

**1. General information****Course:** MANAGEMENT AND URBAN DESIGN OF FORMS**Type:** ELECTIVE**Degree:** 2343 - MASTERS DEGREE PROGRAMME IN ENGINEERING OF ROADS, CANALS AND PORTS**Center:** 603 - E.T.S. CIVIL ENGINEERS OF CR**Year:** 2**Main language:** English**Use of additional languages:****Web site:****Code:** 310819**ECTS credits:** 4.5**Academic year:** 2020-21**Group(s):** 20**Duration:** First semester**Second language:** Spanish**English Friendly:** N**Bilingual:** N**Lecturer:** JOSE MARIA CORONADO TORDESILLAS - Group(s): 20

Building/Office	Department	Phone number	Email	Office hours
ETSI Caminos/ 2-D47	INGENIERÍA CIVIL Y DE LA EDIFICACIÓN	926052404	josemaria.coronado@uclm.es	Se concretará al iniciar el curso en función de la disponibilidad de los alumnos. It will be fixed in the first week according to the students' calendar

**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	Se concretará al iniciar el curso en función de la disponibilidad de los alumnos. It will be fixed in the first week according to the students' calendar

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

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.

**6. Units / Contents****Unit 1: GIS analysis of the urban form****Unit 1.1** GIS data sources**Unit 1.2** Analysis of urban parameters, land use, street networks, etc. for the different urban forms**Unit 1.3** Network analysis and urban studies**Unit 2: Identification of urban forms. Management and desing problems****Unit 2.1** Historic City centres**Unit 2.2** XIXth century urban expansions (Ensanches)**Unit 2.3** Modern movement residential neighbourhoods

## Unit 2.4 Peripheral single family housing neighbourhoods

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	Y	N	
Class Attendance (practical) [ON-SITE]	Debates	G04 G14 ITUOT6 ITUOT7	0.35	8.75	Y	Y	
Computer room practice [ON-SITE]	Guided or supervised work	G04 G14 ITUOT6 ITUOT7	0.28	7	Y	Y	
Writing of reports or projects [OFF-SITE]	Case Studies	G04 G14 ITUOT6 ITUOT7	3.15	78.75	Y	Y	Short reports will be written about specific GIS analysis, management and desing problems in the different urban forms, comparing in some cases Spanish and international case studies.
<b>Total:</b>			<b>4.5</b>	<b>112.5</b>			
<b>Total credits of in-class work: 1.35</b>			<b>Total class time hours: 33.75</b>				
<b>Total credits of out of class work: 3.15</b>			<b>Total hours of out of class work: 78.75</b>				

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
Assessment of problem solving and/or case studies	20.00%	20.00%	GIS analysis maps and reports
Final test	30.00%	40.00%	Final report of the course
Oral presentations assessment	30.00%	40.00%	Final presentation of the GIS analysis and urban form management of the case study proposed
<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).

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][Case Studies]	8.75
<b>Unit 1 (de 2): GIS analysis of the urban form</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	9
Class Attendance (practical) [PRESENCIAL][Debates]	4
Computer room practice [PRESENCIAL][Guided or supervised work]	7
Writing of reports or projects [AUTÓNOMA][Case Studies]	35
Group 20:	
<b>Initial date:</b> 12/09/2018	<b>End date:</b> 17/10/2018
<b>Unit 2 (de 2): Identification of urban forms. Management and desing problems</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	9
Class Attendance (practical) [PRESENCIAL][Debates]	4.75
Writing of reports or projects [AUTÓNOMA][Case Studies]	35
Group 20:	
<b>Initial date:</b> 17/10/2018	<b>End date:</b> 28/11/2019
<b>Global activity</b>	
<b>Activities</b>	<b>hours</b>
Writing of reports or projects [AUTÓNOMA][Case Studies]	78.75
Class Attendance (theory) [PRESENCIAL][Lectures]	18
Class Attendance (practical) [PRESENCIAL][Debates]	8.75
Computer room practice [PRESENCIAL][Guided or supervised work]	7
<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	Universidad, Secretariado de		84-472-0796-X	2003	

Gutiérrez Puebla, Javier	construcción de la ciudad SIG: Sistemas de Información Geográfica	Publicaciones 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 formas de crecimiento	Colegio Universitario	84-600-5423-3	1988