INFORMATION ON THE DEGREE COURSE:

DEGREE IN ARCHITECTURE FROM THE UNIVERSITY OF A CORUÑA

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I & II. Brief details of the history of the university: its foundation and the commencement of the degree in architecture

The School of Architecture of the University of A Coruña was created by Decree on 17 August 1973, offering the first course in the academic year 1975-76. At the moment of its creation the School of Architecture was a part of the University of Santiago de Compostela.

Law 11/1989 on the Organisation of the University System of Galicia created new universities in A Coruña and Vigo, which together with the university of Santiago de Compostela were responsible for offering public higher education services in the region of Galicia. The University of A Coruña is based in the city of the same name, and is also responsible for its campus in the city of Ferrol.

Decree 3/1990 of 11 January 1990 on the segregation of centres and services of the University of Santiago de Compostela transferred to the University of A Coruña the centres and facilities in the campuses of A Coruña and Ferrol which until that time had belonged to the University of Santiago de Compostela. These centres included the School of Architecture of A Coruña, with all of its material and human resources. In accordance with Transitory Provision 1 of this Decree, the School of Architecture effectively became a part of the University of A Coruña on 1 January 1990.

Apart from offering the degree course in architecture, the School also initially considered offering doctoral and post-graduate courses aimed at training the existing faculty members and architects interested in carrying out research.

Over the four decades of its existence, the School has modified the study plans for the official university qualifications in Architecture, both as a result of legal requirements and of seeking an academic offer that is more closely adapted to the needs of both students and society at large.

The first study plan applied in teaching the university course corresponded to the period prim 1969/1975, which was then partially modified (affecting the first two years) by the study plan from 1984.

After this, the study plan approved by the Universities Council was implanted in accordance with the directives of Royal Decree 1497/1987, as published in the Official State Bulletin on 19 January 1996.

As a result of joining the European Higher Education Area and based on the guidelines of Royal Decree 1393 /2007, a new study plan was devised for qualifications resulting in the title of Graduate in Architecture, authorising the graduate to work as a professional architect. This study plan, published in the Official State Bulletin on 18 April 2011, began to be applied in the academic year 2010/2011.

BRIEF DETAILS OF THE DEGREE COURSE OFFERED

Verification by the Universities Council: 30 June 2010.

Publication in the Official State Bulletin: 18 April 2011.

First academic year when students were accepted on the degree course: 2010/2011

III. Structure of the study plan

Total length: 5 years (300 credits) **+** End of Degree Project (30 credits)

Number of academic cycles: 1

Distribution of the study plan in ECTS credits by type of subject:

TYPE OF SUBJECT	NUMBER OF SUBJECTS	NUMBER OF CREDITS	% OF CREDITS
Basic training	10	60	20%
Obligatory	36	222	74%
Optional	4	18	6%
External work experience (optional)		Up to 4.5 credits recognised as optional	
Total	50	300	
Final Degree Project (FDP)	1	30	
Total with EDP		**330**	

Structure of the academic year: length, exam sessions, etc.

Structure of the academic year	Each term	2 Terms
Exam sessions	One with two opportunities to sit the exam	January/ May (1st opportunity, depending on the term) July (2nd opportunity)
Number of weeks of class	15 per term	
Duration of subjects	One term	

Teaching method, type of evaluation depending on the type of subject:

Type of subject	Area	Teaching method	Type of evaluation
BASIC TRAINING 60 ECTS	Mathematics	Lectures on theory Problem-solving exercises	Continuous evaluation Carrying out and presenting exercises. Written theoretical and practical exam
	Physics	Master classes on theory Practical classes	Continuous evaluation Theoretical and practical test
	Graphic expression	Master classes on theory Graphic classes Shared workshops Practice in computer laboratory	Continuous evaluation with requirement to attend 80% of lectures. Objective test. Students' projects in workshop Students' notebooks
PROJECTUAL 126 ECTS	Architectural Design	Analysis of written sources Master classes Classes in small groups Collaborative learning Project workshop	Continuous evaluation with requirement to attend lectures Workshop projects Tutored work Objective test
	Town Planning and Urban Design	Lectures on theory Classes to solve doubts and problems Teaching in workshops Carrying out and presenting projects Shared workshops	Continuous evaluation with requirement to attend lectures Theoretical-practical tests Carrying out and presenting exercises individually Presenting and defending group projects Practical work carried out during the course Objective test
	Architectural Composition	Master classes Chaired discussions Tutored projects Field trips	Continuous evaluation Objective tests Analysis of architectural texts, works or fragments

Type of subject	Area	Teaching method	Type of evaluation
TECHNICAL 90 ECTS	Structures	Master classes on theory Lectures and/or interactive classes on problems Practical classes on problems Interdisciplinary workshop	Continuous evaluation Written theoretical and practical tests Individual practice and/or group practice
	Building Technology	Lectures on theory Practical classes in graphics classroom Practical classes in the laboratory	Continuous evaluation Written theoretical and practical tests Individual practice and/or group practice Tutored projects Multiple choice tests
	Systems	Lectures on theory Problem-solving individually or in groups	Continuous evaluation Written theoretical and practical tests Individual practice and/or group practice
FINAL DEGREE PROJECT 30 ECTS	Type: Obligatory Producing an original, individual exercise consisting of an integral, professional architecture project, bringing together all of the skills and knowledge acquired during the degree course to the point of demonstrating sufficient ability to permit the full completion of the construction work to which the project refers, in accordance with applicable technical and administrative regulations. Duration: 30 Credits Carried out once all of the credits from the study plan have been obtained. Presented and defended before a university panel, which must include at least one professional of recognised prestige, proposed by the professional bodies.		

IV. Installations of the university school of architecture

The Architecture Degree Course is offered at the installations of the University School of Architecture, which consist of two buildings. One is the School itself, and the other is known as the Departments Building.

CLASSROOMS

The classrooms in these two buildings, together with the resources in each of them, are shown in the following diagram:

SCHOOL BUILDING

TYPE OF ROOM	ROOM	FLOOR	TYPE	CAPACITY	PROJECTION		INTERNET ACCES	SOUND	C.P.U.
					SLIDES	VIDEO PROJECTOR AUDIO			
AMPHITHEATRE	E-1	-1	LECTURE	178	1	1	1	1	1
	E-2	-1	LECTURE	178	1	1	1	1	1
FIXED SEATING	E-3	-1	LECTURE	72	1	1	1	1	1
	EVENTS ROOM	0	CONFERENCES	184	1	1	1	1	1
	2-1	2	INTERACTIVE	25		1	1	1	
	2-2	2	LECTURE	77	1	1	1	1	1
	2-3	2	INTERACTIVE	25		1	1	1	
	2-4	2	LECTURE	77	1	1	1	1	1
	2-5	2	INTERACTIVE	28		1	1	1	
	2-6	2	INTERACTIVE	28		1	1	1	
	2-7	2	LECTURE/ INTERACTIVE	40		1	1	1	
	2-8	2	LECTURE	90	1	1	1	1	1
	2-9	2	LECTURE	77		1	1	1	1
	2-10	2	INTERACTIVE	26		1	1	1	
MOVEABLE SEATING	3-I A	3	LECTURE/ INTERACTIVE	47	1	1	1	1	
	3-I B	3	INTERACTIVE	23		1	1		
	3-II A	3	LECTURE/ INTERACTIVE	47	1	1	1		
	3-II B	3	INTERACTIVE	29		1	1		
	3-III A	3	LECTURE/ INTERACTIVE	41	1	1	1		
	3-III B	3	INTERACTIVE	23		1	1		
	3-IV A	3	LECTURE/ INTERACTIVE	41	1	1	1		

	3-IV B	3	INTERACTIVE	23		1	1		
FIXED SEATING	4-I A	4	INTERACTIVE	30		1	1		
	4-II A	4	LECTURE/ INTERACTIVE	54	1	1	1		
	4-II A	4	LECTURE/ INTERACTIVE	56	1	1	1		
	4-IV A	4	LECTURE/ INTERACTIVE	54		1	1		
	5-II	5	LECTURE	108	1	1	1	1	1
DRAWING ROOM	3-I	3	GRAPHIC	74			1		
	3-II	3	GRAPHIC	66			1		
	3-III	3	GRAPHIC	77			1		
	3-IV	3	GRAPHIC	80			1		
	4-I	4	GRAPHIC	65			1		
	4-II	4	GRAPHIC	57			1		
	4-III	4	GRAPHIC	62			1		
	4-IV	4	GRAPHIC	66			1		

DEPARTMENTS BUILDING

TYPE OF ROOM	CLASS	FLOOR	TYPE	CAPACITY	SLIDES	VIDEO PROJ.	INTERNET	SOUND	CPU
MOVEABLE SEATS	ED.1	-2	MASTER	52	1	1	1	1	1
FIXED SEATS	ED.2	-2	LECTURE/INTERACTIVE	44		1	1	1	1
FIXED SEATS	ED. 4	-2	LECTURE/INTERACTIVE	44		1	1	1	1
MOVEABLE SEATS	ED. 5	-2	MASTER	52	1	1	1	1	1
FIXED SEATS	DOCT1	0	DOCTORATE	32	1		1		
MOVEABLE SEATS	DOCT 2	0	DOCTORATE	27	1		1		

As can be seen in these tables, the University School of Architecture currently has a total of 41 classrooms, of which 33 are for lectures and interactive classes, and 8 are for graphics classes.

The **first 33** consist of the following:

- **Eight** lecture rooms with a computer with Internet access, a video projector, slide projector, sound system, and the **events room**.
- **Ten** classrooms (2 in the departments building) used for lectures and interactive teaching as necessary. There are a further **four** classroom in the departments building, two of which are normally used for Master's Degrees and two for Doctorates. All of them have an Internet connection, video projector and slide projector.
- **Ten** classrooms for interactive teaching, with Internet connections and a video projector

The **eight graphics classes** all have Internet connections.

All of the classrooms have suitable structural, acoustic and lighting conditions as well as the necessary equipment for their respective purposes.

LABORATORIES AND CLASSROOMS WITH SPECIFIC EQUIPMENT

- **ASSISTED DESIGN LABORATORY**

The assisted design laboratory consists of the following:

2 classrooms with 28 computers with Pentium 4 (or AMD) processors in each.
1 students' workspace with 26 computers + 7 computers for printers, plotters and scanners.

The computer equipment consists of the following:

Servers

- Primary Domain Controller (SERV1).
- Secondary Domain Controller (SERV2).
- Web and Applications Server (MERCURIO).
- Backup Server (ELTERA).

Clients

- 51 computers in the laboratory rooms.
- 1 Gestetner A3 Color C7528n laser printer
- 2 A1 B/W HP430 plotters
- 2 A0 B/W HP430 plotters
- 1 Nikon CoolScan 4000 slide scanner
- 1 A3 Epson GT-10000+ scanner

- **MODELLING WORKSHOP:**

Location: Basement of the departments building
Surface area: 64.41 m2
The workshop contains all of the necessary cutting tools and equipment for making models.

- **DIGITAL CREATION LABORATORY:**

Location: Basement of the departments building
Surface area: 43.74 m2
Contains laser cutting machine and 3-D printer

- **PHOTOGRAPHIC LABORATORY**

Location: Basement 2 of the School building
Surface area: 46.06 m2
Contains equipment for printing photos (trays, enlarger, etc.)

- **CONSTRUCTION MATERIALS LIBRARY I**

Location: Attic, floor 4.I of the School building
Surface area: 51.92 m2
Workshop and space where professors demonstrate materials and construction details, etc.

- **CONSTRUCTION MATERIALS LIBRARY II**

Location: Attic, floor 4.IV of the School building
Surface area: 51.92 m2
Workshop and space where professors demonstrate materials and construction details, etc.

- **INSTALLATIONS MATERIAL LIBRARY**
  Location: Attic, floor 4.III of the School building
  Surface area: 51.92 m2
  Workshop and space where professors demonstrate materials and construction details, etc.
  Currently under construction.

- **STATUES ROOM**
  Location: Basement 1 of the School building
  Surface area: 52.00 m2
  Workshop space for drawing statues, charcoal sketching etc. guided by a professor.

- **END OF DEGREE PROJECT ROOM**
  Classroom covering approximately 90 square metres on the second floor of the School with 12 work surfaces for delivering and correcting End of Degree Projects.

The laboratories and rooms with specific equipment are perfectly adapted for their intended purposes.

LIBRARY

The library of the School of Architecture has a collection of monographic works consisting of around 50,000 volumes, 618 serial publications and 3,606 volumes in other formats (videodiscs, CDs, photos, cartographic material, etc.).

The library also has access to a significant number of **electronic resources** such as databases, e-books, online magazines and support materials for study and research, thanks to the services provided by the three Galician university libraries (BUGALICIA).

The main field of knowledge covered by the written and electronic resources from the library is architecture and urban planning, although it also covers the fields of mathematics, physics, computing and history.

Like all great libraries, the collection also includes a large reference section with encyclopaedias, dictionaries, annuals, legislation and regulatory material.

The library covers a total of 900 square metres containing the collection (80% of which is freely accessible), with the following areas:

- General reading room
- Reference and group work room
- Newspaper archive
- Reserved funds room
- Storeroom
- Office

The different rooms have a total of **120 reading spaces**
The following resources are available for public use::

- 1 DVD player
- 1 VHS video player
- 1 TV with incorporated DVD player

- 4 PCs to consult the catalogue, access the Internet and access other electronic resources.
- 4 PCs connected to 2 scanners
- 2 photocopiers

The materials available in the library and its respective spaces are adapted to the requirements of the School of Architecture.

OTHER AREAS

- **EVENTS ROOM** with 184 seats, equipped with public address system and video projector.

- **MEETING ROOM** with 20-25 seats, for meetings of the School's different governing bodies.

- **CONFERENCE ROOM** in the departments building, with 55 seats, with computer for projections and exhibitions.

- **MEETING SPACE**, measuring approximately 122 square metres, with 48 workstations on four tables for group work. It also includes 24 chairs and a Wi-Fi connection for students to work.

- **EXHIBITION SPACE** on the ground floor of the centre.

V. Faculty members by departments & categories

The following table shows the number of faculty members in each department and category:

CATEGORY / DEPT.	HEAD PROFESSOR	TENURED PROFESSOR	FULL UNI. SCHOOL PROFESSOR	VISITING LECTURER – PhD.	NON-TENURED PROFESSOR	ASSISTANT PROFESSOR	ASSOCIATE PROFESSOR	INTERN, SUB.	TOTAL
Architectural Composition and History of Art	3	1	1	2			1	5	13
Architectural Constructions	2	3	2	3	5		6		23
Architectural Graphics	2	5	2 + 2 PhD.	1	8				20
Cmm & Structural Theory	2	4	1 + 1 PhD.	3	2		2	2	17
Architectural Projects		1	2	3	9	1	2	10	28
Urban Planning And Territorial Organisation	1	2		2	2+1 PhD.	2	3	3	16
Applied Mathematics		3		1	1				5
TOTAL	**10**	**19**	**11**	**15**	**28**	**3**	**14**	**22**	**122**

This table shows the following details:

There are currently 122 professors teaching on the degree course, of which 48 are tenured doctors (10 head professors, 19 tenured professors, 15 contracted PhD professors, 3 University School professors and 1 collaborator), 35 tenured non-PhD professors (8 University School professors and 27 collaborators) and 39 non-tenured professors (3 Assistant professors [1 PhD], 14 Associate Professors [1 PhD] and 22 replacement interns [3 PhDs]).

- The total percentage of professors with a PhD is 43.4%
- Also**:** 88.8% of the faculty members have professional experience outside of academic work or research.
- Also, 68.3% have more than 10 years' professional experience as an Architect, 6.3% have between 5 and 10 years' experience, and 14.2% have less than 5 years' experience.

VI. International agreements with other universities

The School of Architecture of the University of A Coruña currently participates in exchange or mobility programmes for international students through the ERASMUS project and other bilateral agreements. The countries and universities with which the School has agreements are detailed in the following lists:

BELGIUM	Louvain la Neuve	Université Catholique de Louvain
CYPRUS	Nicosia	Panepistimio Kyprou (UCY) (University of Cyprus)
FRANCE	Clermont-Ferrand	Ecole N. S. d'Architecture de Clermont-Ferrand F
	Lille	Ecole N. S. d'Architecture et de Paysage Lille
	Nantes	Ecole d'Architecture de Nantes
	Paris-La-Villette	Ecole d'Architecture de Paris-La-Villette
	Rouen	Ecole d'Architecture de Normandie
	Rennes	Ecole N. S. d'Architecture de Bretagne
GERMANY	Karlsruhe	Karlsruher Institut für Technologie
	Regensburg	Fachhochschule Regensburg
	Stuttgart	Universität Stuttgart
ITALY	Ferrara	Università degli Studi di Ferrara
	Florence	Universidade dos Estudios de Florencia
	Milan	Politecnico di Milano
	Palermo	Università degli Studi di Palermo
	Rome	Università degli Studi di Roma 'La Sapienza'
	Turin	Politecnico di Torino
	Venice	Università IUAV di Venezia
NORWAY	Trondheim	Norges Teknisk-Naturvitenskapelige Universitet
POLAND	Krakow	Politechnika Krakowska
	Lublin	Politechnika Lubelska
PORTUGAL	Braga	Universidade do Minho
	Coimbra	Universidade do Minho
	Evora	Universidade de Evora
	Lisbon	Universidade Lusófona de Humanidades e Tecnologias
	Oporto	Universidade do Porto
	Covilha	Universidade da Beira Interior
TURKEY	Istanbul	T.C. Yeditepe Universitesi
ARGENTINA	Buenos Aires	Facultad de Arquitectura, Diseño y Urbanismo
	Santa Fe	Universidad Nacional del Litoral
ARMENIA	Teryan	Yerevan State University of Architecture and Construction
BRAZIL	Rio de Janeiro	Universidade Federal de Rio de Janeiro
	Niteroi	Universidade Federal Fluminense
	Florianópolis	Universidade do Estado de Santa Catarina
	Florianópolis	Universidade Federal de Santa Catarina
	São Paulo	Universidade Estadual Paulista 'Júlio de Mesquita Filho'
	Fortaleza	Universidade Federal do Ceará
CHINA	Harbin	The School of Architecture of Harbin Institute of Technology
MOROCCO	Rabat	L´Ecole Nationale D´Architecture
MEXICO	Mexico	Instituto Tecnológico y de Estudios Superiores de Monterrey
	Mexico City	Universidad Autónoma Metropolitana
	Mexicali	Universidad Autónoma de Baja California
RUSSIA	Moscow	Moscow State Academy of Municipal Economy and Construction

VII. Admissions

In accordance with Provision 14 of Royal Decree 1393/2007 of 29 October, modified by Royal Decree 861/2010 of 2 July on the Organisation of Official University Courses, in order to enrol on official Degree courses it is necessary to hold a Baccalaureate qualification or equivalent and to have passed the university entrance exam described in Article 42 of Organic Law 6/2001 on Universities, modified by Law 4/2007 of 12 April.

The list of academic and administrative requirements that applicants must meet in order to enrol on the Degree Course in Architecture is defined by Royal Decree 1892/2008 of 14 November, regulating access to official university degree courses and enrolment procedures for public Spanish universities, and their respective provisions.

This decree defines the different ways of accessing university studies: university entrance tests, 2nd degree vocational training courses, level 3 professional modules, a higher education training cycle or equivalent, or otherwise any other assimilated university qualification or university entrance tests for applicants over the age of 25. Information for students on these access methods is described at http://ciug.cesga.es/marcoacceso.html.

This same decree also stipulates that preference will be given to students who wish to access the degree course whose fourth exercise in the general stage corresponds to a topic associated with the field of knowledge of “Engineering and Architecture.”

At present there are no special access tests. However, apart from the entrance exam indicated above, this School intends to implant some type of test that evaluates the skills and abilities of students to take this degree course.

The mechanism and procedures for the selection process are defined by the Order of the Regional Ministry of Education and University Organisation, regulating the enrolment process for university students in the faculties of the three Galician universities, and are coordinated by the Inter-University Committee of Galicia (CIUG). This committee was created as a result of an agreement signed by the three Galician universities in order to bring together the principles of a single, open district, university autonomy and the coordination of the procedures and responsibilities in providing access for students to the universities.

All of the information in relation to this university admission method is available on the website:
http://ciug.cesga.es/PDF/Guia2009.pdf

The Regulations for the Enrolment of Students in the University of A Coruña (approved by the University’s Board of Governors on 7 June 2000) details the requirements and procedures for accessing degree courses with and without a limited number of places.
http://www.udc.es/informacion/ga/lexislacionenormativa/regulamentos/academica/a.asp

Enrolment profile for new students

The recommended profile for students wishing to enrol on the degree course is for students who have passed the university entrance exams after taking Baccalaureate exams in the scientific and technical area, with a solid grounding in mathematics, physics and computing; an education in the humanities, especially in the history of art, and with basic knowledge of spatial representation systems and the basics of design, and with a working knowledge of graphic design, spatial perspective and artistic creation.

VIII. Statistics

Student / Professor ratio: 17:1

Students / class ratio: Theoretical classes 60:1; practical classes, 20:1

Total number of students: 795

Students per year:

YEAR	NUMBER OF STUDENTS
1	174
2	201
3	210
4	210
5	184
Students with Projects	-

Number of graduates per year: None, as the plan is still not fully implemented.

EXPLANATION OF THE RELATIONSHIP BETWEEN THE COURSES INCLUDED IN THE STUDY PLAN WITH THE SUBSECTIONS OF ARTICLE 46 OF EUROPEAN DIRECTIVE 2005/36/EC

Architectural Design 1 & Architectural Design 2

The subjects Architectural Design 1 and Architectural Design 2 focus on learning the instruments used create architectural designs, to achieve the knowledge and skills set out in subsection (a) of Article 46.

Drawing in Architecture & Analysis of Architectural Forms

These subjects belong to the preparatory block of topics, laying the foundations for students to subsequently acquire the specific skills and knowledge included in the technical and design modules.

Their main objective is to provide students with initial training in order to acquire the knowledge and skills required to analyse and represent architecture which will subsequently allow them to study formal and aesthetic aspects of architectural designs, how they interact with the urban environment and their adaptation to users' needs, in relation to the skills and knowledge set out in subsections (a), (b), (c) and (e) of Article 46 of Directive 2005/36/EC.

Descriptive Geometry & Architectural Form Geometry

As subjects that belong to the preparatory block of topics, their main is to provide students with initial training in order to acquire the knowledge and skills required for the architectural design and spatial representation set out in subsections (a), (b), (c), (d) and (e) of Article 46 of Directive 2005/36/EC, which subsequently allow them to study formal and aesthetic aspects of architectural designs, how they interact with the urban environment and their adaptation to users' needs, acquiring the specific skills and knowledge of the technical and design modules.

Mathematics 1

As well as being a preparatory course, Mathematics 1 is associated with subsection (b) as a knowledge of geometry is essential for architectural design, composition and layout, and is associated with subsection (h) as a knowledge of numerical calculus, analytical geometry and algebraic methods form the

basis for understanding the physical phenomena that make it possible to comprehend the problems of structural design.

Introduction to architecture

In providing an initial approach by students to architecture understood as a scientific, humanistic and cultural topic, part of the teaching programme serves to update their knowledge on the history, theory, arts and other aspects of technological culture. Another objective is the orientation of this knowledge in the field cultural and artistic education, as well as how it affects our lives, as a means of guiding future designs.

Physics 1

As well as being a preparatory course, Physics 1 is associated with subsection (h) as the contents of this topic focus on the mechanics, statics and calculation of isostatic articulated and arched structures. These contents are essential in order to understand the structural problems associated with building design.

Mathematics 2

As well as being a preparatory course, Mathematics 2 is associated with subsection (h) as a knowledge of mathematical analysis, numerical calculus, analytical geometry and differential geometry provides the student with the necessary mathematical techniques to solve scientific and technical problems that affect the comprehension of the structural design and engineering problems associated with building design.

Construction 1

This introductory course offers an overview of the construction materials, systems and solutions (subsection (g)) in relation to the profession of architecture (subsection (f)). It introduces students to the design concepts for architectural project (a common theme for all of the subjects on the degree course associated with architectural designs), introduces the specific basic vocabulary of construction, offers an initial grounding in understanding the need for harmony between construction systems used in architectural designs, and introduces students to the skills and knowledge required for structural design and to apply the regulations that affect the different performance requirements of building solutions.

Architectural Design 3 & Architectural Design 4

The subjects of Architectural Design 3 and Architectural Design 4 continue to focus closely on architectural design projects, gradually incorporating concepts such as understanding the relationship between people and buildings and between buildings and their environment, as described in subsection (e).

Architectural analysis 1

As a preparatory course, its main aim is to teach students the skills that allow them to express their ideas graphically in an accurate, effective manner, so that they can materialise and communicate their architectural ideas. This subject introduces the basic methodological concepts of architectural analysis that are explored in greater detail in Architectural Analysis 2.

Architectural analysis 2

As a preparatory course, its main aim is to teach students about architectural analysis using the methodology of the subject, in order to comprehend architecture in terms of its topological, functional, formal, spatial, structural or semantic aspects.

Physics 2

As well as being a preparatory course, Physics 2 is associated with subsection (i) as its contents focus on fluid mechanics, heat transfer, acoustics and electricity. These contents are essential in order to achieve an adequate understanding of the physical problems and technologies associated with internal conditions of comfort and protection against the climate.

History of art

This subject obviously forms a part of the complementary training of future architectural designers, including a knowledge of the fine arts, their history and history theoretical importance are essential in terms of their influence on the quality of architectural design, as set out in subsections (b) and (c).

Urbanism 1

Throughout the different years of the Architecture degree, the urban planning courses focus on providing students with the necessary knowledge, skills and abilities to analyse problems associated with the transformation and planning of the city and territory, with a special emphasis on urban design. The teaching strategy gradually introduces students to urban planning and organisation through an understanding of the planning process and learning investigation and diagnostic techniques applied to metropolitan space on different scales.

In particular, the Urbanism 1 course focuses on providing students with essential knowledge about the history of urban layouts. Recognising these processes in modern-day cities introduces students to the techniques and elements of territorial analysis.

Structures 1

The Structures 1 course is associated with subsection (h), as its contents focus on the theory of the elasticity and resistance of materials, as well as the mechanical response of materials. These contents are essential in order to understand the structural problems associated with building design.

Construction 2

This subject provides students with an understanding of the sciences of materials and terrain studies; excavation, foundation and retaining systems; and construction systems using large-scale methods. This knowledge is aimed at acquiring the skills in building design (subsection (h)) and the methods of investigation and preparation of the brief for a design project (subsection (g)), which are complemented with climatic factors (subsection (i)), cost constraints and complying with building regulations (subsection (j)) and the skill to translate the technical knowledge acquired into building designs.

Architectural Design 5 & Architectural Design 6

The Architectural Design 5 and Architectural Design 6 courses mainly focus on architectural design projects, with students continuing to work on understanding the relationship between people and buildings and between buildings and their environment, as well as understanding the role of the architect in society (subsection (f) of Article 46).

Construction 3

This subject provides an understanding of partition systems, exterior and interior covering systems and vertical communication systems, the skills of building design (subsection (h)), methods of investigation and preparation of the brief for a design project (subsection (g)), complemented with knowledge of climatic factors (subsection (i)), cost constraints and complying with building regulations (subsection (j)) and the ability to translate the technical knowledge acquired into building projects designed using the construction systems studied. In methodological terms, this subject is based in an integral workshop together with other disciplines, providing a working environment to acquire the skills to create and develop architectural designs that satisfy the applicable technical requirements and building regulations.

Structures 2

The Structures 2 course is associated with subsection (h) as its contents focus on energy methods, matrix calculus and the finite elements method. These contents are essential in order to understand the structural design problems associated with building design.

Urbanism 2

The Urbanism 2 course examines urban design from the perspective of its component elements, exploring the applicable legal framework and the urban planning information required to ensure a rigorous approach.

Theory of architecture

This subject provides the conceptual training and critical perspective of the fine arts as an influence on the quality of architectural design, as described in subsection (c) of Article 46, with the aim of providing adequate knowledge and comprehension of architecture and urban design, as set out in subsections (a), (b), (e), (f) and (g).

Construction 4

This subject provides an understanding of construction systems using wood and metal bars, aimed at acquiring the skills in building design (subsection (h)) and the methods of investigation and preparation of the brief for a design project

(subsection (g)), complemented with cost constraints and complying with building regulations (subsection (j)) and the acquisition of skills to translate the technical knowledge acquired into building projects designed using the construction systems studied. In methodological terms, this subject is based in an integral workshop together with other disciplines, providing a working environment to acquire the skills to create and develop architectural designs that satisfy the applicable technical requirements and building regulations.

Structures 3

The Structures 3 course is associated with subsection (h) as its contents focus on design and construction of steel structures. These contents are essential in order to understand the structural design, constructional and engineering problems associated with building design.

They are also associated with subsection (a) as the design and calculation of steel structures gives students the ability to create architectural designs that satisfy technical requirements.

Urbanism 3

The Urbanism 3 course completes the necessary knowledge to carry out an urban planning project by introducing themes associated with sustainability, green spaces, the landscape, mobility and accessibility, as well as the respective regulatory aspects. It also introduces students to the specific construction problems associated with urban design projects.

Systems 1

This course teaches the necessary knowledge for the design, calculation, specification and execution of building installations to provide water systems, gas systems, electricity systems and renewable energy supplies systems, as well as installations for urban networks, ventilation systems and heating systems.

This knowledge is associated with acquiring skills in building design (subsection (h)), the methods of investigation and preparation of the brief for a design project (subsection (g)), complemented with climate factors (subsection (i)), cost constraints and building regulations (subsection (j)) and the ability to translate their technical knowledge into building design projects.

Architectural Design 7 & Architectural Design 8

The Architectural Design 7 and Architectural Design 8 courses are increasingly complex and maintain the focus on architectural design, understanding the relationship between people and buildings and between buildings and their environment, based on social factors and introducing technological and energy questions (subsection (i)).

Urbanism 4

The Urbanism 4 course explores in detail the concept of understanding analysis as a project, focusing on the problems of the urban periphery and the process of constructing territory, from the rural landscape to the complex contemporary city.

Construction 5

On this course students study bar systems and surface elements made of reinforced concrete, aimed at acquiring an understanding of structural design (subsection (h)) and the methods of investigation and preparation of the brief for a design project (subsection (g)), complemented with a knowledge of cost constraints and building regulations (subsection (j)) and the skills to translate design concepts into buildings by using the construction systems studied. In methodological terms, this subject is based on training in an integral workshop together with other disciplines, providing a working environment to acquire the skills to create and develop architectural designs that satisfy the applicable technical requirements and building regulations.

Structures 4

The Structures 4 course is associated with subsection (h) as its contents focus on the design and calculation of structures made of reinforced concrete. These contents are essential in order to understand the structural design, constructional and engineering problems associated with building design.

It is also associated with subsection (a) as the design and calculation of reinforced concrete structures allows students to create architectural designs that satisfy technical requirements.

History of Architecture 1

The topics covered on this course introduce students to the history of construction in the region of Galicia, providing the necessary guidelines to help analyse and understand its rich, living heritage, and also to condition the creation of future projects in an environment that is strongly marked by its history. As a result, this course complies with the requirements set out in subsections (b), (c) and (e) of Article 46 of the Directive.

Construction 6

This course develops students' knowledge in relation to the design, sizing, specification and construction of building envelopes (roofs, façades and basements), examining the most frequent pathologies, analysing the type of damage caused and presenting the methods and procedures used to carry out the respective repairs. This knowledge is aimed at acquiring skills in building design (subsection (h)), in understanding the methods of investigation and preparation of the brief for a design project (subsection (g)), complemented with climatic factors (subsection (i)), cost constraints and building regulations (subsection (j)) and the ability to translate the technical knowledge acquired into building projects. In methodological terms, this subject is based on training in an integral workshop together with other disciplines, providing a working environment to acquire the skills to create and develop architectural designs that satisfy the applicable technical requirements and building regulations.

Structures 5

The Structures 5 course is associated with subsection (h) as its contents focus on the design and calculation of structures made of pre-stressed concrete, brick and wood. These contents are essential in understanding the structural design, constructional and engineering problems associated with building design.

It is also associated with subsection (a) as the design and calculation of pre-stressed concrete, brick and wood structures provides the ability to create architectural designs that satisfy technical requirements.

Systems 2

This subject provides knowledge of the design, calculation, specification and execution of air conditioning systems, lighting systems, transportation systems,

protection and acoustic conditioning installations. This knowledge is aimed at acquiring skills in building design (subsection (h)) and the methods of investigation and preparation of the brief for a design project (subsection (g)), complemented with climatic factors (subsection (i)), cost constraints and complying with building regulations (subsection (j)) and the skill to translate the technical knowledge acquired into building designs. This subject is based in an integral workshop together with other disciplines, providing a working environment to acquire the skills to create and develop architectural designs that satisfy the applicable technical requirements.

History of Architecture 2

At an advanced stage of the degree course, students explore how architecture has played a role in our western culture throughout history, studying the development of an important European city in terms of its urban planning and architecture, with the aim of achieving the objectives set out in subsections (b), (c) and (d) of Article 46 of the Directive.

Architectural Design 9 & Architectural Design 10

The Architectural Design 9 and Architectural Design 10 courses focus more closely on all of the skills covered in previous courses in highly complicated architectural designs, concentrating on the responsibility of the architect in relation to the territory, landscape and the environment.

Urbanism 5

The Urbanism 5 course presents students with the technological and urban design of a complex urban project (a neighbourhood, industrial estate, etc.), requiring them to apply the knowledge they have acquired in previous courses, exploring specific regulatory, constructional and organisational aspects associated with urban planning and design.

Foundations

The Foundations course is associated with subsection (h) as the contents focus on soil mechanics and the design and calculation of foundations. These contents are essential in correctly understanding the structural design, construction and engineering problems associated with building design. They are also associated with subsection (a) as the design and calculation of

foundations allows students to create architectural designs that satisfy technical requirements.

Construction 7

This final construction course presents contents that explore the compatibility between construction materials and systems (including the analysis of pathologies that arise as a result of incompatibilities), unique construction methods and sustainable construction, applied to the development of execution projects governed by intrinsic construction coherence and congruence between the construction systems used and the aims of the architectural design, including the application of regulations and procedures as used in professional practice. All of these contents focus on acquiring the knowledge and skills in relation to building design (subsection (h)), methods of investigation and preparation of the brief for a design project (subsection (g)), complemented with climatic factors (subsection (i)), complying with budgetary constraints and building regulations (subsection (j)) and the ability to apply the technical knowledge learned to design projects. In methodological terms, this subject is based in an integral workshop together with other disciplines, providing a working environment to acquire the skills to create and develop architectural designs that satisfy the applicable technical requirements and building regulations.

Architectural Law

The contents of this subject are associated with subsections (d), (f), (j) and (k) as they deal with the application of urban planning regulations, procedures for obtaining licences for integral projects and the execution of construction projects and urban spaces. It also covers professional ethics, corporate organisation and professional procedures (subsection (k)) and evaluation methods (subsection (j)).

Table 1 (English version) ACCORDANCE OF THE CURRICULUM WITH THE DIRECTIVE 2005/36/EC

DEGREE IN ARCHITECTURE FROM THE UNIVERSITY OF A CORUÑA

Cycles (1)	Modules		Fields of study and Courses	hours and/or ECTS						subject of the course																					
				Field		Courses				I		II		III		IV		V		VI		VII		VIII		IX		X		XI	
				ECTS Field	Hours field	ECTS Course	Hours course	Hours presential	Hours student's work	Art. 46(1)(a)		Art. 46(1)(b)		Art. 46(1) (c)		Art. 46(1)(d)		Art. 46(1) (e)		Art. 46(1) (f)		Art. 46(1)(g)		Art. 46(1)(h)		Art. 46(1)(i)		Art. 46(1)(j)		Art. 46(1)(k)	
				ECTS	hours	ECTS	hours	hours	ECTS	hours	ECTS	hours	ECTS	hours	ECTS	hours	ECTS	hours	ECTS	hours	ECTS	hours	ECTS	hours	ECTS	hours	ECTS	hours	ECTS	hours	ECTS
	Module 1. PROPAEDEUTIC (60 ECTS)	Field 1	GRAPHIC EXPRESSION	36	900	36	900	360	540	487,5	19,5	150	6	50	2	50	2	162,5	6,5		0		0		0		0		0		0
		1002	Drawing in Architecture			6	150	60	90	100	4	25	1					25	1												
		1003	Descriptive Geometry			6	150	60	90	100	4	25	1			12,5	0,5	12,5	0,5												
		1007	Analysis of Architectural Forms			6	150	60	90	75	3	25	1	12,5	0,5			37,5	1,5												
		1012	Architectural Analysis 1			6	150	60	90	75	3	25	1	12,5	0,5			37,5	1,5												
		1014	Architectural Form Geometry			6	150	60	90	75	3	25	1	12,5	0,5	12,5	0,5	25	1												
		1017	Architectural Analysis 2			6	150	60	90	62,5	2,5	25	1	12,5	0,5	25	1	25	1												
		Field 2	MATHEMATICS	12	300	12	300	120	180		0	75	3		0		0		0		0		0	225	9		0		0		0
		1004	Mathematics 1		60	6	150	60	90			75	3											75	3						
		1009	Mathematics 2		60	6	150	60	90															150	6						
		Field 3	PHYSICS	12	300	12	300	120	180		0		0		0		0		0		0		0	150	6	150	6		0		0
		1008	Physics 1		60	6	150	60	90															150	6						
		1013	Physics 2		60	6	150	60	90																	150	6				
	Module 2. PROJECTUAL (126 ECTS)	Field 1	ARCHITECTURAL DESIGN	66	1650	66	1650	660	990	1350	54		0		0		0	100	4	75	3		0	25	1	50	2	25	1	25	1
		1001	Architectural Design 1		60	6	150	60	90	150	6																				
		1006	Architectural Design 2		60	6	150	60	90	150	6																				
		1011	Architectural Design 3		60	6	150	60	90	137,5	5,5							12,5	0,5												
		1016	Architectural Design 4		60	6	150	60	90	137,5	5,5							12,5	0,5												
		1021	Architectural Design 5		60	6	150	60	90	125	5							12,5	0,5	12,5	0,5										
		1026	Architectural Design 6		60	6	150	60	90	125	5							12,5	0,5	12,5	0,5										
		1031	Architectural Design 7		60	6	150	60	90	112,5	4,5							12,5	0,5	12,5	0,5					12,5	0,5				
		1036	Architectural Design 8		60	6	150	60	90	112,5	4,5							12,5	0,5	12,5	0,5					12,5	0,5				
		1041	Architectural Design 9		90	9	225	90	135	150	6							12,5	0,5	12,5	0,5			12,5	0,5	12,5	0,5	12,5	0,5	12,5	0,5
		1044	Architectural Design 10		90	9	225	90	135	150	6							12,5	0,5	12,5	0,5			12,5	0,5	12,5	0,5	12,5	0,5	12,5	0,5
		Field 2	ARCHITECTURAL COMPOSTION	30	750	30	750	300	450	275	11	225	9	137,5	5,5	25	1	50	2	25	1	12,5	0,5		0		0		0		0
		1005	Introduction to Architecture		60	6	150	60	90	50	2	50	2	37,5	1,5			12,5	0,5												
		1015	History of Art		60	6	150	60	90	50	2	50	2	50	2			0													
		1025	Theory of Architecture		60	6	150	60	90	50	2	50	2					12,5	0,5	25	1	12,5	0,5								
		1035	History of Architecture 1		60	6	150	60	90	75	3	25	1	25	1			25	1												
		1040	History of Architecture 2		60	6	150	60	90	50	2	50	2	25	1	25	1														
		Field 3	TOWN PLANNING AND URBAN DESIGN	30	750	30	750	300	450	175	7	100	4	12,5	0,5	287,5	11,5	87,5	3,5	12,5	0,5	37,5	1,5	0	0	0	0	0	0	37,5	1,5
		1018	Urbanism 1		60	6	150	60	90			50	2	12,5	0,5	50	2	25	1	12,5	0,5										
		1024	Urbanism 2		60	6	150	60	90	50	2	25	1			50	2	12,5	0,5											12,5	0,5
		1029	Urbanism 3		60	6	150	60	90	50	2	12,5	0,5			50	2	12,5	0,5			12,5	0,5							12,5	0,5
		1032	Urbanism 4		60	6	150	60	90	50	2	12,5	0,5			62,5	2,5	25	1			0								0	
		1042	Urbanism 5		60	6	150	60	90	25	1					75	3	12,5	0,5			25	1							12,5	0,5
		Field 4	LEGAL ARCHITECTURE	6	150	6	150	60	90	25	1		0		0	25	1		0	25	1		0		0		0		0	75	3
		1046	Legal Architecture		60	6	150	60	90	25	1					25	1			25	1									75	3
	Module 3. TECHNICAL (90 ECTS)	Field 1	BUILDING TECCHNOLOGY	42	1050	42	1050	420	630	287,5	11,5		0		0		0		0	12,5	0,5	375	15	112,5	4,5	50	2	112,5	4,5	100	4
		1010	Construcción 1		60	6	150	60	90	37,5	1,5									12,5	0,5	37,5	1,5	12,5	0,5	12,5	0,5	25	1	12,5	0,5
		1020	Construcción 2		60	6	150	60	90	37,5	1,5											50	2	12,5	0,5	12,5	0,5	25	1	12,5	0,5
		1022	Construcción 3		60	6	150	60	90	37,5	1,5											62,5	2,5	12,5	0,5			12,5	0,5	25	1
		1027	Construcción 4		60	6	150	60	90	37,5	1,5											62,5	2,5	25	1			12,5	0,5	12,5	0,5
		1033	Construcción 5		60	6	150	60	90	37,5	1,5											62,5	2,5	25	1			12,5	0,5	12,5	0,5
		1037	Construcción 6		60	6	150	60	90	50	2											50	2	12,5	0,5	12,5	0,5	12,5	0,5	12,5	0,5
		1045	Construcción 7		60	6	150	60	90	50	2											50	2	12,5	0,5	12,5	0,5	12,5	0,5	12,5	0,5
		Field 2	STRUCTURAL	36	900	36	900	360	540	200	8		0		0		0		0		0		0	650	26		0		0		2
		1019	Strctures 1		60	6	150	60	90	25	1													125	5						
		1023	Strctures 2		60	6	150	60	90	25	1													125	5						
		1028	Strctures 3		60	6	150	60	90	37,5	1,5													100	4					12,5	0,5
		1034	Strctures 4		60	6	150	60	90	37,5	1,5													100	4					12,5	0,5
		1038	Strctures 5		60	6	150	60	90	37,5	1,5													100	4					12,5	0,5
		1043	Foundations		60	6	150	60	90	37,5	1,5													100	4					12,5	0,5
		Field 3	SYSTEMS	12	300	12	300	120	180	25	1		0		0		0		0		0	25	1		0	175	7	50	2	25	1
		1030	Systems 1		60	6	150	60	90	12,5	0,5											12,5	0,5			87,5	3,5	25	1	12,5	0,5
		1039	Systems 2		60	6	150	60	90	12,5	0,5											12,5	0,5			87,5	3,5	25	1	12,5	0,5
	Module 6. FINAL DEGREE PROJECT (30 ECTS)	Field 1	Degree Final Project	30	750	30	150	60	90	425	17	25	1	25	1	25	1	25	0,5	25	1	50	2	87,5	3,5	50	2	12,5	0,5	12,5	0,5
		1059	Degree Final Project			30	150	60	90	425	17	25	1	25	1	25	1	25	0,5	25	1	50	2	87,5	3,5	50	2	12,5	0,5	12,5	0,5
			HOURS/ECTS mandatory subjects	312	7800	312	11700	4680	7020	3250	130	575	23	225	9	412,5	16,5	412,5	16,5	175	7	500	20	1250	50	475	19	200	8	325	13
						100%				42%		7%		3%		5%		5%		2%		6%		16%		6%		3%		4%	
										Art. 46(1)(a)		Art. 46(1)(b)		Art. 46(1) (c)		Art. 46(1)(d)		Art. 46(1) (e)		Art. 46(1) (f)		Art. 46(1)(g)		Art. 46(1)(h)		Art. 46(1)(i)		Art. 46(1)(j)		Art. 46(1)(k)	
	OPTIONAL COMPLEMENTS	Field 1	OPTIONAL COMPLEMENTS	18	450	18																									
			Optativa 1		45	4,5																									
			Optativa 2		45	4,5																									
			Optativa 3		45	4,5																									
			Optativa 4		45	4,5																									
			EFECTIVE SUBJECTS (select 4 ptativa)																												
		1047	Industrialised Architecture		45		67,5	112,5	4,5																						
		1048	Project Organisation		45		67,5	112,5	4,5																						
		1049	Singular Structures		45		67,5	112,5	4,5																						
		1050	Structural Projects		45		67,5	112,5	4,5																						
		1051	Advanced Representation of Architecture		45		67,5	112,5	4,5																						
		1052	Complex Geometries in Architecture		45		67,5	112,5	4,5																						
		1053	Graphic Communication in Architecture		45		67,5	112,6	5,5																						
		1054	Installation Projects		45		67,5	112,5	4,5																						
		1055	Theory of Composition and Heritage		45		67,5	112,5	4,5																						
		1056	Sustainable Landscape and Habitat		45		67,5	112,5	4,5																						
		1057	Territorial Organisation		45		67,5	112,5	4,5																						
		1058	Planning Methods		45		67,5	112,5	4,5																						
			TOTAL HOURS/ECTS	330	8250																										

CLARIFICATION

Mandatory subjects (core/compulsory): **bold**

Elective subjects (optional): regular

Electives in liberal arts: *[italics, in brackets]*

Allocated: class hours, with ECTS

To be allocated: autonomous student work, with ECTS

Total: sum of previous concepts

Table 2: DEGREE IN ARCHITECTURE FROM THE UNIVERSITY OF A CORUÑA

YEARS OF STUDIES	SEMESTER	TYPE OF SUBJECT	CODE	SUBJECT	FIELD OF STUDIES	BRIEF DESCRIPTION	CREDITS / YEAR			HOURS / YEAR		
							ECTS Credits	Theoretical	Workshop / practical	Total hours	Theoretical	Workshop / practical
1	FIRST SEMESTER	**COM**	1001	**Architectural Design 1**	Architectural Projects	Understanding and representing architectural elements I: Manuals and elements of architectural projects; drawing as an instrument of thought and representation; scale and measurement. Introduction to built architecture; introduction to architectural projects through drawings and the analysis of paradigmatic and/or significant contemporary architectural projects. Projects and composition: architectural composition and representation methods. EXERCISES - Analysis and review of paradigmatic and/or significant contemporary architecture projects. - Handling of simple volumes at human and object scale .	6	1,5	4,5	60	15	45
		COM	1002	**Drawing in Architecture**	Architectural Drawing	Introduction to freehand illustration. Introduction to architectural drawing. Introduction to computer assisted design.	6	1,5	4,5	60	15	45
		COM	1003	**Descriptive Geometry**	Architectural Drawing	Introduction to descriptive geometry. Main representation systems: parallel projection. Joint development of parallel projection systems. Development of linear perspective. Introduction to shading theory.	6	1,5	4,5	60	15	45
		COM	1004	**Mathematics 1**	Applied Mathematics	Algebraic methods. Metric geometry. Analytical geometry. Derivation of functions from different variables. Integration methods. Analytical and numerical solution of differential equations.	6	3	3	60	30	30
		COM	1005	**Introduction to Architecture**	Architectural Composition	Introduction to architecture. Concepts and limits of architecture. The idea of architecture: theories and history of architecture. Introduction to the theory and comprehension of architecture. Analytical and interpretive instruments: knowing how to look at architecture, knowing how to think architecture. Architecture, city and territory.	6	3	3	60	30	30
	SECOND SEMESTER	**COM**	1006	**Architectural Design 2**	Architectural Projects	Understanding and representing architectural elements II: the conventions of graphic language and their application in representing projects; drawing as a project tool; representing projects through geometry. Models. Architectural projects and living space: architectural space: use, function, representation, symbolism; architectural elements and living spaces, architectural space and anthropic aspects EXERCISES Designing and structuring simple architectural spaces for habitation (living, working, interacting).	6	1,5	4,5	60	15	45
		COM	1007	**Analysis of Architectural Forms**	Architectural Drawing	Analysis of architectural forms through freehand drawing. Sketching and draughtsmanship. Creative representation and conceptual graphics.	6	1,5	4,5	60	15	45
		COM	1008	**Physics 1**	M. of C.M. and Structural Theory	Introduction to mechanics. Vectorial calculus. Static behaviour of rigid solids and materials. Centres of gravity and masses. Calculus for articulated structures. Beams. Gantries. Static behaviour of cables.	6	3	3	60	30	30
		COM	1009	**Mathematics 2**	Applied Mathematics	Differential geometry of curves and surfaces. Multiple integrals. Curved and surface integrals.	6	3	3	60	30	30
		COM	1010	**Construction1**	Architectural Constructions	Architecture, construction, the physical environment and materials. The anatomy of buildings. Understanding the historical evolution of construction systems and their effects on architecture. Introduction to structures. Compression, tensile strength, bending strength. Reinforced concrete as a structural material. Steel as a structural material. Foundations and retaining walls. Roofs. Vertical communication systems. Interior dividing walls. Claddings. Building Systems.	6	3	3	60	30	30
						1st Year	**60**	**22,5**	**37,5**	**600**	**225**	**375**

YEARS OF STUDIES	SEMESTER	TYPE OF SUBJECT	CODE	SUBJECT	FIELD OF STUDIES	BRIEF DESCRIPTION	CREDITS / YEAR			HOURS / YEAR		
							ECTS Credits	Theoretical	Workshop / practical	Total hours	Theoretical	Workshop / practical
2	THIRD SEMESTER	COM	1011	**Architectural Design 3**	Architectural Projects	This topic analyses aspects associated with the location and construction of architectural elements; places as spaces containing material strata that create a specific identity. Geographical, typological, cultural and referential conditioning factors in the surrounding environment. The definition and use of concepts such as privacy, the division of spaces, public space, levels of intimacy or protected areas. Working with the potential of spaces when planning to insert an object in the landscape (urban, rural or peripheral), with symbolic concepts, emerging forms and abstraction as compositional possibilities. Including references to nature and art as immediate references for architectural elements.	6	1,5	4,5	60	15	45
		COM	1012	**Architectural Analysis 1**	Architectural Drawing	Architectural drawing. Techniques and systems used for drawing plans. 3-D drawing using analogue and digital methods. Functional analysis. The concept of space. Perception of space. Analytical strategies.	6	1,5	4,5	60	15	45
		COM	1013	**Physics 2**	M. of C.M. and Structural Theory	Fluids, heat, psychometrics, acoustics, electricity and lighting	6	3	3	60	30	30
		COM	1014	**Architectural Form Geometry**	Architectural Drawing	Polyhedral surfaces. Architectural applications of polyhedrons. Curved surfaces: basic quadric, elliptical quadric, warped ruled surfaces, architectural applications. Topographic surfaces. Advanced shading theory: chiaroscuro.	6	3	3	60	30	30
		COM	1015	**History of Art**	Architectural Composition	Art and architecture. Art throughout history Art and architecture in the classic world, Mediaeval, Renaissance and Baroque periods. From neo-classicism to modernism: the culture of the nineteenth century and the industrial revolution. The avant-garde movements and art from the twentieth century.	6	4,5	1,5	60	45	15
	FOURTH SEMESTER	COM	1016	**Architectural Design 4**	Architectural Projects	This topic focuses on the organisation and structuring of spaces within the functional layout of a building, challenging the traditional floor-layout concept and exploring the possibilities that a spatial approach towards architecture offers in terms of allocating different uses to a building. Students work with basic objects and geometries, exploring the possibilities for artistic experimentation using strategies such as addition, twinning, inversion or seriation, within a conceptual approach associated with the culture of forms. Common architectural typologies will be used, encouraging students to explore different ideas, progressively enriching their cultural knowledge and perfecting the tools used for creating projects.	6	1,5	4,5	60	15	45
		COM	1017	**Architectural Analysis 2**	Architectural Drawing	Graphically rendering the project process. Topological analysis. Function analysis. Forms. Spatial analysis. Analysing light. Structural and constructive analysis. Introduction to the graphic analysis of architecture .	6	1,5	4,5	60	15	45
		COM	1018	**Urbanism 1**	Urbanism and T.O.	The theory and history of urban layouts, exploring the process of building cities throughout time, from cities with mediaeval origins through to contemporary urban growth (suburbs, industrial estates, garden cities, etc.), using techniques for urban and territorial analysis.	6	1,5	4,5	60	15	45
		COM	1019	**Structures 1**	M. of C.M. and Structural Theory	Theory of elasticity and material resistance. Stress and deformation states. The mechanical response of materials. Axial force. Shearing force. Bending: stress analysis. Pure, simple, skewed and compound bending. Bending: deformation analysis. Torque. Buckling.	6	3	3	60	30	30
		COM	1020	**Construction 2**	Architectural construction	Architecture, materials and building. The science of construction materials. Construction elements of systems under compression. Heavy structures. Terrain. Foundations. Architecture and construction with walls. Ceramic structures, natural stone and concrete blocks. Prospective analysis for construction. The development of construction systems, including history, types, materials, regulations, concepts, design, safety, industrialised processes, appraisal, specification, preservation, pathologies and restoration.	6	3	3	60	30	30
						2nd Year	**60**	**24**	**36**	**600**	**240**	**360**

YEARS OF STUDIES	SEMESTER	TYPE OF SUBJECT	CODE	SUBJECT	FIELD OF STUDIES	BRIEF DESCRIPTION	CREDITS / YEAR			HOURS / YEAR		
							ECTS Credits	Theoretical	Workshop / practical	Total hours	Theoretical	Workshop / practical
3	FIFTH SEMESTER	COM	1021	**Architectural Design 5**	Architectural Projects	This topic introduces students to creating their own project methodology, analysing and applying the necessary conditions to create a project from a conceptual perspective. Analysing other artistic and creative aspects apart from architecture, together with a common thread that connects and interrelates the successive projects, will make it possible to approach the different exercises during the term with sufficient variety, encouraging students to take different approaches towards their work, sharing experiences, skills and personal references, progressively enriching their cultural knowledge and perfecting their working tools in relation to projects.	6	1,5	4,5	60	15	45
		COM	1022	**Construction 3**	Architectural construction	Fixed and mobile partition systems, interior carpentry. Vertical communication and transportation systems: stairs. Covering systems for buildings and urban areas; the development of building systems, including history, typologies, materials, regulations, conception, design, safety, industrialised processes, appraisal, specification, conservation, pathologies and repair.	6	3	3	60	30	30
		COM	1023	**Structures 2**	M. of C.M. and Structural Theory	Energy methods. Basic calculus. Essential elements of the matrix method. Structural analysis using the matrix method for stiffness. Applications. Flax matrix methods. 3-D matrix methods. Structural analysis using the finite elements method. Basic aspects of the finite elements method. Bar structures. 2-D structures. 3-D structures. Isoparametric formulation. Applications.	6	3	3	60	30	30
		COM	1024	**Urbanism 2**	Urbanism and T.O.	Basic on the analysis and layout of urban space, focusing on the initial relationships defined in its construction, including those that define its identity and those that can affect its future development and changes, either as a result of a lack of definition (empty spaces) or apparent contradiction (imbalances, frictions). Use of analytical, synoptic and design techniques. The work carried out will concentrate on a built part of the city which is currently unconsolidated but with plans for changes. Special attention will be given to urban development information techniques, exploring the correct instruments for urban development.	6	1,5	4,5	60	15	45
		COM	1025	**Theory of Architecture**	Architectural Composition	Architecture and architectural composition. The theoretical basis of architecture. Intentionality in architectural creation. Aesthetics: architectural theories and aesthetic theories. The relationships between architectural techniques, art and systems. The architecture and the city of the nineteenth and twentieth centuries: technology and the metropolis. The maestros of modern architecture. Basic elements of architectural theory in the twenty-first century.	6	4,5	1,5	60	45	15
	SIXTH SEMESTER	COM	1026	**Architectural Design 6**	Architectural Projects	This topic will consolidate each student's individual design methodology, allowing them to verify how approaching a project from a disciplinary perspective allows them to deal with very diverse programmes in terms of their scale and complexity. In this term we will focus on the role of the building in relation to its surroundings, considering its influence ranging from interventions in consolidated urban settings of heritage interest, to developing suburbs on the outskirts of the city without any characteristic built elements. We will also focus on the concept of collective use, spaces for interaction and relaxation, privacy conditions, circulation, spaces used as meeting points, questions regarding representativeness and image, the qualities of outdoor spaces, pavements, green spaces, lighting conditions in different spaces, etc.	6	1,5	4,5	60	15	45
		COM	1027	**Construction 4**	Architectural construction	Porticoed construction systems using steel and wood. General aspects of metallic construction; materials: types, properties and behaviour; safety and maintenance; joints used for metal structures; the construction of metallic structures; roofs used for metallic construction; small bar systems in architecture; building in wood; wood throughout history; the material: wood; construction elements made of wood; joints; latticework in wood; types of construction; panelling and partition walls; pathologies affecting wood and therapeutic measures. The development of construction systems, including: history, typologies, materials, regulations, conception, design, safety, industrialised processes, appraisal, specification, preservation, pathologies and repair.	6	3	3	60	30	30
		COM	1028	**Structures 3**	M. of C.M. and Structural Theory	Steel structures: structural design of buildings; calculations; structural analysis; verification of resistance of sections; sizing of compressed elements; sizing of deflected elements; joints. Bases for supports.	6	3	3	60	30	30
		COM	1029	**Urbanism 3**	Urbanism and T.O.	Environmental aspects and sustainability associated with the open/public space of consolidated cities. This topic will include a project to design a public open space associated with road networks, green spaces or other open spaces: squares, gardens, parks, riverside walks, seafront promenades, avenues, etc. The project will explore the different types of urban mobility and public use of these spaces. We will explore the development of construction projects and their layout, including aspects such as gardening and plant species.	6	1,5	4,5	60	15	45
		COM	1030	**Systems 1**	Architectural construction	Systems in architecture. Supply Systems, systems for the treatment and elimination of water. Gas Systems and other fuels. Electrical Systems. Urban networks. Renewable energy sources. Heating and ventilation systems.	6	4,5	1,5	60	45	15
						3rd Year	**60**	**27**	**33**	**600**	**270**	**330**

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4	SEVENTH SEMESTER	**COM**	1031	**Architectural Design 7**	Architectural Projects	In this topic students will create projects of an intermediate complexity, focusing on the compositional, spatial, technical and functional aspects of architectural and urban design. The process of composition and design will include learning technological and Urbanism subjects. Students will work with housing, housing regulations and standards, neighbourhoods and urban space, resolving layouts for housing that allow for a global perspective of the complex relationships that can arise in a given space. The change of scale in comparison to previous terms and the extent of the projects will require the students to make use of experience and knowledge acquired in other disciplines, as well as in their daily lives. Other topics covered in greater detail will include basic design projects and execution projects applying acceptable living standards, the elimination of barriers, evacuation criteria, technical building codes and Urbanism regulations.	6	1,5	4,5	60	15	45
		COM	1032	**Urbanism 4**	Urbanism and T.O.	Studying built space. Basic aspects for the construction of territory. Suburban areas (intermediate space). Analysis as a project. Studying elements used to organise and structure territory, their origin, fragility and transformation. Connections between different spaces (urban/rural). The process of constructing territory, its reality, characteristics and potential. The creation of spaces for human use, mankind as a transformer and user of built space. The city and territory as human creations; peripheral spaces, transitions, intermediate spaces. Associated with Urbanism, sustainability, the environment, landscape and territorial organisation.	6	1,5	4,5	60	15	45
		COM	1033	**Construction 5**	Architectural construction	Porticoed construction systems in concrete: Porticoes in architectural composition. The materials used for porticoed systems. Building in concrete; general aspects. The material: types, properties and behaviour. Concrete structures: interactions between the soil and cement; types of foundations. Formwork, shuttering and moulds. Safety and durability of the structure. The pathology of concrete. The development of construction systems, including historical aspects, typologies, materials, regulations, conception, design, safety, industrialised processes, appraisal, specification, preservation, pathologies and repair.	6	3	3	60	30	30
		COM	1034	**Structures 4**	M. of C.M. and Structural Theory	Introduction to reinforced concrete structures. Reinforcement of sections. Porticoes. One-way floor slabs. Reticular floor slabs and panels. Pathology and reinforcement in reinforced concrete.	6	3	3	60	30	30
		COM	1035	**History of Architecture 1**	Architectural Composit+E33:E37ion	History of Architecture I, studying the historical heritage of Galicia : Galician architecture in history; ancient architecture, the middle ages and modern age. The origins of Galician architecture. Romanesque architecture in Galicia. Gothic architecture in Galicia. Architecture of the Renaissance and Baroque periods. Neoclassicism and eclecticism. Galician architecture in the modern age.	6	4,5	1,5	60	45	15
	EIGHTH SEMESTER	**COM**	1036	**Architectural Design 8**	Architectural Projects	In this subject students will produce projects of a medium-high complexity based on the criteria from the previous term. Students will work with single family homes, collective homes and other types of housing, and they interact with the areas where they are built. This will include aspects such as spatial flexibility, accessibility, private and shared zones, transitions between the interior and exterior, children's playgrounds, working areas, storage areas, economy, the needs of daily life and new ways of working. The term will end with a study and appraisal of community facilities required for the area being studied, and the integral treatment of the area.	6	1,5	4,5	60	15	45
		COM	1037	**Construction 6**	Architectural construction	Building envelope systems and their characteristics: thermal, acoustic, safety, lighting, filtration; requirements. Construction design: roofs, light and heavy façades, underground building envelopes; glazing, external carpentry, integration in urban buildings and ensembles, execution. Energy certification. Sustainability. Development of construction systems, including history, typology, materials, regulations, conception, design, safety, industrialised processes, appraisal, specification, preservation, pathologies and repair.	6	3	3	60	30	30
		COM	1038	**Structures 5**	M. of C.M. and Structural Theory	Pre-stressed concrete structures. Introduction, calculations, pre-stressed beams. Floor slabs using pre-stressed pre-fabricated elements. Post-tensioned slabs. Fabrication structures: structural layout of the building, calculations, sizing of non-reinforced structures, sizing of reinforced structures. Wood structures: structural layout of the building, calculations, final limit states, service limit states, joints.	6	3	3	60	30	30
		COM	1039	**Systems 2**	Architectural construction	Air conditioning systems. Lighting. Transportation and special Systems. Protective Systems. Acoustic conditioning.	6	4,5	1,5	60	45	15
		COM	1040	**History of Architecture 2**	Architectural Composition	Modern and Contemporary architecture. The history of architecture as the history of the city. Background: the historic city and its architecture. The scientific revolution and the industrial revolution in architecture and urban layout. The Modern Movement: background and development. Review and critique of the Modern Movement. The processes of crisis and disciplinary recovery. The destruction and disappearance of the universal models. Architecture and the modern city: our present.	6	4,5	1,5	60	45	15
						4th Year	**60**	**30**	**30**	**600**	**300**	**300**

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							ECTS Credits	Theoretical	Workshop / practical	Total hours	Theoretical	Workshop / practical
5	NINETH SEMESTER	**COM**	1041	**Architectural Design 9**	Architectural Projects	This topic focuses on complex projects on an urban scale, considering the special conditions involved in interventions in fragments of the city; the connection of road infrastructures and facilities, topographical and climatological conditions, frictions and nexuses with previously existing elements, conditions for processing and development, etc. Students will investigate the shape of the city, the creation and transformation of the urban fabric, requirements in terms of open spaces, equipment, collective housing, the landscape, social needs, ecology and sustainability, quality of life and the architectural, urban development and landscape traditions of western culture. The project must be highly complex in nature, culminating the student's progress during the degree course.	9	1,5	7,5	90	15	75
		COM	1042	**Urbanism 5**	Urbanism and T.O.	This topic deals with Urbanism on an intermediate scale in depth, with the aim of teaching students the techniques involved in Urbanism. The object of the study will be a part of the city. The exercise will be based on formal aspects used in professional activity, as a result of which the respective legal status will be defined, either as a Partial Plan, Special plan, or any other types of procedure applied in municipal planning activity. The following themes will be explored: Residential development, either as a result of expansion or newly created housing, through remodelling or renovation work. The creation of public spaces and areas with different facilities. Suburban areas. Tertiary development, new centres. Industrial interventions on a minor scale. Mini-industrial estates. Other topics associated with current Urbanism concerns.	6	1,5	4,5	60	15	45
		COM	1043	**Foundations**	M. of C.M. and Structural Theory	Soil mechanics. Recognising soils. General concepts for foundations. Surface foundations. Medium and deep foundations. Excavation and containing work. Walls and screens. Introduction to the pathology of foundations and underpinning techniques.	6	3	3	60	30	30
		OP*		Optional 1			4,5					
		OP*		Optional 2			4,5					
	TENTH SEMESTER	**COM**	1044	**Architectural Design 10**	Architectural Projects	This topic will focus on experimental architecture, working on complex scales and for specialised programmes. Students will explore the emblematic nature of certain types of architecture and responsibilities with regard to the territory, landscape and the environment. The exercises will include a thematic approach towards highly specialised aspects such as architectural renovation, sustainable design, the incorporation of new technologies or advanced structural systems.	9	1,5	7,5	90	15	75
		COM	1045	**Construction 7**	Architectural construction	The pathology of materials. Compatibility between materials and construction systems. Unique construction systems. Coherence between construction materials and systems and architecture. Sustainable construction. The development of construction details and project documentation. Application of technical and construction regulations.	6	3	3	60	30	30
		COM	1046	**Architecture Law**	Architectural construction, Urbanism and T.O.	Introduction. Basic Urbanism legislation. Sectorial laws. Planning. Urban economics. Professional ethics, civil liability and professional practice. Real estate appraisals.	6	4,5	1,5	60	45	15
		OP*		Optional 3			4,5	-	-	-	-	-
		OP*		Optional 4			4,5	-	-	-	-	-
						5th Year	**60**	**15**	**27**	**420**	**150**	**270**
6	ELEVENTH SEMESTER	**COM**	1059	**End of Degree Project**	Architectural Composition. Architectural construction Architectural graphics. M. of C.M. and Structural Theory Architectural Projects Urbanism and T.O.	For their End of Degree Projects students will present projects capable of bringing together the skills and knowledge acquired during the degree course, as a general rehearsal for working as an architect. The End of Degree Project must therefore be an original exercise that will be presented and defended before a panel, and must consist of an integral and professional project that combines all of the skills and knowledge acquired on the degree course, developed to the point of demonstrating that the student has acquired the necessary ability to fully execute the structures to which the project refers, in compliance with all applicable regulations.	**30**	1,28	28,72	300	12,8	287,2
						TOTAL	**330**	119,8	192,2	3120	1198	1922

YEARS OF STUDIES	SEMESTER	TYPE OF SUBJECT	CODE	SUBJECT	FIELD OF STUDIES	BRIEF DESCRIPTION	CREDITS / YEAR			HOURS / YEAR		
							ECTS Credits	Theoretical	Workshop / practical	Total hours	Theoretical	Workshop / practical
OPTIONAL SUBJECTS	TENTH SMESTER &ELEVENTH SEMESTER	**OP**	1047	**Industrialised Architecture**	Architectural construction	Industrialised and prefabricated constructions. Dimensional compatibility; modular coordination; tolerances. The structural and functional importance of joints in industrialised construction. Increasing specialisation and differentiation in the structural system, envelope system and air conditioning systems in modern construction. Connection, anchoring and fixing systems. Prefabricated concrete; structures and panels made of prefabricated concrete. Milling, cutting, joining, folding and anchoring systems for steel. Façade panels. The industrialisation of wood. Glass panels. Industrialisation and prefabrication of roof structures. Panels and lighting for roofs. Modular compartmentalisation. Raised flooring, wall panels and false ceilings. Transportation, elevation and assembly systems. Prefabricated housing. Emergency	4,5	2,25	2,25	45	22,5	22,5
		OP	1048	**Project Organisation**	Architectural construction	Basic economic concepts. The construction sector. The architecture studio. The construction firm. Project documentation and its production. Execution of works. Description, analysis and planning of work. Quality and environmental management systems.	4,5	3	1,5	45	30	15
		OP	1049	**Singular Structures**	M. of C.M. and Structural Theory	High-rise buildings. Large span roofs. Special grids. Textile structures and cable networks. Self-tensing structures. Pneumatic structures. Transformable structures. Lattice structures.	4,5	1,5	3	45	15	30
		OP	1050	**Structural Projects**	M. of C.M. and Structural Theory	Pre-stressed concrete structures. Fabricated structures. Wood structures. Structural projects. Structural project documentation. The design, modelling and calculation of structures using computer programmes. Building structure execution projects.	4,5	1,5	3	45	15	30
		OP	1051	**Advanced Representation of Architecture**	Architectural Drawing	Introduction to 3-D computing. 3-D surfaces, nurbs. 3-D solids. Textures, materials, lights, rendering. 3-D "bim" programmes (Archicad, Allpan, Revit). Introduction to topography; representing the terrain user computerised methods. Geometric sunlighting and non-conventional representation methods; sunlight using computer lighting. Colour and art in the city; specialised software.	4,5	1,5	3	45	15	30
		OP	1052	**Complex Geometries in Architecture**	Architectural Drawing	Drawing using CAD-3D. Polyhedral architectural surfaces: folds, flat and spatial grids. Curved architectural surfaces: simple curvature, revolution and translation, double curvature. Architectural surfaces with difficult geometric definition: stretched surfaces, pneumatic surfaces. Application to the construction of vanished or unbuilt architecture.	4,5	2,25	2,25	45	22,5	22,5
		OP	1053	**Graphic Communication in Architecture**	Architectural Drawing	Visual communication. Corporate image; programme design. Theory and practice of signage. Computer technology used for graphic design. Websites.	4,5	1,5	3	45	15	30
		OP	1054	**Installation Projects**	Architectural construction	Plumbing systems; cold water and watering systems. Sewage systems. Hot water and heating systems. Air conditioning systems. Electrical systems. Special Systems. Energy efficiency and sustainability.	4,5	3	1,5	45	30	15
		OP	1055	**Theory of Composition and Heritage**	Architectural Projects and Architectural Composition	The theoretical basis of architecture. Intentionality in architectural creation. Aesthetical theories and architectural composition. The project as an integrating element for different disciplines. Heritage projects. Fundamental aspects of restoration. Restoration projects.	4,5	2,25	2,25	45	22,5	22,5
		OP	1056	**Sustainable Landscape and Habitat**	Architectural Projects and Urbanism and T.O.	Understanding the sustainable aspect of projects affecting the territory. Recognising landscapes and forms of intervention. Studying and proposing minimum standards of habitability from the perspective of sustainable organisation. Sustainability, the environment, landscape, thematic aspects of the economy and sociology of the territory, infrastructures and territorial organisation, general planning, Urbanism, sustainable urban organisation, planning instruments and techniques.	4,5	1,5	3	45	15	30
		OP	1057	**Territorial Organisation**	Urbanism and T.O.	Recognition of the territory. Urban systems. Territorial and sectorial planning. Territorial projects. Territorial plans. Territorial administration and management. Application of territorial organisation legislation.	4,5	1,5	3	45	15	30
		OP	1058	**Planning Methods**	Urbanism and T.O.	The territorial framework: recognising the territory. Urban systems and settlements. Urbanism. Road planning: units, facilities and systems. Sectors, classification and regulations. Residential projects. Urban plans: Urbanism and development; types of plans; urban layouts and designs in urban plans; plans and infrastructures; plans for the built city; large-scale plans; the new Urbanism culture.	4,5	1,5	3	45	15	30

***Optional subjects to be chosen fron the school offer**

CLARIFICA

Duration			A	Full year
			S1	First semester
			S2	Second semester
Type of subject			TR	core
			COM	mandatory
			OP	optional
			LE	elective in liberal arts