

PLANNING THE *LA ASUNCIÓN* CAMPUS OF THE *UNIVERSIDAD DE CÁDIZ* IN JEREZ DE LA FRONTERA

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GENERAL INTRODUCTION

Objective of the project and project designers

The planning proposal for the *Campus de la Asunción de la Universidad de Cádiz* in Jerez de la Frontera takes into account the need to provide the area with a single site that houses all of the university facilities that are currently scattered throughout different parts of the city. It also seeks to improve the educational facilities themselves and to establish the services required for the smooth running of the academic facility but which have not yet been provided (which include a library, a sports centre, a general assembly hall, and a services building). It is also necessary to rationalise academic uses in line with the *Ley de Reforma Universitaria* (LRU)¹ and to introduce the Department model, which supposes a radical change from the existing model based on Faculties and Schools. This also offers the possibility of introducing new academic qualifications and specialities.

All of this has been undertaken from the perspective of a globalising urban model, which not only seeks integration with the immediate environment, but also looks to improve it. Furthermore, it represents an “area of new opportunities” for the eastern part of Jerez and indeed for the whole of the city.

The proposal also seeks to qualify spaces, though this time with respect to the internal workings and structure. It tries to do this from the perspectives of architecture and image, in the belief that the campus can bestow prestige upon the university function, because —as we should not forget— in a country that recognises the value of being socially advanced this constitutes the basis of the cult of learning.

Given the extraordinary complexity of this proposal, we will proceed to individually examine the different components developed within the Basic Project:

1. General planning of the complex
2. General urbanisation

1. University Reform Law.

3. Building containing offices and seminars
4. Building containing lecture halls and classrooms
5. Library
6. Services building
7. General assembly hall
8. Campus parking and storage facilities
9. Sports centre.

The project has been drawn up by the *Gerencia Municipal de Urbanismo del Excmo. Ayuntamiento De Jerez*² following instructions provided by the *Area de Infraestructuras* of the *Universidad de Cádiz*, and under the supervision of its architect and director, don José María Esteban González.

The following technicians formed the design team:

General co-ordination of the work and drafting of proposals for the General Planning, Urbanisation, Library Building and Sports Centre:

Benito García Morán. Architect, *Gerencia Municipal de Urbanismo*³

Preparation of the Basic Project for the Legal and Business Studies building (external team):

Francisco Paints Port. Architect

Miguel Angel Som Ruiz. Architect

Federico Montaldo Merino, Architect

Juán José López Carreño. Technical architect

José Ignacio Montaldo Merino. Technical architect

Preparation of the Basic Projects for the Lecture Halls and Classrooms, and Parking and Storage Facilities (external team):

Carmen Stingy Basáñez. Architect

Miguel Angel Berges Houses. Architect

Jacobo Berges Torres. Architect

Preparation of the Basic Project for the Services Building:

Juán Ramón Díaz Paints. Architect, *Gerencia Municipal de Urbanismo*

Preparation of the Basic Project for the General Assembly Hall building:

Gonzaga Delage Darnaude. Architect, *Gerencia Municipal de Urbanismo*

General co-ordination of Drafting and CAD:⁴

2. Municipal Department of Urbanism of Jerez City Council.

3. Municipal Management Group for Urbanism.

4. Auto Cad design programme.

Juan Córdoba Moreno. Draftsman, *Gerencia Municipal de Urbanismo*

Drafting for the G.M.U.:

Manuel Fernández Espinosa

Antonio Moreno Manzano.

Drafting collaborators:

*Departamento de Planeamiento, Obras, Proyectos e Informática de la G.M.U. of Jerez*⁵

Geo-technical study:

Vorsevi s.A.

Location of the area

The project for the new Campus is located in the part of Jerez de la Frontera known as *La Asunción*. *La Asunción* lies in the eastern part of Jerez's urban nucleus. Its northern limit follows *Avenida de Arcos* and its southern border is established by *Avenida de Las Delicias*. It is only 500 metres from the city's old quarter and is located in an area into which the city has expanded since the 1950's.

Until recently, this area housed military barracks, but these have now been de-commissioned and demolished. Following an agreement signed with Spain's *Ministerio de Defensa* this area became municipal property and was placed at the disposition of the *Universidad de Cádiz*.

It has a total surface area of approximately 114,000 m², with about 25,000 m² forming a green belt zone. The area is fully equipped with all necessary urban services.

The first phase of the project deals with the planning and development of the northern part of the plot. This part borders on *Avenida de Arcos* and has a total surface area of 58,413 m².

The following questions have to be borne in mind with respect to the city's model for *Movilidad Local y Metropolitana*.⁶

- The decentralisation of the *Universidad de Cádiz* raises the problem of student movements to and from educational centres. Accessibility and mobility should therefore be afforded high-priorities when drawing up a model for new university premises.
- The advantages associated with having a university in the province are undermined if students are not provided with the necessary means to freely move to these centres from their places of residence. This problem needs to be addressed through joint and co-ordinated action involving all the local municipal and administrative authorities.

5. Department of Planning, Works, Projects and Computer Science of the G.M.U. of Jerez.

6. Local and Metropolitan Mobility.

- From the point of view of road links, the *La Asunción* area is well connected to the city's main road network and therefore communicated with the Metropolitan Network. There is direct access from the new *Ronda Este de Jerez*⁷ (currently under construction) which connects up all of the main roads outside the city.
- It is important to bear in mind the importance of rail transport, and especially so once the Airport —Jerez— Cádiz line has been completed. This will lead to significant reductions in travel times and an increased frequency of services. The *La Asunción* area enjoys a privileged location, as it is only three hundred metres from the present Railway Station. In the near future, this is destined to become a Transport Interchange Centre, with the addition of an adjoining Bus Station, which is foreseen in the *Plan de Integración del Ferrocarril en el Medio Urbano de Jerez*⁸.
- With regard to its Urban Bus service, Jerez offers an extensive and high quality service. It has air-conditioned air buses and vehicles with special low platforms providing accessibility for the handicapped and guaranteeing mobility for everyone within the city.

As far as the area's relationship with areas dedicated to green belt and sports uses is concerned, it should be pointed out that sport has become an increasingly important part of university life, and that more and more students participate in sports activities on a regular basis.

In this particular case, the *La Asunción* area lies just 100 metres from the Chapin Municipal Sports Complex, which is a possible centre for university sports and is able to cater for a multitude of sporting specialities.

Apart from the green belt areas already foreseen in the plan (a minimum of 28,000 m²), there is also the neighbouring *Parque González Hontoria*, with its 290,000 m² and plans for the future *Parque de La Canaleja*, with a further 122,000 m².

*Resolutions in the P.G.M.O.*⁹

According to the *Normativa Urbanística del Plan General* and stemming from its *Modificación nº 4*, the area has been qualified as a *Sistema General de Equipamentos*,¹⁰ dedicated to Educational uses.

This qualification is regulated in Chapter Six of the previously referred to *Normas Urbanísticas, (Uso de Equipamientos y Servicios Públicos)*.¹¹ This chapter makes it clear how flexible Planning can be when there is a need to admit different solutions that provide answers to the different requirements and needs presented by each particular case.

7. Eastern Jerez ring road

8. Plan for Integrating the Railway into the Urban Environment of Jerez

9. The Municipal Plan (Plan General Municipal de Ordenación)

10. General System of Facilities

11. Use of public facilities and services

To be more precise, the use associated with university education is covered in Section E2, Group V, (Higher Education). Section 6 of Article 230 is significant in that it establishes that the Development Potential cannot exceed $1.5 \text{ m}^2/\text{m}^2$ per undeveloped plot, without establishing any limitations on volume, occupation or height.

Needs programme

This needs programme is a compilation of various different documents that have been sent to the editing team by the *Area de Infraestructura* of the *Universidad de Cádiz*. We have worked with them in a co-ordinated effort to draft the current proposal and to seek solutions for the different needs that were outlined to us.

As previously mentioned, the needs programme presented here has been subjected to constant revisions and modifications over the time in which the current proposal has gradually taken shape. This should be accepted as logical, given the large and complex nature of the project that we are involved in. Furthermore, the premises should be the subject of detailed analysis by the University, as this institution is none other than the promoter and final user of the end product.

Be that as it may, we must also stress that the possibilities for constructing on the building plot and the aspirations for creating new centres and studies exceed those presented in the programme that we have presented here. As a result, the planning proposal presents the programme outlined below as simply a first phase. It should be understood, however, that the rest of the site—which is not covered by the present project— could offer much greater building potential than that proposed in this document.

The initial information provided by the University with respect to potential users is as follows:

Degree in law	1500 students
Second cycle legal studies	300 students
Degree in business studies	1500 students
Department of public administration management	600 students
Second cycle business studies	300 students
Total students.	4200 students

Foreseeing a continuous use of the buildings and two separate shifts of classes with a peak hour capacity of 4,500 places, we can calculate spatial requirements on the basis of a maximum of 3,000 students.

Urbanistic planning needs

Parking Facilities: An area the size of the one outlined has a peak capacity of 4,200 students (in the first phase). We must therefore make provision for parking places for a minimum of 325 cars, in addition to those that may be created as a consequence of improvements to the neighbouring road network. Basing our calculations on a minimum required surface area of 20 m² per parking place, it would be necessary to reserve 6,500 m² for parking. Such an area is clearly excessive, and more in line with the image of the car park of a large hyper-market. As a result, the best solution would seem to be that of providing underground parking, at least to the extent of avoiding converting the area into an enormous car deposit.

Green zones: Keeping to the previously mentioned requirements, it is possible to exceed the total 25,000 m² of green zone currently earmarked for the area in the General Plan on just the present plot alone (first and second phase). It is necessary, however, to foresee a design that permits its use as both an open space and, alternatively, as a meeting place. The inclusion of an outdoor “amphitheatre”, which might also serve as a venue for concerts, plays and other mass-participation events—not necessarily related with the university, but with the city itself— would also be favourably regarded.

Other actions: Apart from these major requirements, we should also add two other features that need to be borne in mind when planning this area:

The perimeter of the complex should be sufficiently open so as to make it fully visible from the exterior, yet sufficiently open so as to permit effective control and surveillance from its interior.

Provision of the necessary facilities to ensure the smooth operation of the Campus.

CRITERIA FOR ACTION

Bearing in mind the previously outlined needs programme, and after an urbanistic and functional analysis of the target area, we have produced the following list of basic criteria for planning the whole area into which we will integrate the first phase of the current project:

These criteria will be as follows:

- The proposed image for the *Campus Universitario de La Asunción* is an Integrated one and is based upon Departments.
- The general focus when planning the area revolves around the idea of a large enclosed—and therefore controlled— site with a main surface traffic of pedestrians and bicycles. Motor transport is preferably limited to emergency services.
- The main accesses are located in previously existing side streets so as not to exacerbate the dense traffic of the *Avenida de Arcos* and the *Paseo de las Delicias*.

A number of secondary pedestrian accesses and bus stops for urban services will also be located along both these transport routes.

- The routes of a series of pedestrian and/or cycle paths separate the different "plots" or areas of homogeneous uses within the complex. (The proposal outlines two parallel east-west and two north-south axes, with the westernmost axis framing the green area designated by the P.G.M.O.).
- The definition of a series of internal "plots" or areas of homogeneous use that spatially and functionally zone the area, which is based on these transit arteries and respect for the green area strips established by the General Plan.
- An answer to the great foreseeable demand for parking space, based upon a large central area located at a basement site, with covered or partially covered accesses via passages connecting these areas. As a complement to this solution—and making use of the same subterranean communication axes—it would be possible to envisage individual basements for the faculties that require them.
- An extension of the existing lateral roadways that run between *Avenida de Arcos* and *Paseo de las Delicias*, with a traverse section of 3-2-7-2-3, and with lines of parking spaces along both sides of the road and the hard-shoulder. Also the possibility of two-way traffic, which would guarantee access to and from both of these major streets.
- Special attention will be given to the proposal and to the way in which the citizens of Jerez perceive and understand "the place".

We believe that if we take these ideas into consideration, it will be possible to create a complex that would meet the following requirements:

- It would be a planned complex and give the impression of forming part of a city, rather than being just a group of unconnected and isolated buildings separated and surrounded by random and unusable open spaces.
- It would be an accessible complex, combining pedestrian traffic—which would be the only form of surface transit—with the planning need to satisfy demand for places in which to park private vehicles.
- The complex should offer the population pleasant open spaces that are easy to use and maintain. The central area could serve as a meeting space for the Campus, and combined with the functional buildings around it, this would give an impression of continuous use. It is also necessary to plan the inner area and to afford the same importance and care to the design of open spaces as that afforded to the built environment.
- The complex would promote contact with the neighbouring densely populated area (located to the west) through a green area that could be used, planned and regulated by both the university and its neighbours.
- The complex would highlight the most representative of the many uses contained in its interior and especially the buildings dedicated to educational uses. It would

also serve as a showcase for the institution along the main streets that border it (*Avenida de Arcos* and *Paseo de las Delicias*).

- It would be a complex that could be easily constructed in different phases, with each of the component parts being able to function on its own until the rest of the buildings had been constructed.
- The complex should be capable of incorporating the most modern university uses and building concepts, including integrated and intelligent buildings.
- The quality of the architecture should match and consolidate the quality of the urbanistic planning and design.
- The final Campus product must conform to the established Urbanistic image. The different architectural components will adapt to their urban environment and become part of the general development of this area of the city.
- The proposal must take into consideration the value of the new Campus in Jerez. It must gain general acceptance and also establish its importance both within the surrounding area and as a generator of new activities that will influence its level of activity.

GENERAL PLANNING OF THE COMPLEX

Description of the proposal

The general planning proposal presented in this section is based upon ideas advanced in the previous section, but also takes into consideration how the whole plot —located between *Avenida de Arcos* and *Avenida de las Delicias* and including the area previously occupied by the *La Asunción* military barracks— would work once it assumes its university function.

Once a functional scheme had been outlined and initial planning completed, the project went on to develop the finer details of what has come to be called the “first phase” and deals with the northern part of the area.

Basic lines of the overall planning proposal

The proposed structure for the whole surface area destined for university use begins —as we have seen from the previous section— with the premise of the General Plan and respects the open space next to *Avenida de Arcos* and the *Barriada de la Vid*.¹² One of the first project decisions was that of completing this margin by creating a similar area next to the *Avenida de las Delicias*, and thereby establishing a U-shaped green zone around the development area, which would facilitate contact with the nearby city.

12. A residential quarter.

Taking these green areas as a starting point, it was decided to create a series of internal communication axes:

- Two pedestrian axes running from north to south (*Avenida de Arcos-Avenida de las Delicias*), with the one to the west coinciding with the limit of the green margin and the one to the east running through the middle of the plot.
- Three pedestrian axes running from east to west (*La Asunción-La Vid*), with the limits of the central route coinciding with the limits of the first phase. These axes —although meant for pedestrians— will be sufficiently wide (10 metres) and have appropriate covering to permit their use by emergency service vehicles.
- Two roads passing at a depth of 4 metres below ground level in an east-west direction and running parallel to the outer pedestrian routes. As a result, the first phase seems to be enclosed by a semi-submerged road situated to its north. These road axes will provide access to the different underground parking areas that will be located either under the buildings themselves or in special open and semi-covered areas.

With this communications structure and set of green areas, we have a grid pattern similar to that of a Roman military city, with its “*Cardo*” and “*Decumanus*” defining a series of blocks or “squares” with sufficient surface areas to house the different buildings required.

One final and no less important general planning decision concerns the location of a large open space within one of these “squares”. This space, which is on *Calle Nuestra Señora de la Consolación* (located to the east of the plot), would be bordered by an arcade in the style of a monastery cloister.

Description of the proposal developed for the project

Once decisions have been taken as to the relative positions and trajectories of the green areas, footpaths, routes for motorised transport and large open cloisters, decision making for the first phase comes down to allocating the uses of the different resulting “squares”. This is resolved as follows:

Open cloister: As already mentioned, this is the large open space for meetings and social interaction on the Campus. It is located on the side of the site nearest the *La Asunción* quarter and is surrounded —on all four of its sides— by an arcade with two rows of pilasters of two different heights, with the smaller, more domestic, ones on the inside, and the larger, more monumental ones, on the outside. The inner part of the cloister is completed by a clump of trees and a “hard” base that is given an artificial slope in order to accentuate the view of the trees, and a central area with different tiered terraces that house a space earmarked for a strip of water. In this way, there is a space with qualities for hosting daily activity —under the trees and on the terraces that are covered by a pergola— and the major mass events associated with academic life.

A series of buildings have been located around the cloister as if this was an urban square and they were its interior facades:

Services Building and Library: They are located as two independent volumes in the area opposite the entrance to the cloister that gives onto the road, which shares perimeters with one of the cloister's rows of side arches and with the central north-south and central and upper east-west footpaths.

These are two independent blocks occupying a surface area of 40×40 metres and which are separated by a 20 metre wide space that serves as a lobby for both units and also for the classrooms located behind them.

The library, which is housed in the highest of the buildings (with four floors according to the proposal), forms the south-west corner of the cloister and converts the row of arches into a double façade that is as high as the building itself and forms a very special angle. As it occupies a position that "divides off" the second phase of the university complex, it could be used as a common building for the whole complex and could be extended in the future, as and when required.

The services building has been located at what is both the geometric centre and also the centre of gravity of the whole complex. This has been done because for functional reasons; it needs to be equidistant from the other buildings and uses and also needs to be located in an area near both the pedestrian (above all from the central footpath that leads to *Avenida de Arcos*) and road (as the planned exit from the subterranean parking areas is just at the confluence of the central north-south and upper east-west axes) accesses.

Building Containing Offices and Seminar Facilities: This is located with facades facing the open cloister, *Calle Nuestra Señora de Consolación* and *Avenida de Arcos* (and is separated from them by strips of green zone). The building's perimeter is constructed with a double row layout, opening out onto a very large central patio. This rigid layout is broken at one of the corners of the patio in order to allow larger spaces. The three storey building partly incorporates the cloister arches and its lower level has a patio that connects with the cloisters. The underground part of this building has parking facilities for university lecturers and non-teaching staff, with access from the covered road.

General Assembly Hall: This has been located in such a way as to close the angle created by the previously described building (the library, with the services building on one side and the offices and seminar facilities on the other). Its location corresponds to the functional effect of its possible independent use separated from the university complex, and for this reason it is located in an area near the central entrance to the complex from *Avenida de Arcos*.

Building Containing Lecture Halls and Classrooms: In terms of its size and functions, it could quite safely be said that this is the central building of the university complex. It is located so as to be supported by three communication axes; the two

running north-south and the east-west axis lying further to the south. This layout allows integrated access to the library and services buildings (the three buildings most used by university students). It also provides a communications axis which runs from the open cloister, passes between the library and services buildings, and opens into the heart of the classroom section. In this way, it also emphasises the U-shaped form of the classroom building. The classroom building also constitutes a fundamental part of the parking system, as its basement houses the largest surface area dedicated to this particular use. This basement is also connected to the surface just to the north of the classroom section and is separated from the classroom building by an underground road, while further space is dedicated to semi-covered parking. As in the case of the library, the building borders on the second phase of the development: this will facilitate its use by the whole complex and allow its possible future extension. The building is two storeys high.

Sports Centre: This building faces the *La Vid* neighbourhood and adds the finishing touch to the axis created by the cloister, services building-library and classroom blocks. Its position has been partly determined—as in the case of the general assembly hall—by the consideration of facilitating its use by groups from outside the Campus and allowing them access to it without having to pass through the Campus itself.

Campus Parking and Storage Facilities: As already mentioned, these are located in the block positioned to the north of the classroom building. They are directly connected to the road network and constitute a continuation of the other basement parking facilities.

An open sunken-level system has been chosen that spatially enriches the whole complex without having to confine vehicles to a basement with a corresponding “hard square” above it.

The campus storage facilities are located in the south-east corner of the block. They are situated just below ground level, have direct road access, and support an upper level square that houses the ramps and lifts that communicate the surface level and parking facilities. This unit also serves as a lobby for the services building, library and classroom block.

Closing off the Campus: Both the university and the city council have preferred a closed complex with accesses to different individual areas that can readily be controlled. For this reason, the complex has a closed perimeter with two gates on the north side (*Avenida de Arcos*), two more on the *La Vid* side, and a further two in *Calle Nuestra Señora de Consolación*, all of which coincide with internal footpaths.

Likewise, it is possible to control entry and access to the parking facilities and underground traffic.

Finally, we must mention that access controls have been introduced in order to limit the access of people from outside the university, who use the sports centre and the general assembly hall, to the rest of the Campus complex.

USE OF SURFACES ACCORDING TO THE GENERAL PLANNING PROPOSAL

The general surface areas resulting from the planning proposal are as follows:

Surfaces occupied by the built environment:

Outlying green areas	11,967 m ²
Open cloister	6,830 m ²
Area of covered cloister.....	2,800 m ²
Footpaths	11,967.50 m ²
Ramps and open spaces over roadways	1,492 m ²
Covered paths and roads.....	2,700 m ²
Parking and storage space.....	4,123 m ²
Total area destined for open spaces.....	38,730 m ²

Surface areas occupied by buildings:

Offices and seminar facilities.....	3,362 m ²
Library	1,647 m ²
Services building	1,600 m ²
General assembly hall.....	1,650 m ²
Classrooms.....	7,502 m ²
Sports centre.....	3,920 m ²
Total area occupied by buildings.....	19,681 m ²
Total project surface area (1 st phase)	58,411 m ²

BUILT SURFACE AREAS RESULTING FROM EACH PROPOSAL.

LAW AND ECONOMICS FACULTY BUILDING

Surface above ground level – 7,609 m²

Covered public spaces – 910.09 m²

Surface below ground level – 3,250 m², (118 parking places for cars and 40 for motorcycles).

Library

Built surface above ground level – 6,713.00 m²

Covered public spaces - 905 m²

Surface area below ground level – 2,560.36 m²

Classrooms

Built surface areas below ground level – 8,242.17 m² (parking for 250 vehicles).

Built surface areas above ground level – 8,425.12 m²

Common services building

Built surface above ground level – 3,088.50 m²

Built surface below ground level – 199.55 m²

General assembly hall

Built surface area above ground level – 2,609.34 m²

Parking area and storage space

Total parking area – 3,338.31 m²

Total built surface area for storage and loading bay – 721.35 m²

Sports Centre

Built surface area – 3,468.4 m²



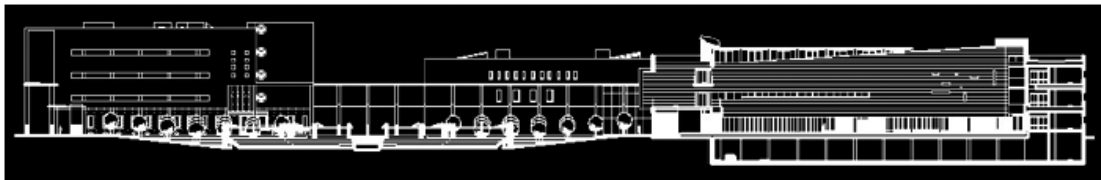
Plan of the plot and for the first phase of action.



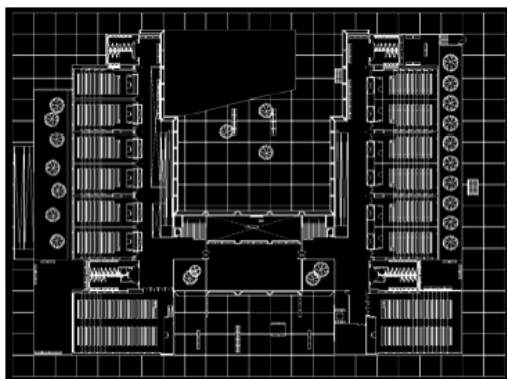
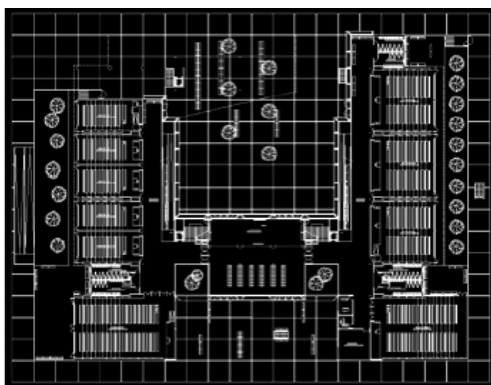


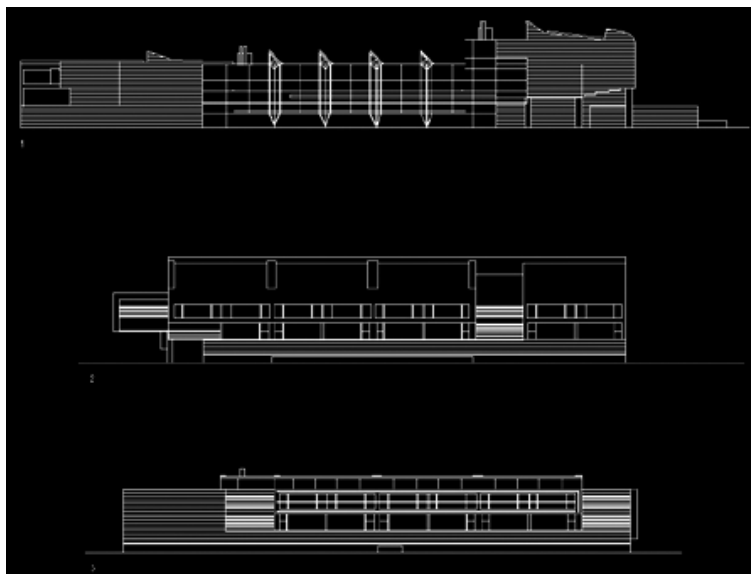
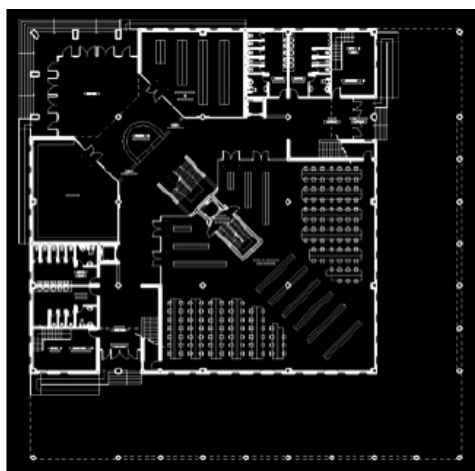
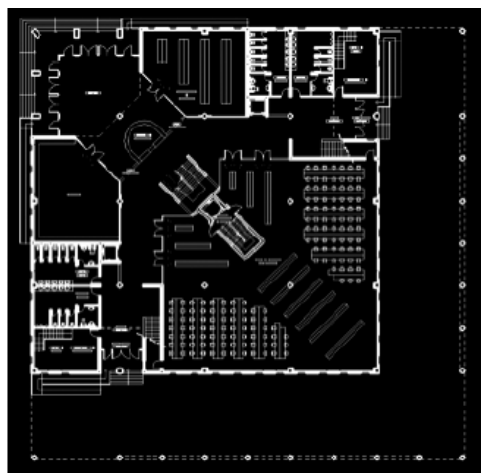
View of the cloister

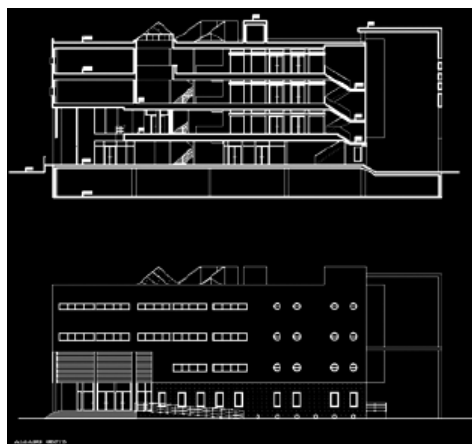
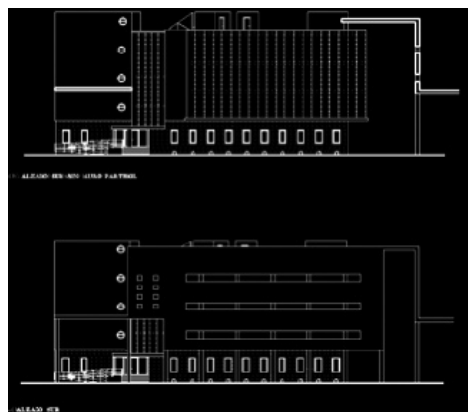
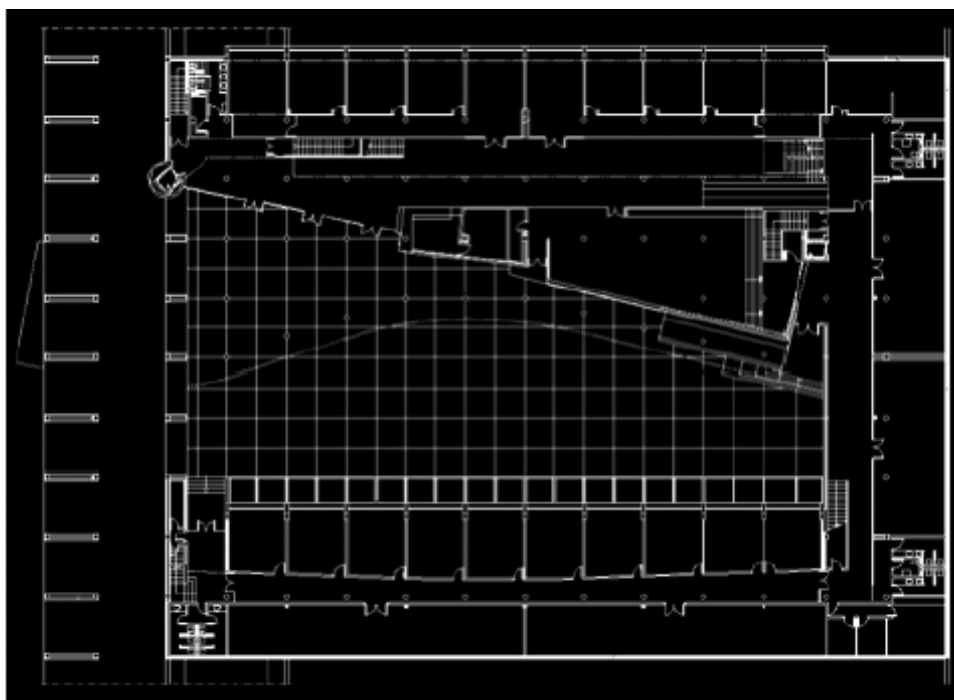
Cross section of the cloister

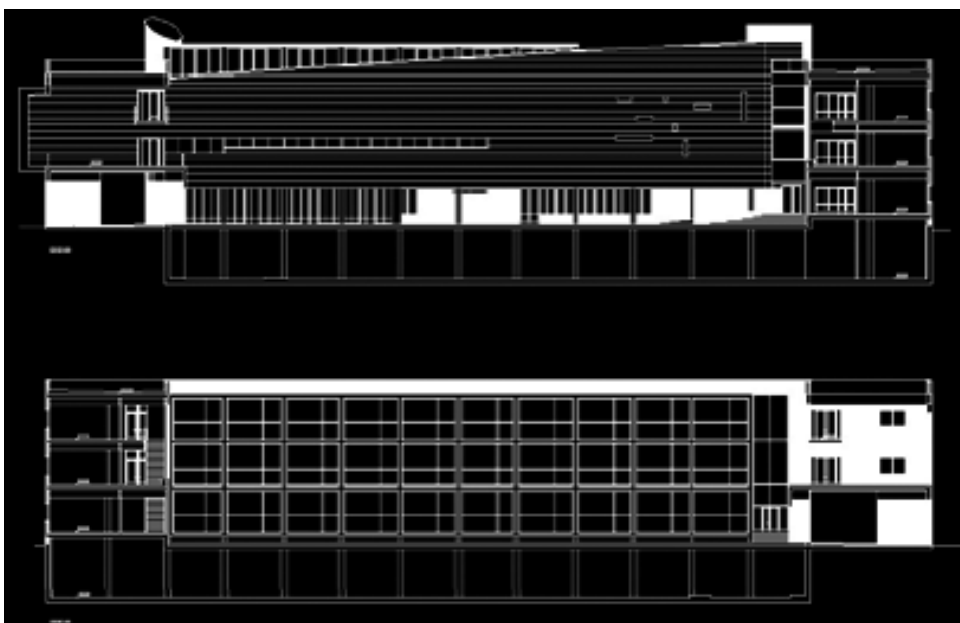


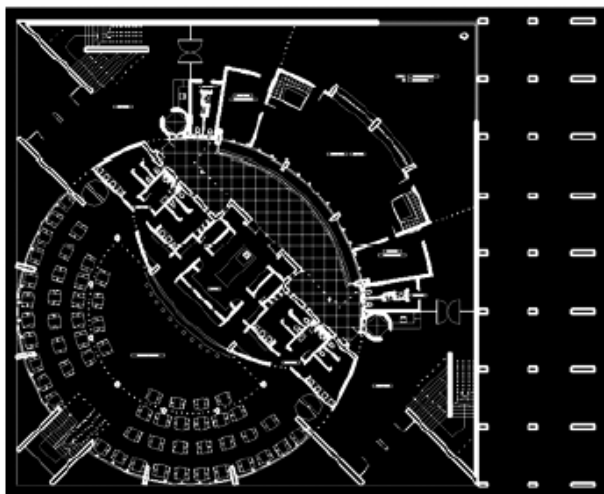
Classroom building – ground floor and first floor



Aulario, cross section*Library – ground floor and first floor*

Library – frontages*Offices and seminar facilities – ground floor*

Offices and seminar facilities – frontages



Services building – ground floor

