



**Teaching Guide**

Identifying Data					2023/24
<b>Subject (*)</b>	Technical Projects I	<b>Code</b>	670G01124		
<b>Study programme</b>	Grao en Arquitectura Técnica				
Descriptors					
<b>Cycle</b>	<b>Period</b>	<b>Year</b>	<b>Type</b>	<b>Credits</b>	
Graduate	1st four-month period	Third	Obligatory	6	
<b>Language</b>	Spanish				
<b>Teaching method</b>	Face-to-face				
<b>Prerequisites</b>					
<b>Department</b>	Expresión Gráfica Arquitectónica				
<b>Coordinador</b>	Gonzalez Sarceda, Manuel	<b>E-mail</b>	manuel.gsarceda@udc.es		
<b>Lecturers</b>	Gonzalez Sarceda, Manuel Perez Doval, Luis	<b>E-mail</b>	manuel.gsarceda@udc.es luis.pdoval@udc.es		
<b>Web</b>					
<b>General description</b>	<p>IT HAS TO HAVE THE CONCEPTUAL BASIC NOTIONS ABOUT THE DESIGN, BY WHAT THE STUDENT WILL FORM IN METHODOLOGIES TO BE ABLE TO FACE UP TO DESIGNS OF EDIFICACIÓN, SO MUCH OF REHABILITATION AS OF NEW CONSTRUCTIONS, PURCHASING THE CAPACITY TO DRAFT, ANALYSE, CONTROL, MANAGE AND DEVELOP TECHNICAL PROJECTS IN THE FIELD OF THE EDIFICACIÓN. STUDY OF THE ANTECEDENTS AND THE NEEDS OF PLANNING OF THE DESIGN IN THE REHABILITATION. RELATIVE KNOWLEDGES TO THE TAKING OF DATA AND PREVIOUS PLANNING. CAPACITY FOR THE ESTABLISHMENT OF A METHODOLOGICAL PROCESS IN THE REALISATION OF THE PROJECT. KNOWLEDGE OF THE BASIC ELEMENTS OF THE DESIGN, HIS FORM AND HIS IMPORTANCE IN THE PHYSICAL SPACE. CAPACITY TO REALISE PROJECTS OF REHABILITATION OR RESTORATION ATTENDING SO MUCH TO HIS FORMAL APPEARANCE, FUNCTIONAL OR TO HIS EXECUTION. ASSESSMENT OF TIME AND METHODS OF EXECUTION. CAPACITY FOR THE REALISATION OF A PROJECT OF FEASIBILITY WITH EXCELLENT RESULT.</p>				

**Study programme competences**

Code	Study programme competences
A61	A3.6 Ability to analyse and create building evacuation plans.
A74	A6.1 Ability to use advanced tools to meet and manage technical plan elements.
A75	A6.2 Ability to draft technical plans for work and building that do not require architectural plans, and for demolition and decoration works.
A76	A6.3 Ability to draft documents related to multidisciplinary construction projects.
A77	A6.4 Ability to analyse and implement construction plans.
A78	A6.5 Ability to analyse, design and implement solutions to create universal access to buildings and their external environment.
B31	B1 Students will demonstrate knowledge and understanding of subjects that build upon the foundation of a general secondary education using advanced textbooks and ideas and analyses from the cutting edge of their field.
B32	B2 Students will be able to use their knowledge professionally and will possess the skills required to formulate and defend arguments and solve problems within their area of study.
B33	B3 Students will have the ability to gather and interpret relevant data (especially within their field of study) in order to make decisions and reflect on social, scientific and ethical matters.
B34	B4 Students will be able to communicate information, ideas, problems and solutions to specialist and non-specialist audiences alike.
B35	B5 Students will develop the learning skills and autonomy they need to continue their studies at postgraduate level.
C1	Adequate oral and written expression in the official languages.
C3	Using ICT in working contexts and lifelong learning.
C4	Acting as a respectful citizen according to democratic cultures and human rights and with a gender perspective.
C5	Understanding the importance of entrepreneurial culture and the useful means for enterprising people.
C6	Acquiring skills for healthy lifestyles, and healthy habits and routines.
C7	Developing the ability to work in interdisciplinary or transdisciplinary teams in order to offer proposals that can contribute to a sustainable environmental, economic, political and social development.



C8	Valuing the importance of research, innovation and technological development for the socioeconomic and cultural progress of society.
C9	Ability to manage times and resources: developing plans, prioritizing activities, identifying critical points, establishing goals and accomplishing them.

Learning outcomes			
Learning outcomes		Study programme competences	
Ability to analyse and create building evacuation plans.	A61		
Ability to use advanced tools to meet and manage technical plan elements.	A74		
Ability to draft technical plans for work and building that do not require architectural plans, and for demolition and decoration works.	A75		
Ability to draft documents related to multidisciplinary construction projects.	A76		
Ability to analyse and implement construction plans.	A77		
Ability to analyse, design and implement solutions to create universal access to buildings and their external environment.	A78		
Students will demonstrate knowledge and understanding of subjects that build upon the foundation of a general secondary education using advanced textbooks and ideas and analyses from the cutting edge of their field.		B31	
Students will be able to use their knowledge professionally and will possess the skills required to formulate and defend arguments and solve problems within their area of study.		B32	
Students will have the ability to gather and interpret relevant data (especially within their field of study) in order to make decisions and reflect on social, scientific and ethical matters.		B33	
Students will be able to communicate information, ideas, problems and solutions to specialist and non-specialist audiences alike.		B34	
Students will develop the learning skills and autonomy they need to continue their studies at postgraduate level.		B35	
Adequate oral and written expression in the official languages.			C1
Using ICT in working contexts and lifelong learning.			C3
Acting as a respectful citizen according to democratic cultures and human rights and with a gender perspective.			C4
Understanding the importance of entrepreneurial culture and the useful means for enterprising people.			C5
Acquiring skills for healthy lifestyles, and healthy habits and routines.			C6
Developing the ability to work in interdisciplinary or transdisciplinary teams in order to offer proposals that can contribute to a sustainable environmental, economic, political and social development.			C7
Valuing the importance of research, innovation and technological development for the socioeconomic and cultural progress of society.			C8
Ability to manage times and resources: developing plans, prioritizing activities, identifying critical points, establishing goals and accomplishing them.			C9

Contents	
Topic	Sub-topic
Introduction	Development of the asignatura, length ,assistance, assessment and material
Project	Definition of the project, the parts of the manufacture of one project, the project of edificación. Definition and parts of the even.
Tools of a diseño	The point; Línea; Angles and flat figures; Volúmenes; Colores; The vertical and horizontal and the meaning of all estos elements in the symbolic plane.
The basic plane and the importance of the handle of this flat	Basic plane and disposal of points of maximum and minimum tension. The diseño graphic. Application of the basic flat method.
Methodology to project	Zones, subzonas, areas and interrelación between areas and zones. Knowledge of the space and of the object that occupy it. Project areas of the building, bedroom, be, kitchen, bathroom, etc.
Project of feasibility	Development of one project of rehabilitaci3n stop a client of a building cataloged of the Coruña. Practical case.



Planning				
Methodologies / tests	Competencies	Ordinary class hours	Student?s personal work hours	Total hours
Document analysis	A74 B31 B32 B33 C3 C6 C7 C8 C9	0	30	30
Laboratory practice	A61 A77 A78 B32 B33 B34 C1 C3 C6 C7 C9	28	20	48
Problem solving	A61 A75 A76 A77 A78 B31 B32 B33 B34 B35 C1 C4 C5 C6 C7 C9	4	0	4
Supervised projects	A61 A74 A75 A76 A77 A78 B32 B33 B34 C1 C3 C6 C7 C9	14	40	54
Student portfolio	A74 A76 A77 B32 C1 C6 C9	4	0	4
Guest lecture / keynote speech	A74 B33 C4 C6 C9	8	0	8
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
Document analysis	UTILIZATION OF THE CORRESPONDING BIBLIOGRAPHY.
Laboratory practice	THEY WILL SERVE THESE PRACTICES TO DO CORRECTIONS DOS EXERCISES.
Problem solving	THEY WILL DO PUBLICLY IN TIME PRESENCIAIS WHERE ALL WILL BE ABLE TO TAKE PART GIVING HIS POINT OF VIEW OF THE SOLUTION.
Supervised projects	SPLIT DOS EXERCISES WILL BE PLANTEADOS AND RESOLVED IN SCHEDULE NO PRESENCIAL WITH THE CORRESPONDING DISCUSSION AND CORRECTION SAME DOS IN TIME PRESENCIAL.
Student portfolio	THEY WILL GO SAVING ALL THE WORKS OF THE STUDENT IN A CARPETA THAT HE EVEN SAYS IN THE BEGINNING OF THE COURSE. THEY WILL HAVE PERSONAL SESSIONS WITH THE STUDENTS IN TITORWENT SO THAT THEY DO AUTOCORRECCIÓNS DOS WORKS.
Guest lecture / keynote speech	WEEKLY BEFORE THEY EXPOSE THE PRACTICAL EXERCISES, WILL DO AN ORAL EXHIBITION AND IN THE PIZARFROG DOS CONTENTS BY PART OF THE PROFESSOR THAT WILL TREAT OF ARE AFRAID GOES TO BOARD IN PRACTICE.

Personalized attention	
Methodologies	Description
Student portfolio	<p>THEY WILL GO SAVING ALL THE WORKS OF THE STUDENT IN A FOLDER, THAT THE SAME DESIGNED TO THE BEGINNING OF THE COURSE. THEY WILL HAVE SESSIONS WITH THE STUDENTS IN TITORWENT, SO THAT THEY DO AUTOCORRECCIÓNS OF THE WORKS.</p> <p>The "Alumnado with recognition of dedication part time and dispenses academician of exemption of assistance", will have to put in knowledge of the corresponding professor, said circumstance, to be able to concretise the development of this activity as it consider more suitable.</p>

Assessment			
Methodologies	Competencies	Description	Qualification



Problem solving	A61 A75 A76 A77 A78 B31 B32 B33 B34 B35 C1 C4 C5 C6 C7 C9	Problem solving will be done in the classroom with all students who must be take part to reach solutions from their own point of view.	13
Document analysis	A74 B31 B32 B33 C3 C6 C7 C8 C9	Use of the corresponding bibliography.	2
Supervised projects	A61 A74 A75 A76 A77 A78 B32 B33 B34 C1 C3 C6 C7 C9	Part of the exercises can be solved out of the classroom timetable but discussed and corrected into the classroom timetable.	30
Student portfolio	A74 A76 A77 B32 C1 C6 C9	All the student's works will be saved into a folder designed by themselves at the course start. Students can get personal attention in tutorial hours to do self-correction of their works.	2
Guest lecture / keynote speech	A74 B33 C4 C6 C9	Weekly, the professor will explain the topics of the practical work to be developed by the students and after this, the students will expose the works developed along the week before.	2
Laboratory practice	A61 A77 A78 B32 B33 B34 C1 C3 C6 C7 C9	This practices will be to do corrections on the student works.	51

#### Assessment comments

For the evaluation of the asignatura demands an assistance regulate so much to the classes expositivas as to the interactive, with a minimum of 80% of assistance in each one of them. The teaching of the asignatura of Technical Projects I bases in a methodology of Learning Based in Projects (ABP), subjects to a system of continuous evaluation. 1.- The qualification of the students has a definite support in the practices and works tutelados of the same, with the percentages of assessment, distinct, that establish in the previous criteria of evaluation. 2.- The practices and works tutelados delivered, all and all they compulsory, have distinct character: To.- Entregables evaluables (Around the eight practices). B.- Selective (a practice). 3.- The last practice, composed of two parts, a proyectiva and another valorativa, having to surpass the two; and the final result does average with the others practise of the course. To surpass the asignatura, by course will owe to fulfil the following condition: 1.-Have been delivered all the practices and individual works and each one/or of them/will have to have you been considered/or how apt/or. This criterion also is applicable so much to the First how to the Second Opportunity: The students that do not surpass the asignatura by course will have to deliver the corresponding works in the date fixed for the First Opportunity of evaluation (JANUARY) or, in his case, in the date fixed for the Second Opportunity of evaluation (JUNE-JULIO). In these deliveries will have to follow obligatoriamente the indications, fixed in the tutorías corresponding, of the responsible professor of the matter. IMPORTANT: it will have the condition of NO PRESENTED the student that find in any of the following circumstances: - Not fulfilling with the minimum of assistance demanded. - Not delivering any of the works proposed. It will not allow complete or modify the works out of the dates of distinguished delivery.

#### Sources of information



<b>Basic</b>	<ul style="list-style-type: none"><li>- WUCIUS WONG (). FUNDAMENTOS DEL DISEÑO BIDIMENSIONAL Y TRIDIMENSIONAL.</li><li>- BRUNO MUNARI (). DISEÑO Y COMUNICACIÓN VISUAL. CONTRIBUCIÓN A UNA METODOLOGÍA DIDÁCTICA..</li> <li>- JONES CHRISTOPHER. (). MÉTODOS DE DISEÑO.</li><li>- FRANCIS D.K. CHING (). ARQUITECTURA: FORMA, ESPACIO Y ORDEN. .</li><li>- FRANCIS D.K. CHING Y STEVEN P. JOROSZEK (). DIBUJO Y PROYECTO..</li><li>- ERNST NEUFERT (). ARTE DE PROYECTAR EN ARQUITECTURA.</li><li>- FRANCISCO DE GRACIA (). CONSTRUIR EN LO CONSTRUIDO: LA ARQUITECTURA COMO MODIFICACIÓN.</li><li>- PÉREZ GUERRA (). DICTÁMENES Y ESTUDIOS DE DERECHO URBANO. EDITORIAL MONTE CORVO</li><li>- GALLEGO ANABITARTE (). LEY DEL SUELO. EDITORIAL I.F.I.</li><li>- GONZÁLEZ PÉREZ, J. (). COMENTARIOS A LA LEY DEL SUELO. EDITORIAL CIVITAS</li><li>- FERNÁNDEZ ALBA (). IDEOLOGÍA Y ENSEÑANZA DE LA ARQUITECTURA EN ESPAÑA. EDITORIAL TUCAR</li><li>- GONZÁLEZ VELAYOS, E. (). BREVE HISTORIA DE UNA LARGA PROFESIÓN. EDITORIAL C.G.C.C.O.O.A.</li><li>- RUÍZ SERRA, R. (). RÉGIMEN DE FINCAS RUINOSAS.. EDITORIAL M.O.P.U.</li><li>- RUDOLF PRENZEL (). DISEÑO Y TÉCNICA DE LA REPRESENTACIÓN EN ARQUITECTURA.. ED. GUSTAVO GILI</li><li>- K.D. PORTMAN (). SIGNOS Y SÍMBOLOS DE LOS DISEÑOS DE LA CONSTRUCCIÓN.. ED. GUSTAVO GILI</li><li>- HENRICH SCHMITT (). TRATADO DE LA CONSTRUCCIÓN.. ED. GUSTAVO GILI</li><li>- Panero, J. (1983). Las dimensiones humanas en los espacios interiores estándares antropométricos. Barcelona. Ed. Gustavo Gili</li></ul>
<b>Complementary</b>	

## Recommendations

### Subjects that it is recommended to have taken before

Building Facilities II/670G01123  
Construction II/670G01115  
Architectural Graphic Expression II/670G01117  
Topography and Setting out/670G01119  
Construction Materials I/670G01105  
Construction I/670G01106  
Building Facilities I/670G01112  
Construction Materials II/670G01113  
Descriptive and Representation Geometry/670G01102  
Digital Graphic Tools for Building/670G01109  
Architectural Graphic Expression I/670G01103

### Subjects that are recommended to be taken simultaneously

Building Facilities III and Urban Facilities/670G01132  
Construction III/670G01122  
Construction Materials III/670G01118

### Subjects that continue the syllabus

Interior Design, Gardening and Landscaping/670G01135  
Technical Projects II/670G01128  
Degree Final Project /670G01140

### Other comments

NOTE: For the correct follow-up and aprovechamiento of the matter considers convenient the knowledge and handle of computer programs of design assisted (AutoCAD, ArchiCad, Revit, SketchUP, etc.), as well as of computer programs of character ofimático (processing of texts, leaves of calculation, management of PDFs, treatment of images, presentations, etc.). It recommends attend to the interactive classes (Workshop of Technical Projects I) provistos of a portable computer with access to Internet.



(\*)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.