PORTFOLIO

MATTHEW JOHN HART
The main objective was to design a library that would not block out the view of the surrounding ruins. For this reason the original walls on the ground level are restored and the volumetric addition is raised. This creates an empty space that houses the conference room between the ruins and the library.
**LIBRARY OVER ARCHEOLOGICAL RUINS**

Prof. Luigi Franciosini

**Top, left to right:** the library structure and volume are defined by the underlying ruins. **Middle, left to right:** each level presents a unique experience because of the varying distance from the surrounding ruins. **Bottom, left to right:** ground level with book deposit and offices, first floor with conference room and lobby, second floor with study space.

Matthew John Hart
Four key values were used in designing this project:
- importance of the surrounding space as a filter between the homes and the urban context;
- different house types are present on each floor;
- external landings are wide and furnished, thus becoming a place for social activity;
- presence of green and multi-use spaces on connecting roofs.
The housing units are laid out so that none of the bedrooms have windows facing the external landings. This has been made possible by creating more than one elevator and stair block for the larger of the two buildings, thus reducing the length of the landings. The “flipped duplex” variant facilitated a more varied distribution of housing types for each floor. Each unit is designed to have a window in a straight line of sight while entering through the front door. This creates a dialogue...
The idea for the external façade is to unite the new housing units to the surrounding brick-faced buildings. The terracotta slabs create the colour contrast with the sky that is so typical of the Roman tradition and culture while emphasizing the volumetric movement of the façades.
Masters of Architecture Design Studio 2

The objective of the Laboratorio di Progettazione Architettonica 2M (Architectural Design Studio 2 of 4 in the Master’s Program) was to design a new library for the School of Architecture. The assigned area was that of the Ex-Mattatoio in Testaccio, formerly an industrial area of Rome.

The building had to contain: a lounge area, collective study rooms, single work stations, an exhibition area, a multimedia room, book deposit, bookshop, a cafeteria and an auditorium.

The narrow rectangular geometry of the site (30 x 150 m) was the incentive to plan the distribution of the various required spaces approaching the design concept through cross sections rather than floor plans.

left: site plan - bottom: concept sketch of cross section
DESIGN FOR A NEW UNIVERSITY LIBRARY

Prof. Paolo Desideri

top left: cross section
top right: longitudinal section
middle: east side elevation by day
bottom: west side elevation by night

All drawings were produced by using Autodesk Autocad and Adobe Photoshop.

Matthew John Hart
DESIGN FOR A NEW UNIVERSITY LIBRARY
Prof. Paolo Desideri

SPACE USAGE:
1 - lobby
2 - book display
3 - audiovisual
4 - reading room
5 - offices
6 - group study
7 - exhibition space
8 - machinery
9 - auditorium
10 - cafeteria
11 - book shop
12 - book deposit

All drawings were produced by using Autodesk Autocad.
In order to emphasize the presence of the green roof and façades, the exterior surfaces are simple and neutral.

top left: view of the east side entrance from the new Testaccio Market Place
bottom left: view of the front entrance

top right: view of the back and the west side entrance
3d renders were produced using Rhinoceros and Adobe Photoshop
Masters of Architecture Design Studio 3

The objective of the Laboratorio di Progettazione Architettonica 3M (Architectural Design Studio 3 of 4 in the Master’s Program) was to continue the design the new library for the School of Architecture.

The object of the Design Studio was to examine the previous design in depth, study it’s construction phases and its feasibility. Students had to produce design computations, cost estimates, ventilation system (heating/cooling) plans, find and succesfully use technical data regarding any products that were to be used in the project.

Students were required to produce a model of the building with Autodesk Revit with which the computations and estimates could be extrapolated.

Fire safety regulations had priority in the design process, thus the initial project underwent a series of changes in order to meet these standards.

One of the most important changes was structural: though a steel structure was chosen initially, after having considered safety codes and preliminary cost estimates, a cement base with a steel-structure on top was considered as a better solution.
1:50 scale cross section with two 1:20 scale details. Both details serve to better illustrate how the top steel structure is anchored to the underlying cement structure and how the user perceives this change.
Each building technology has its own identity, both structurally and aesthetically. The reading room on the first floor is in a cement structure, the walls separating the different spaces are thick and give the user a sense of solidity. The group study space is located in the light steel structure above the reinforced concrete block-like structure. The space is more open and bright, fixed partitions are made of glass and removable ones are made of compressed recycled cardboard.

All drawings were produced by using Autodesk Revit + Autocad.
Top left is an interior view of one area of the reading room. The thick brick partitions guarantee a silent environment.

Top center is a 3D rendering that shows the technical detail of the façade and the floor for the cement structure.

Bottom left is an interior view of the group study area. The steel structure makes a bright open space design possible.

Bottom center is a 3D rendering that shows the technical detail of the façade plating and the floor for the light steel structure.

All views and renderings were produced with Autodesk Revit.