



Teaching Guide

Identifying Data				
Subject (*)			Using Technology for Architectural Research	Code
Study programme			Máster Universitario en Rehabilitación Arquitectónica (a distancia)	630548005d
Descriptors				
Cycle	Period	Year	Type	Credits
Official Master's Degree	1st four-month period	First	Optional	3
Language	Spanish			
Teaching method	Non-attendance			
Prerequisites				
Department	Construcións e Estruturas Arquitectónicas, Cívicas e AeronáuticasEnxeñaría CivilExpresión Gráfica ArquitectónicaMatemáticasProxectos Arquitectónicos, Urbanismo e Composición			
Coordinador	Fernandez Cobian, Esteban		E-mail	esteban.fcobian@udc.es
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General description	<p>The aim of this subject is to introduce the student to the methodologies of technological research in Architecture. Spanish Faculties of Architecture have three areas that have this consideration: Building, Structures and Technical Services. Each of them uses specific resources that should be known.</p> <p>The subject has introductory sessions about what architectural research consists of, and specific sessions, in which a number of researchers working in these areas will show their experiences, with special emphasis in methodologies and results obtained.</p> <p>Additionally, the group will have visits to the University of A Coruña laboratories, available to its researchers in technological areas.</p>			

Study programme competences / results

Code	Study programme competences / results
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Learning outcomes

Learning outcomes	Study programme competences / results		
La adquisición por el alumno de dominio suficiente en las competencias que se ejercitan en este módulo	AJ11 AJ11 AJ11 AJ11	BJ7 BJ7 BJ7	
CM6 Critically assess the knowledge, technology and information available to solve the problems they must face, as well as discovering the limits of knowledge in the area of technology in architecture, to propose research that will advance it.	AJ11 AJ11 AJ11 AJ11 AJ11 AJ11	BJ7 BJ7 BJ7	CJ16 CJ16 CJ16 CJ16 CJ16 CJ16 CJ16 CJ16 CJ16 CJ16 CJ16 CJ16



Contents	
Topic	Sub-topic
1. Technological research in Architecture	Initial approaches The doctoral thesis Conferences Scientific journals
2. Technological research in Architecture	Bibliographic resources Online resources
3. Research in Architectural Structures	General framework Recent research
4. Research in Building	General framework Recent research
5. Research in Technical Systems	General framework Recent research
7. Center for Technological Innovation in Building and Civil Engineering (CITEEC)	Visit to the different departments

Planning				
Methodologies / tests	Competencies / Results	Teaching hours (in-person & virtual)	Student's personal work hours	Total hours
Guest lecture / keynote speech	A1 A2 B1	6	0	6
Case study	A3 A8	15	0	15
Supervised projects	A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 B1 B2 B3 B4 B5 B6 C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15	0	52	52
Personalized attention		2	0	2
(*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.				

Methodologies	
Methodologies	Description
Guest lecture / keynote speech	This subject needs to transmit knowledge, define concepts and explore a reality - the scientific one - that is novel to university students with eminently technical and artistic training. In the magisterial sessions it is sought to fill this gap.
Case study	The matter would be raised only in a theoretical way if students were not familiarized with the documents that make up the doctoral thesis, with the methods to follow in the formalization of research projects, and above all, with specific research. The case study is intended to complement the theoretical knowledge already explained with practical cases.
Supervised projects	Approach by the student of an original research work, as a technological doctoral thesis project that could be developed at the UDC School of Architecture.

Personalized attention	
Methodologies	Description
Supervised projects	Guest lecture / keynote speech and Case studies. Efforts will be made to involve each student in the theoretical explanations, promoting participation.
Guest lecture / keynote speech	Supervised projects. The practical exercise will be supervised from the beginning, with previously established periodic corrections.



Assessment			
Methodologies	Competencies / Results	Description	Qualification
Supervised projects	A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 B1 B2 B3 B4 B5 B6 C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15	The adaptation of the exercise to the usual scientific standards will be assessed, with special attention to the correctness of the dating system used.	90
Guest lecture / keynote speech	A1 A2 B1	Given the face-to-face nature of the MURA, in this matter an attendance of no less than 80% is required relative to the totality of the scheduled face-to-face sessions.	10

Assessment comments
<p>The general requirement of attendance will not have effect for students who have recognized a part-time dedication according to the norm that regulates the regime of dedication to study and the permanence and progression of undergraduate and master's students at the UDC.</p> <p>The monitoring of the course and authorship of works will be verified with the fulfillment of obligatory tutorials.</p> <p>If a student copies any exercise to another, it will be considered suspended in the nearest call.</p>

Sources of information	
Basic	
Complementary	Barrientos Loayza, P. 2012. Cómo escribir un paper. Orientaciones y consejos.Chinneck, J. W. 2006. How to organize your thesis?Schwanitz, D. 2007. La nota a pie de página.The Chicago Manual of Style Online, 17 edition.

Recommendations
Subjects that it is recommended to have taken before
Subjects that are recommended to be taken simultaneously
Architectural Research and Documentation Techniques/630548004
Subjects that continue the syllabus
Other comments
<p>This subject serves as a training complement to the ETSAC "Architecture and Urbanism" doctorate program.</p>

(*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.