



## 1. General information

**Course:** MANAGEMENT AND URBAN DESIGN OF FORMS**Code:** 310819**Type:** ELECTIVE**ECTS credits:** 4.5**Degree:** 2343 - MASTERS DEGREE PROGRAMME IN ENGINEERING OF ROADS, CANALS AND PORTS**Academic year:** 2023-24**Center:** 603 - E.T.S. CIVIL ENGINEERS OF CR**Group(s):** 20**Year:** 2**Duration:** First semester**Main language:** English**Second language:** Spanish**Use of additional languages:****English Friendly:** N**Web site:****Bilingual:** N**Lecturer:** MARIA AMPARO MOYANO ENRIQUEZ DE SALAMANCA - Group(s): 20

Building/Office	Department	Phone number	Email	Office hours
ETSI Caminos/ 2-D49	INGENIERÍA CIVIL Y DE LA EDIFICACIÓN	926051930	Amparo.Moyano@uclm.es	Wed and Thu: 11:30 to 14:30. In any case, the student should ask for an appointment by email.

## 2. Pre-Requisites

Not established

## 3. Justification in the curriculum, relation to other subjects and to the profession

The course belongs to the Master "Ing. de Caminos" (Civil engineering) urban and transport intensification. For that reason, it is linked to the "Trabajo Proyectual" (PBL; project work) in the same topic, and gives theoretical support and analysis tools to the learning process.

## 4. Degree competences achieved in this course

## Course competences

Code	Description
G04	Knowledge of the history of civil engineering and ability to analyse and assess public works in particular and the construction industry in general.
G14	Ability to undertake studies, spatial planning and urban development plans and projects.
ITUOT6	Knowledge of the influence of urban form on the efficiency of modes of urban transportation and the management of public services and infrastructure.
ITUOT7	Capacity to analyse and diagnose the social, cultural, environmental and economic conditions of a neighbourhood, as well as to carry out projects to improve urban quality

## 5. Objectives or Learning Outcomes

## Course learning outcomes

## Description

Students are familiar with the forms of physical and social rehabilitation of residential neighborhoods.

Students are familiar with the measures to preserve and promote the built heritage in the different areas of the city, especially in the historic districts.

Students are familiar with the most common problems of urban infrastructure and services in different urban forms.

Students know the problems and solutions that are usual for mobility in the different types of neighborhoods.

Students are familiar with the most modern techniques for introducing sustainable mobility into the various urban forms. Intermodal transportation hubs, bicycles, public transport.

Students understand the peculiarities of planning, designing and managing different urban forms.

## 6. Units / Contents

## Unit 1: Identification of urban forms. Management and desing problems

**Unit 1.1** Historic City centres**Unit 1.2** XIXth century urban expansions (Ensanches)**Unit 1.3** Modern movement residential neighbourhoods**Unit 1.4** Peripheral single family housing neighbourhoods

## Unit 2: GIS analysis of urban forms

**Unit 2.1** Data sources and repositories**Unit 2.2** Methods of urban forms' analysis and identification**Unit 2.3** Urban forms' analysis: urban parameters, land-use, streets characteristics, etc.**Unit 2.4** Network analysis and urban studies

## 7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description

Class Attendance (theory) [ON-SITE]	Lectures	G04 G14 ITUOT6 ITUOT7	0.72	18	N	-	
Computer room practice [ON-SITE]	Guided or supervised work	G04 G14 ITUOT6 ITUOT7	0.38	9.5	Y	N	
Project or Topic Presentations [ON-SITE]	Debates	G04 G14 ITUOT6 ITUOT7	0.25	6.25	Y	N	Presentation and debates about urban forms manegement, comparing the case study proposed for analysis and other international cases.
Practicum and practical activities report writing or preparation [OFF-SITE]	Individual presentation of projects and reports	G04 G14 ITUOT6 ITUOT7	0.8	20	Y	Y	Reports and slides elaboration about urban forms' management, and GIS analysis and maps elaboration related to specific aspects of urban forms. Retrievable activity.
Writing of reports or projects [OFF-SITE]	project-based learning	G04 G14 ITUOT6 ITUOT7	2.35	58.75	Y	Y	Final report including the analysis, identification and comparison of urban forms in the case study proposed, which could be a national or international city. Retrievable activity.
Total:			4.5	112.5			
Total credits of in-class work: 1.35			Total class time hours: 33.75				
Total credits of out of class work: 3.15			Total hours of out of class work: 78.75				

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System			
Evaluation System	Continuous assessment	Non-continuous evaluation*	Description
Assessment of active participation	20.00%	0.00%	Class participation during computer room practices, presentations and debates.
Practicum and practical activities reports assessment	30.00%	30.00%	GIS analysis maps and reports/slides about urban forms' management. Minimum grade required in each one: 4.0
Projects	50.00%	70.00%	Final report of the course, including the identification of urban forms and good practices for management. Minimum grade required: 4.0
<b>Total:</b>	<b>100.00%</b>	<b>100.00%</b>	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject, an ordinary and an extraordinary one (evaluating 100% of the competences).

#### Evaluation criteria for the final exam:

##### Continuous assessment:

The final grade of the course must be greater or equal to 5.0, and it will be obtained using the percentages assigned for the different activities included in the continuous evaluation system.

Unless stated otherwise, continuous evaluation criteria will be applied to all students.

Anyone choosing non-continuous assessment must follow the official process to inform about it. This option is only available if the student's participation in evaluation activities (from the continuous assessment) has not reached 50% of the total evaluation for the subject.

##### Non-continuous evaluation:

The final grade of the course must be greater or equal to 5.0, and it will be obtained using the percentages assigned for the different activities included in the non-continuous evaluation system.

In this case, the students must do the GIS analysis and reports in an autonomous way and present them in the final evaluation with the final report. In addition, they must include a section in the final report with the comparison with international case studies, as they probably do not attend the presentations and debates carried out during the course.

#### Specifications for the resit/retake exam:

Every student is evaluated in the same way than in the final exam assessment (for both continuous or non-continuous evaluation), considering the same weighting percentages for getting the final grade.

#### Specifications for the second resit / retake exam:

In this case, every student is evaluated using the same criteria and weighting percentages established in the non-continuous evaluation.

9. Assignments, course calendar and important dates	
Not related to the syllabus/contents	
<b>Hours</b>	<b>hours</b>
Writing of reports or projects [AUTÓNOMA][project-based learning]	18.75
<b>Unit 1 (de 2): Identification of urban forms. Management and desing problems</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	9
Project or Topic Presentations [PRESENCIAL][Debates]	4
Practicum and practical activities report writing or preparation [AUTÓNOMA][Individual presentation of projects and reports]	10
Writing of reports or projects [AUTÓNOMA][project-based learning]	20
<b>Unit 2 (de 2): GIS analysis of urban forms</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	9

Computer room practice [PRESENCIAL][Guided or supervised work]	9.5
Project or Topic Presentations [PRESENCIAL][Debates]	2.25
Practicum and practical activities report writing or preparation [AUTÓNOMA][Individual presentation of projects and reports]	10
Writing of reports or projects [AUTÓNOMA][project-based learning]	20
<b>Global activity</b>	
<b>Activities</b>	<b>hours</b>
Practicum and practical activities report writing or preparation [AUTÓNOMA][Individual presentation of projects and reports]	20
Writing of reports or projects [AUTÓNOMA][project-based learning]	58.75
Project or Topic Presentations [PRESENCIAL][Debates]	6.25
Class Attendance (theory) [PRESENCIAL][Lectures]	18
Computer room practice [PRESENCIAL][Guided or supervised work]	9.5
<b>Total horas: 112.5</b>	

10. Bibliography and Sources						
Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Barrionuevo Ferrer, Antonio	Sevilla: las formas de crecimiento y construcción de la ciudad	Universidad, Secretariado de Publicaciones		84-472-0796-X	2003	
Gutiérrez Puebla, Javier	SIG: Sistemas de Información Geográfica	Síntesis		84-7738-246-8	2008	
Haupt, P., Berghauser Pont, M.	Spacemate <a href="http://www.urban-knowledge.nl/3/spacemate-spacematrix?_language=en">http://www.urban-knowledge.nl/3/spacemate-spacematrix?_language=en</a>			978-90-407-2530-2	2005	
Kostof, Spiro	The city assembled: the elements of urban form through history	Thames & Hudson		0-500-28172-6	1999	
Kostof, Spiro	The city shaped: urban patterns and meanings through history	Bulfinch Press Book		0-8212-2016-0	1999	
Panerai, Philippe R.	Formas urbanas: de la manzana al bloque	Gustavo Gili		84-252-1291-X	1986	
Panerai, Philippe R.	Urban forms : the death and life of the urban block /	Architectural Press,		978-0-7506-5607-8	2004	
Rodríguez-Tarduchy, María José	Forma y ciudad : en los límites de la arquitectura y el urbanismo	Cinter Divulgación Técnica,		978-84-939305-0-9	2011	
Solà-Morales i Rubió, Manuel de	Las formas de crecimiento urbano	UPC		84-8301-197-2	2008	
VALENZUELA RUBIO, Manuel	Cascos históricos y dinámicas territoriales: el caso de las ciudades de Sevilla y Madrid	Colegio Universitario		84-600-5423-3	1988	
	Las formas de crecimiento					