

PRINCIPLES OF THE EDUCATIONAL MODEL

The Universitat Jaume I's educational model is based on ten principles that are closely interrelated, and which cannot be understood without considering them as a whole:

1. Comprehensive development of students
2. Fostering of ethics and social responsibility
3. Commitment to development and social and territorial cohesion
4. Encouragement of the vocation for research

5. Increased internationalisation
6. Commitment to Valencian as the institutional language and to multilingualism
7. Encouragement of the use of ICTs
8. Continuous improvement of quality
9. Promotion of employability and a smart entrepreneurial spirit
10. Promotion of lifelong learning



Further information:

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Academic information:

Master's Degree in Geospatial Technologies
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ERASMUS MUNDUS

Erasmus Mundus international
interuniversity programme

Please note that this brochure is for information
purposes only // 0423



Master's Degree

Geospatial Technologies (Erasmus Mundus)

Engineering and Architecture



Presentation

The Erasmus Mundus Master's Degree in Geospatial Technologies prepares you to master the new technologies for the development of applications in Geographic Information Systems (GIS) and Digital Twins and for the analysis of georeferenced information so as to be able to optimise decision making involving geographic, environmental and social aspects affecting the future of our planet.

Proof of the excellence of the programme is the fact that it has been recognised as an Erasmus Mundus Master by the European Commission. As a consequence, it has received more than 15 million euros in funding since it was launched in 2007. Its quality has been acknowledged on a number of occasions, including "Best master's degree in Technology" in the most recent editions of the ranking published by the newspaper El Mundo.

The course is also taught by the Universidade Nova de Lisboa and the University of Münster. It is an official joint degree in Spain, Portugal and Germany.

We are partners with top-level companies and institutions such as the United Nations, the European Environment Agency, the ESRI, the Spanish Geographic Institute or the Valencia Institute of Cartography.

Coordinators

Joaquín Huerta Guijarro.

Additional information

Coordinating university: University of Münster (Germany)

Partner universities: Universitat Jaume I of Castellón, Universidade Nova de Lisboa, University of Münster

Number of credits: 90 ECTS credits (European Credit Transfer System)

Duration: three academic semesters (September/March)

Teaching modality: face-to face learning

Language of instruction: English

Price: in accordance with official fees to be announced 51,26 €/credit

Course structure [32 students]

Subjects // Character // ECTS		
First semester, Universitat Jaume I (UJI)		
Module 1: Foundations of informatics (10 ECTS)		
Programming	C	4
Databases and Data Management	C	3
Artificial Intelligence and Machine Learning	C	3
Module 2: Advanced Informatics and Data Analytics (12 ECTS)		
Data Science	C	4
Development of Applications for Geographic Data Exploration and Visualization	C	5
Spatial Data Services, Sources, Standards and Infrastructures	C	3
Module 3: Geospatial Technologies (8 ECTS)		
Geographic Information Systems: Desktop to Web	C	3
Geographic Information Systems: Applications and Trends	C	2
Earth Observation and Remote Sensing	C	3
First semester, Universidade Nova de Lisboa (UNL)		
Module 1: Foundations of Geographic Information Science I (7,5 ECTS)		
Geographic Information Science	C	7,5
Module 2: Advanced Topics in Geographic Information Science I (7,5 ECTS)		
Spatial Analysis and Visualization	OP	7,5
Remote Sensing	OP	7,5
Module 3: Analytical Tools (15 ECTS)		
Spatial Statistics	C	7,5
Geospatial Datamining	C	7,5

Group Project Seminar on Programming and Analysis	C	7,5
Second semester, University of Münster (WWU)		
Module 4: Foundations of Geographic Information Science II (4 ECTS)		
Core Topics in Geographic Information Science	C	2
Geoinformatics Forum	C	1
Geoinformatics Forum Discussion Group	C	1
Module 5: Advanced Topics in Geographic Information Science II (10 ECTS)		
Location Based Services	OP	5
Spatial Cognition	OP	5
Study Project	OP	5
Programming in Geographic Information	OP	5
Reference Systems	OP	5
Further Electives	OP	5
Module 6: Applied Topics in Geographic Information Science (10 ECTS)		
From Data to knowledge	C	5
Applied topics	C	5
Module 7: Transferable Skills (6 ECTS)		
Project Management/Geomundus conference	C	3
Research Methods in Geographic Information Science	C	3
Third Semester, University of Münster, Universidade Nova de Lisboa or Universitat Jaume I		
Thesis (30 ECTS)		
Master thesis seminar	MT	2
Master thesis with defence	MT	28
Total		90