

SUBJECT DESCRIPTION

MODELO

PED.013.03

Course	Topographic Engineering						
Subject	Automatic Cartography						
Academic year	2023-2024	Curricular year	2nd	Study period	1st semester		
Type of subject	Compulsory	Student workload (H)	Total: 168	Contact: 75	ECTS	6	
Professor(s)	PhD Eufémia da Glória Rodrigues Patrício						
☑ Area/Group Coordinator☐ Head of Department		PhD Maria Elisabete Soares					

PLANNED SUBJECT DESCRIPTION

1. LEARNING OBJECTIVES

Qualify the students with methods and digital techniques of conception of topographic and cartographic numeric models seeking the production of maps.

2. PROGRAMME

Introduction

Cartographic Drawing.

Organization, management and planning for Cartographic production.

Cartographic norms.

Geo-reference images in raster format.

Cartographic digitizing of images in analogical format.

Automatic applications in the Cartography.

3. COHERENCE BETWEEN PROGRAMME AND OBJECTIVES

To satisfy the objectives of the curricular unit, the content is designed to train the student as a future professional in the area of cartographic production in a company or public institution.

Accordingly, students acquire concepts in classic cartographic production as well as in cutting edge tools to develop competence in production, including planning, organizing information, knowledge of ISO norms for representing geographic information and how to analyse the information produced from a visual inspection perspective and from the perspective of automatic inspection and correction

4. MAIN BIBLIOGRAPHY

Mandatory

Appointments made by the discipline teacher and continuously updated.

Keats, J. S., "Cartographic Design and Production", 1998;

Autodesk, "AutoCADMap – User's Guide, 3";



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Recommended

Robinson, Arthur H., "Elements of Cartography";

Sousa Cruz, J.J. " Manual de Topografia ".

5. TEACHING METHODOLOGIES (INCLUDING EVALUATION)

Oral presentation with resource of audiovisual equipment and the programs applied to the Cartography.

Availability of e-learning contents.

Test theoretic–practical; accomplishment of a practical work with a weight of at least 30%.

Pratical works count toward the time of examination and examination resourse. As an option the student.

6. COHERENCE BETWEEN TEACHING METHODOLOGIES AND OBJECTIVES

To reach the objectives, the students are taught through theoretical and practical lectures e teacherstudent interaction as well as laboratory practice in which the students become familiar with the techniques of cartographic production, carrying out a practical assignment which they plan and organize information using appropriate software until they obtain the final product.

7. ATTENDANCE

There are no rules for attendance

8. CONTACTS AND OFFICE HOURS

Teacher: Eufémia da Glória R.Patrício

email: gpatricio@ipg.pt

Office nº: 78

Office hours. Thursday: 11:30 a.m 13h:30 a.m

Subject area coordinator: Eufémia da Glória Rodrigues Patrício

9. OTHERS

Be careful in the use of computer equipment.



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DATE

28 de setembro de 2023

SIGNATURES

Professor(s), Area/Group Coordinator

Professor	
(signature)	
Area/Group Coordinator	
(signature)	