

**1. General information****Course:** CONSTRUCTION II**Type:** CORE COURSE**Degree:** 378 - UNDERGRADUATE DEGREE PROGRAMME IN ARCHITECTURE**Center:** 606 - SCHOOL OF ARCHITECTURE OF TOLEDO**Year:** 3**Main language:** Spanish**Use of additional languages:****Web site:****Code:** 11314**ECTS credits:** 6**Academic year:** 2021-22**Group(s):** 40**Duration:** First semester**Second language:** English**English Friendly:** Y**Bilingual:** N**Lecturer:** IGNACIO ROMAN SANTIAGO - Group(s): 40

Building/Office	Department	Phone number	Email	Office hours
Edificio 21/despacho 1.22	INGENIERÍA CIVIL Y DE LA EDIFICACIÓN	925268800 ext. 5353	Ignacio.Roman@uclm.es	

**2. Pre-Requisites**

Not established

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

Not established

**4. Degree competences achieved in this course****Course competences**

Code	Description
E14	Ability to apply technical and constructive standards
E15	Ability to preserve building structures, foundations and civil works
E17	Ability to preserve the finished work
E19	Applied knowledge of the plastic, elastic and constructive qualities of heavy building materials
E20	Applied knowledge of the physical and chemical characteristics of building materials
E22	Applied knowledge of conventional construction systems and their pathology
E23	Applied knowledge of industrialized construction systems
E28	Applied knowledge of ecology, sustainability and the principles of conservation of energy and environmental resources
G01	Capacity for analysis and synthesis
G02	Organizational and planning skills
G03	Information management capacity
G04	Problem solving
G05	Decision making
G06	Critical thinking
G07	Working in a team
G08	Working in an interdisciplinary team
G12	Self-directed learning
G16	Creativity

**5. Objectives or Learning Outcomes****Course learning outcomes****Description**

To provide the student with the ability to calculate, design, integrate into buildings and urban complexes and to execute interior partitioning systems, carpentry, staircases and other finished works, as well as enclosure systems, roofing and other thick works.

To transmit to the student an adequate knowledge of conventional construction systems and their pathology, physical and chemical characteristics and production procedures, as well as to propose the study and research of new ways of thinking and facing construction in constant adaptation to the new techniques actively proposed by industry and the market.

**Additional outcomes****6. Units / Contents****Unit 1:****Unit 2:****Unit 3:****Unit 4:****Unit 5:****Unit 6:****Unit 7:****Unit 8:**

**Unit 9:**

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	E14 E15 E19 E20 E22	1	25	N	-	
Problem solving and/or case studies [ON-SITE]	Problem solving and exercises	G01 G02 G03 G04 G05 G06 G07 G08	1	25	Y	N	
Progress test [ON-SITE]		G07 G08	0.4	10	Y	N	
Writing of reports or projects [OFF-SITE]	Self-study	G01 G02 G03 G04 G05 G06 G07 G08 G12 G16	3.6	90	Y	Y	
<b>Total:</b>			<b>6</b>	<b>150</b>			
<b>Total credits of in-class work: 2.4</b>				<b>Total class time hours: 60</b>			
<b>Total credits of out of class work: 3.6</b>				<b>Total hours of out of class work: 90</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 problem solving and/or case studies	75.00%	0.00%	
Progress Tests	25.00%	0.00%	
Final test	0.00%	100.00%	
<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	
Hours	hours
Writing of reports or projects [AUTÓNOMA][Self-study]	30
Unit 1 (de 9):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	4
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	4
Writing of reports or projects [AUTÓNOMA][Self-study]	12
Unit 2 (de 9):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	4
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	4
Writing of reports or projects [AUTÓNOMA][Self-study]	8
Unit 3 (de 9):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	9
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	9
Writing of reports or projects [AUTÓNOMA][Self-study]	16
Unit 4 (de 9):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	2
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
Writing of reports or projects [AUTÓNOMA][Self-study]	5
Unit 5 (de 9):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	4
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	4
Writing of reports or projects [AUTÓNOMA][Self-study]	8
Unit 6 (de 9):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	4
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	4
Writing of reports or projects [AUTÓNOMA][Self-study]	6
Unit 8 (de 9):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	3

Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	3
Writing of reports or projects [AUTÓNOMA][Self-study]	5
<b>Global activity</b>	
<b>Activities</b>	<b>hours</b>
Writing of reports or projects [AUTÓNOMA][Self-study]	90
Class Attendance (theory) [PRESENCIAL][Lectures]	30
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	30
<b>Total horas: 150</b>	

10. Bibliography and Sources						
Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Hardingham, Samantha	Price: Cedric Price Works 1952-2003: A Forward- Minded Retrospective	AA PUBLICATIONS. ARCHITECTURAL ASSOCIATION		X-00208388	2016	
Hart. Henn. Sontag	El Atlas de la Construcción Metálica	GG		84-252-0611-1		
Kenneth Powel	Richard Rogers: Architecture of the Future	Birkhauser		13-978-3-7643-7351-1	2004	
Nerdinger, Winfried.	OTTO: FREI OTTO. THE COMPLETE WORKS. LIGHTWEIGHT CONSTRUCTION. NATURAL DESIGN	BIRKHAUSER VERLAG AG		978-3-7643-7231-6	2005	
Andrea Deplazes (Ed.)	Construir la arquitectura. Del material en bruto al edificio	Gustavo Gili, SL			2010	
Barbara Lamprecht, Julius Shulman, Peter Gössel	Neutra, Complete Works	Taschen GmbH		978-3-8365-1244-2		
Benevolo, Leonardo	Historia de la arquitectura moderna	Gustavo Gili			1987	
Berger, John	Mirar	Gustavo Gili, SL		978-84-252-1729	2001	
Berger, John	Modos de ver			978-84-252-2892-6	1972	
Blaser, Werner	Mies van der Rohe : the art of structure = Die Kunst der Str Whitney	Library of Design		0-8230-3064-4	1994	
Giedion, S	Espacio, Tiempo y Arquitectura;	Reverté			2009	
Hart, Henn, Sontag	El atlas de la construccion metálica	Gustavo Gili, SL	Barcelona	8425206111	1976	
Hays, Miller	Buckminster Fuller: Starting with the Universe	Whitney Museum of American Art			2008	
Heinrich Schmitt, Andreas Heene	Tratado de Construcción	Gustavo Gili, SL		978-84-252-1729	2006	
Heyman, Jacques	Análisis de estructuras : un estudio histórico	Instituto Juan de Herrera		84-9728-112-8	2004	
Jackson, Neil	The Modern Steel House	Routeledge		978-0-419-21720-6	1996	
Kaplan, Wendy	California Design 1930-1965. Living in a modern way.	Mit Press		978-0-262-01607-0	2012	
Kieren, Martin	Hannes Meyer	Arthur Niggli		978-3-7212-0224-3	2007	
Meyer Boake, Terri	Architectural Exposed Structural Steel: Specifications, conexions, details	Birkhauser Verlag AG		978-3-03-821574-5	2015	
Murcutt, Glenn	Murcutt: Thinking Drawing/ Working Working/ Drawing	Toto Shuppan		978-4-88706-294-8	2012	
Pevsner, Nikolaus	Pioneros del diseño moderno : de William Morris a Walter Gropius	Infinito		987-9393-03-1	2003	
Rainer Graefe	Vladimir G. Suchov 1853-1939. Die Kunst der sparsamen Konstruktion."	Deutsche Verlags-Anstalt		ISBN 3-421-02984-9.	1990	
Roy Chudley, Roger Greeno	Manual de construcción de edificios	Gustavo Gili, SL			2008	
Smith, Elizabeth A.T. - Shulman, Julius - Goessel, Peter	Case Study Houses ,	Taschen GmbH		ISBN 978-3-8365-1021	2002	
Sota, Alejandro de la	Alejandro de la Sota	Pronaos SA		978-84-85941-25-4	1997	
Sulzer, Peter	Jean Prouve Complete Works- Volume 1,2,3 y 4	Birkhauser Verlag AG		978-3-7643-2472-8	2008	
Sáenz de Oiza, FCº Javier	Banco de Bilbao.	ETSAM, Departamento de Proyectos				
Wachsmann, Konrad	The turning point of building: structure and design	New York, Reinhold Pub. Corp.			1961	
varios	Acero (I) y (II) Monografías de arquitectura, tecnología y construcción	Gustavo Gili, SL				
Arne Petter Eggen, Bjorn Sandaker Normann	Steel, Structure, and architecture	Phaidon Press		0-8230-5020-3	1995	

Bürklin, Thorsten; Reichardt, Jürgen	Albert Kahn's Industrial Architecture. Form Follows Performance	Birkhäuser	978-3035618099	2019
	PROUVÉ: EL UNIVERSO DE JEAN PROUVÉ. ARQUITECTURA / INDUSTRIA / MOBILIARIO	FUNDACION LA CAIXA	978-84-9900-292-7	2021