practical focus, but also in a solid theoretical base in the areas of Territory, Environment and Sustainable Development. It is structured in a way to privileged the intervention in real life problems, looking for efficient solutions, implementable and sustainable.

**Territory, Environment and Sustainable Development** It relies in the multidisciplinary of the students and in working in diversified teams, accepting a wide range of expertise related to planning and city management, natural and built environment, local and regional development, governance and public administration and other similar.

NOTE: The time to end the course depends on the student choice and there are no rigid rules limiting its maximum length.

### Sanitary Engineering and Integrated Waste Management

<b>Number of years normally used to complete this degree(FT)</b>	1
<b>Part time option</b>	Yes
<b>Number years usually required for completing the degree part-time (PT)</b>	2
<b>Delivery mode</b>	On campus
<b>Number of ECTS</b>	60
<b>Teaching languages</b>	Portuguese, but whenever the class has a non-Portuguese speaking student lectures are taught in English.
<b>Specialisation within in this Degree/the curriculum</b>	
<b>The degree requires an assessed period of work in practice</b>	No
<b>Programme accreditation by a professional body/other institution</b>	yes
<b>This is an Erasmus mundus programme</b>	No

**Curriculum/approach description**

This Advanced Studies (for master, or licenciados pre-Bolonha) aims to train technicians for specific problem resolution in the area of environment, namely in the pollution control, preparing them for their professional lives in the areas of programming, project, construction, exploration, conservation and evaluation of the operation of sanitary infrastructures, pollution control, water supply, sewage, treatment of residual waters, waste treatment and management. It privileged an integrated vision for the present need of society and the market, in a multidisciplinary approach involving environmental, social, economic, technological and legal aspects. It has 10 ECTS related to planning (<http://www.fct.unl.pt/candidato/candidaturas-ao-diploma-de-estudos-avancados/dea-engenharia-sanitaria-e-gestao-integrada-de-residuos>).

NOTE: The time to end the course depends on the student choice and there are no rigid rules limiting its maximum length.

### Sustainable Cities

**Number of years normally used to**

<b>complete this Sustainable Cities degree(FT)</b>	1
<b>Part time option</b>	Yes
<b>Number years usually required for completing the degree part-time (PT)</b>	2
<b>Delivery mode</b>	On campus
<b>Number of ECTS</b>	30
<b>Teaching languages</b>	Portuguese, but whenever the class has a non-Portuguese speaking student lectures are taught in English.
<b>Total students</b> <b>Number of students graduated 2012</b> 10	
<b>Specialisation within in this Degree/the curriculum</b>	
<b>The degree requires an assessed period of work in practice</b>	No
<b>Programme accreditation by a professional body/other institution</b>	yes
<b>This is an Erasmus mundus programme</b>	No

#### Curriculum/approach description

The main objective of this Pos-Graduate Studies (for licenciados), a whole program related to planning (<http://www.fct.unl.pt/candidato/candidaturas-aos-diplomas-de-estudos-pos-graduados/depg-cidades-sustentaveis>) is to supply additional training in theory and practice to professionals that want to update their knowledge, as well as to Pós-Bolonha masters or Pre-Bolonha licenciados looking for more qualifications that allow them to easily access the work market or to pursue research programmes. It is an integrated specialization with practical focus, but also relying on a solid theoretical expertise in the areas of Urban Environment, Urbanism and Sustainable Construction, and Land Use. A set of technical visits to good practice projects and recognized as the front line in the implementations of the better options in relation to the urban conception and of technologies for the sustainability of the cities support the practical focus. The specialization is structured in four groups: curricular units to introduce the concepts and the bases of a sustainable city; technical visits to analyze case studies relevant to sustainable towns (3 visits in national territory and 2 abroad (Barcelona and Hamburg); deepen training focusing in the topic select by the student; support by the seminars of Human Habitat.

NOTE: The time to end the course depends on the student choice and there are no rigid rules limiting its maximum length.

#### Doctoral/PhD education offered at School/department

##### Environment

**Number of years normally used to complete this degree(FT)**

4

**Part time option**

Yes

<b>Number years usually required for completing the degree part-time (PT)</b>	8
<b>Delivery mode</b>	On campus
<b>Number of ECTS</b>	240
<b>Teaching languages</b>	Portuguese, but whenever the class has a non-Portuguese speaking student lectures are taught in English.
<b>Total studentsNational studentsEU studentsNon EU students</b> <b>Number of students graduated 20126</b>	
<b>Specialisation within in this Degree/the curriculum</b>	
<b>Curriculum/approach description</b>	<p>The PhD in Environment, with about 40 ECTS related to planning, aims to prepare the students to acquire a set of general competences associated with the 3rd cycle, allowing for a systematic and conceptual understanding in the domain of environmental sciences and engineering, preparing the students to gain the adequate basis for advanced research.</p> <p>NOTE: The time to end the course depends on the student choice and there are no rigid rules limiting its maximum length.</p>
<b>Climate Change and Sustainable Development Policies</b>	
<b>Number of years normally used to complete this degree(FT)</b>	3
<b>Part time option</b>	Yes
<b>Number years usually required for completing the degree part-time (PT)</b>	6
<b>Delivery mode</b>	On campus
<b>Number of ECTS</b>	180
<b>Teaching languages</b>	Portuguese, but whenever the class has a non-Portuguese speaking student lectures are taught in English.
<b>Total studentsNational studentsEU studentsNon EU students</b> <b>Number of students graduated 20122</b>	
<b>Specialisation within in this Degree/the curriculum</b>	
<b>Curriculum/approach description</b>	<p>This PhD (FCT in association with FCSH of UNL; Faculty of Sciences, Institute of Social Sciences and Faculty of Humanities from the University of Lisbon; Institute of Agronomy and Technical Institute from the Technical University of Lisbon) supported by the University of East Anglia, Great Britain, integrates in an interdisciplinary area within the domain of environmental sciences and social sciences with strong relations with components such as economy, law, policy and ethics. It brings together professors and researchers who are more active and with high number of publications in the area of climate change and sustainable development.</p> <p>(<a href="http://www.fct.unl.pt/candidato/doutoramentos/doutoramento-em-alteracoes-climaticas-e-politicas-de-desenvolvimento-sustentavel">http://www.fct.unl.pt/candidato/doutoramentos/doutoramento-em-alteracoes-climaticas-e-politicas-de-desenvolvimento-sustentavel</a>)</p>

## Climate Change and Sustainable Development Policies

NOTE: The time to end the course depends on the student choice and there are no rigid rules limiting its maximum length.

### E-Planning

Number of years normally used to complete this degree(FT)

3

Part time option

Yes

Number years usually required for completing the degree part-time (PT)

6

Delivery mode

On campus

Number of ECTS

180

Teaching languages

Portuguese, but whenever the class has a non-Portuguese speaking student lectures are taught in English.

### Total studentsNational studentsEU studentsNon EU students

Number of students graduated 20127

Specialisation within in this Degree/the curriculum

<http://www.e-planning.org/agenda.html>

Curriculum/approach description

NOTE: The time to end the course depends on the student choice and there are no rigid rules limiting its maximum length.