

**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:** 2019-20**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

Lecturer: FRANCISCO JAVIER RODRIGUEZ LAZARO - Group(s): 20

Building/Office	Department	Phone number	Email	Office hours
ETSI Caminos, Canales y Puertos. Despacho 2 A48.	INGENIERÍA CIVIL Y DE LA EDIFICACIÓN	3268	fcojavier.rodriguez@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 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: 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: Management and desing problems of the different urban forms

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	R	Description
Class Attendance (theory) [ON-SITE]	Lectures	G04 G14 ITUOT6 ITUOT7	0.72	18	Y	N	Y	
Class Attendance (practical) [ON-SITE]	Debates	G04 G14 ITUOT6 ITUOT7	0.35	8.75	Y	Y	N	
Computer room practice [ON-SITE]	Guided or supervised work	G04 G14 ITUOT6 ITUOT7	0.28	7	Y	Y	Y	
Writing of reports or projects [OFF-SITE]	Case Studies	G04 G14 ITUOT6 ITUOT7	3.15	78.75	Y	Y	Y	Several short papers will be written about management and desing problems in the different urban forms, comparing Spanish and international cases.
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

R: Rescheduling training activity

8. Evaluation criteria and Grading System

Evaluation System	Grading System		Description
	Face-to-Face	Self-Study Student	
Assessment of active participation	20.00%	0.00%	Class participation
Assessment of problem solving and/or case studies	20.00%	0.00%	GIS analysis maps and reports
Final test	30.00%	0.00%	Final report of the course
Oral presentations assessment	30.00%	0.00%	Final presentation of the GIS analysis and urban form management of the case study proposed
Total:	100.00%	0.00%	

9. Assignments, course calendar and important dates

Not related to the syllabus/contents	
Hours	hours
Writing of reports or projects [AUTÓNOMA][Case Studies]	8.75
Unit 1 (de 2): GIS analysis of the urban form	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	9
Computer room practice [PRESENCIAL][Guided or supervised work]	7
Writing of reports or projects [AUTÓNOMA][Case Studies]	35
Group 20:	
Initial date: 12/09/2018	End date: 17/10/2018
Unit 2 (de 2): Management and desing problems of the different urban forms	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	9
Class Attendance (practical) [PRESENCIAL][Debates]	8.75
Writing of reports or projects [AUTÓNOMA][Case Studies]	35
Group 20:	
Initial date: 17/10/2018	End date: 28/11/2019
Global activity	
Activities	hours
Class Attendance (theory) [PRESENCIAL][Lectures]	18
Class Attendance (practical) [PRESENCIAL][Debates]	8.75
Computer room practice [PRESENCIAL][Guided or supervised work]	7
Writing of reports or projects [AUTÓNOMA][Case Studies]	78.75
Total horas: 112.5	

10. Bibliography and Sources

Publishing

Author(s)	Title/Link	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 http://www.urban-knowledge.nl/3/spacemate-spacematrix?_language=en			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	