Teaching Guide				
Identifying Data				2023/24
Subject (*)	Construction 7		Code	630G02045
Study programme	Grao en Estudos de Arquitectura			
Descriptors				
Cycle	Period	Year	Type	Credits
Graduate	1st four-month period	Fifth	Obligatory	4.5
Language	Spanish			
Teaching method	Face-to-face			
Prerequisites				
Department	ConstrucIóns ArquitectónicasConstrucIóns e Estruturas Arquitectónicas, Civís e AeronáuticasEnxeñaría CivilExpresión Gráfica ArquitectónicaMatemáticasProxectos Arquitectónicos, Urbanismo e Composición			
Coordinador	Quintáns Eiras, Carlos Luis	E-mail	carlos.quintans@udc.es	
Lecturers	Quintáns Eiras, Carlos Luis Seoane González, José Carlos	E-mail	carlos.quintans@udc.es carlos.seoane@udc.es	
Web				
General description	-The relation between the different parts of the building as generators of its design. -The terrain and its implications in the design. -Relation between roof and facade. -Relation between enclosure and structure. -Systems and structure. -Systems and enclosures. -Water and building. -The hollow. -High buildings. -Structures of large spans. -Systematization and Construction			

Study programme competences / results	
Code	Study programme competences / results
A12	Ability to conceive, calculate, design, integrate in buildings and urban units and execute building structures (T)
A17	Ability to apply technical and construction standards and regulations
A25	Adequate knowledge of conventional construction systems and pathology
A26	Adequate knowledge of the physical and chemical characteristics, production procedures, pathology and use of building materials
A27	Adequate knowledge of industrialized building systems
A31	Knowledge of methods of measurement, assessment and expert´s report
A32	Knowledge of the project of health and safety at the construction site
A63	Development, presentation and public review before a university jury of an original academic work individually elaborated and linked to any of the subjects previously studied
B9	Understanding the problems of the structural design, construction and engineering associated with building design and technical solutions
B10	Knowing the physical problems, various technologies and function of buildings so as to provide them with internal conditions of comfort and protection against the climate factors in the context of sustainable development
B11	"Knowing the industries, organizations, regulations and procedures involved in translating design concepts into buildings and integrating plans into planning "
B12	Understanding the relationship between people and buildings and between these and their environment, and the need to relate buildings and the spaces between them according to the needs and human scale
C1	Adequate oral and written expression in the official languages.
C3	Using ICT in working contexts and lifelong learning.
C4	Exercising an open, educated, critical, committed, democratic and caring citizenship, being able to analyse facts, diagnose problems, formulate and implement solutions based on knowledge and solutions for the common good

C5	Understanding the importance of entrepreneurial culture and the useful means for enterprising people.
C6	Critically evaluate the knowledge, technology and information available to solve the problems they must face
C7	Assuming as professionals and citizens the importance of learning throughout life
C8	Valuing the importance of research, innovation and technological development for the socioeconomic and cultural progress of society.

Learning outcomes			
Learning outcomes	Study programme competences / results		
Knowledge of the technical codes related to the specific type of building	A12 A17 A25 A26 A27 A31 A32		
Ability to analyze, identify, assess, and prioritize situations of a physical, psychological and environmental nature that must be resolved with the construction design	A12 A25 A26		
Integrating design capacity to achieve the compatible coexistence of each one of the different construction systems	A12 A17 A25 A26 A27 A63	B9 B10 B11 B12	C1 C3 C4 C5 C6 C7 C8

Contents	
Topic	Sub-topic
-The relation between the different parts of the building as generators of the design. -The terrain, implications in the design. -Relations between roof and facade. -Relations between enclosure and structure. -Systems and structure. -Systems and enclosures or partitions. -Water and building. -The hollow. -High buildings. -Structures of large spans. -Systematization in construction	

Planning				
Methodologies / tests	Competencies / Results	Teaching hours (in-person & virtual)	Student?s personal work hours	Total hours
Guest lecture / keynote speech	A12 A17 A25 A26 A27 A31	15	15	30
Workbook	A12 A17	0	10	10

Workshop	A12 A17 A25 A26 A27 A31 A32 A63 B9 B10 B11 B12 C1 C3 C4 C5 C6 C7 C8	0	60	60
Supervised projects	A12 A17 A25 A26 A27	0	11.5	11.5
Personalized attention		1	0	1
(*)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	Theoretical-practical explanation of the basic concepts that affect the coherence of the materials and systems used, of their adequacy and that affect the design, execution and maintenance of the constructions.
Workbook	Readings. The students will read the books, articles and documentation indicated by the professors. To be able to have a record of the readings, students will have to present the requested exercise due in time and form.
Workshop	The Workshop is a space for the student to work and exchange conceived to facilitate the confluence of the different areas related to Architecture, guaranteeing the optimization of teaching resources and rationalizing the student's work. The Workshop aims to establish mechanisms of coordination and transversality throughout the studies, avoiding duplication and reiteration in the requirements. The realization of exercises, as the basis of teaching, in which the student finds an immediate identification between the conception of the design and its materialization, applying the knowledge of the lectures and readings. Partial deliveries are mandatory. Individualized teaching in practical classes. The control of the exercises is done personally with corrections and by means of the presentation of students' work in front the class, to be able to generate also a debate around them. This course -C7- has 3 credits in the total of the Workshop for the 10th quarter.
Supervised projects	The supervised works seek to verify the application of the knowledge acquired in the course and the acquired skills.

Personalized attention	
Methodologies	**Description**
Supervised projects Workshop Guest lecture / keynote speech	The workshop and the tutored work will have personalized attention from the professor for its development by the student in open sessions with the classmates. The master sessions and exercises will have personalized attention from the professor to explain concepts and to resolve questions in tutorials.

Assessment			
Methodologies	**Competencies / Results**	**Description**	**Qualification**
Supervised projects	A12 A17 A25 A26 A27	Supervised exercise	20
Workshop	A12 A17 A25 A26 A27 A31 A32 A63 B9 B10 B11 B12 C1 C3 C4 C5 C6 C7 C8	It is a critical exercise to evaluate the student's capacity for the construction detailing, with the necessary conditions of suitability, adequacy and coherence.	70
Guest lecture / keynote speech	A12 A17 A25 A26 A27 A31	An independent exercise will have to be developed to complete the supervised exercises	10
Others			

Assessment comments

The Continuous Assessment method will be used, which assumes that class attendance will be controlled,and that part of the grade is indicated on the attitude and work of the student during the semester; but it must be completed also with theoretical-practical, conferences, tests to verify that the student assimilated the conceptual and procedural contents of the course. Carrying out and individual presentation of the proposed exercises. Carrying out teamwork and its presentation and individual
and / or team defense. The written tests throughout the course, which will consist of questions related to both the theoretical part and the exercises carried out during the course. Practices developed in class and those carried out under continuous tutoring. Any other activity that is defined in the Teaching Guide of the course, the student's work will be graded in different percentage: theoretical knowledge will be counted like 20% + supervised work10% of the final grade, while practical exercises will suppose the remaining 70%. In any case, the grade of the practical part of the course must be graded at least with a minimum of 5 out of 10 in order to be able to grade the course with a pass. The final grade of the student´s work will be taking in account the delivers of the practical part of the course and a single final test, in which the theoretical and practical knowledge will be measured by the professor.
The evaluation criteria of the first and second opportunity are identical, they will have the same coefficients and the same minimum grade requirement as those indicated for the First Chance. The definition of the minimum requirements, schedule of deliveries, as well as the rest of the details, will be defined with more detail with the course schedule that is delivered at the beginning of the semester. The intermediate pass grades will be kept for the second opportunity, in which the students should complete those parts that were not graded with a pass, part of the course. Teaching to students that are part of mobility programs is adapted to the pedagogical conditions and special supervised exercises, as well as the different tests and exams.
FIRST CHANCE: To be able to pass the practical part of the course.
-Classroom Practice and Shared Workshop Practice- students must make all the scheduled deliveries on time throughout the course. The total non-presentation of the exercises will suppose the qualification of NO-ATTEND. It is mandatory to attend the in-person
test. It is necessary to obtain at least a grade of 5 out of 10. A minimum attendance of 80% will be required to be able to attend the Classroom Practice part and the Shared Workshop Practice part of the course.
SECOND CHANCE: If the student does not pass the course at the first opportunity, he/she will present the same work required at the first opportunity on a scheduled date, making the corrections indicated by the professor and attending also the in-person test. All the parts will be assessed with the same coefficient for the final grade as has been defined for the first opportunity test.

Sources of information	
Basic	
Complementary	

Recommendations
Subjects that it is recommended to have taken before
Construction 6/630G01037 Facilities 2/630G01039 Projects 9/630G01041
Subjects that are recommended to be taken simultaneously
Projects 10/630G01044
Subjects that continue the syllabus
Other comments
The student is supposed to possess the knowledge of the previous Construction subjects, in order to address the passing of this subject. According to the documentation of the ETSAC Architect's Degree: "Students will have to simultaneously take all the subjects of the Workshop, so if it is the first time they enroll in subjects of a workshop they will have to do it in all the subjects of the same. Students will have to take prior to or simultaneously with a workshop all the subjects linked to previous workshops that they have not completely passed.