MSc in Geospatial Information Engineering
Department of Mathematics | Department of Informatics Engineering
Faculty of Sciences and Technology – University of Coimbra

Study Programme

1st Year
1st Semester:
• Georeferencing and Positioning
• Applied Remote Sensing
• Databases
• Digital Cartography
• Option
2nd Semester:
• Applications of Positioning and Navigation
• Digital Photogrammetry
• Programming for WebGIS
• Geographical Information Systems
• Geospatial Intelligence

2nd Year
1st Semester:
• Land Information Systems
• Systems Integration
• 3D Modelling
• Plan of Dissertation, Internship or Project
• Option
2nd Semester:
• Dissertation, Internship or Project

Objectives
The Master in Geospatial Information Engineering aims to train professionals with skills to collect, process and analyse geospatial data; management and provision of geospatial information; as well as the creation of applications and web services associated with this type of information.

Skills
The graduated in the MSc in Geospatial Information Engineering acquires competences for:
• Planning and execution of geospatial data collection with various technologies (namely the global satellite navigation system, total stations, photogrammetric and laser scanning systems or information made available voluntarily by citizens);
• Processing of geospatial data collected by positioning systems and optical, laser and radar sensors, namely multispectral images collected by sensors placed on spatial or terrestrial platforms, aerial or terrestrial photographs or clouds of 3D points collected with laser scanning systems;
• Conception of geographic information systems and geospatial data infrastructures;
• Integration of geospatial data into information systems;
• Exploitation and analysis of geospatial data;
• Quality control of geospatial information and cartographic products;
• Integrating geospatial intelligence into decision-making processes.

Contacts / Information

Course coordination:
coord-meig@uc.pt

Dep. of Mathematics
Telephone: +351 239 791150
E-mail: secmat@mat.uc.pt

Dep. of Informatics Engineering
Telephone: +351 239 790000
E-mail: info@dei.uc.pt

http://www.uc.pt/fctuc/meig