



***BILKAY BEGÜM PEKER***

# CURRICULUM VITAE

**BILKAY BEGÜM PEKER**

Date of Birth: 13/01/1994

Hometown: Ankara, Turkey

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E-mail: [bbegumpeker@gmail.com](mailto:bbegumpeker@gmail.com)

Website: [linkedin.com/in/begumpeker](https://www.linkedin.com/in/begumpeker)

## EDUCATION

2012-2016 *Bilkent University, Turkey*  
*Bachelor of Architecture*  
GPA: 3.13/4

2015 *Politecnico di Milano, Italy*  
*Erasmus Programme*

2006-2012 *Bilkent Laboratory & International School, Turkey*  
*High School*

1999-2005 *British Embassy School Ankara (BESA), Turkey*

## LANGUAGE PROFICIENCY

Turkish ●●●●●●

English ●●●●●●

Italian ●●●○○○

French ●○○○○○

## AWARDS AND HONORS

*Achieving an Honor's Degree from Bilkent University in:*

*2015-2016 Spring Semester*

*2015-2016 Fall Semester*

*2014-2015 Spring Semester*

*2014-2015 Fall Semester*

*2013-2014 Fall Semester*

2012 July *Certificate of International Baccalaureate (IB)*  
*from Bilkent Laboratory and International*  
*School, Ankara, Turkey*

2011 June *Certificate of Middle East Technical University*  
*(METU) basketball team after playing for six*  
*years.*

2010 June *Certification of participation to the Duke of*  
*Edinburgh, Silver Award*

2009 July *Certificate of winning first prize in the drawing*  
*competition for "Stepping Stones" magazine*

2009 June *Certification of participation to the Duke of*  
*Edinburgh, Bronze Award*

## EXHIBITIONS

2016 October *TSMĐ Architecture Students' Project Exhibition*

2016 May *Final Jury Exhibited at TSMĐ Architectural Center*

2015 October *Architects' Association 1927 Exhibition of*  
*Selected Works of Architecture Students*  
*- Bilkent University Representative*

2012 June *International Baccalaureate, High Level*  
*Art Students' Workpieces Exhibited*

## EXPERIENCE

*Member and Student Representative Board*

2014-2016 *Architects' Association 1927, Ankara, Turkey*

*Design / Build Lab*

2014-2015 *Bilkent University*

*Study Abroad Programme with Bilkent University to Verona, Rome,*  
2014 June *Florence, Milan and Venice, Italy*

*Construction Site Intern*

2014 July *Yıldızlar Group*

*Architectural Intern*

2010 July *MTM Architecture*

2015 August *A Architectural Design*

*Conceptual Drawing for Architects and Designers*

2013 July *Central Saint Martins College of Arts and Design,*  
*London, UK*

*Construction Builder*

2011 April *Attending the HABITAT activity in Beius, Romania.*  
*Volunteering to help with building a house.*

*Architecture Career Discovery Camp*

2010 August *Rensselaer Polytechnic Institute*

*Designer*

2008-2010 *Press Team Member for MUNESCO, Ankara, Turkey*

## SKILLS

Revit ●●●●●●

AutoCAD ●●●●●●

Sketch Up ●●●●○○

Rhino ●●○○○○

3DS Max ●●○○○○

Lumion ●●●●●●

Grasshopper ●●○○○○

Adobe Photoshop ●●●●○○

Adobe InDesign ●●●●○○

Adobe Illustrator ●●○○○○

Microsoft Office ●●●●●●

Laser Cutting ●●●●○○

Sketching ●●●●●●

Physical Modeling ●●●●●●

Wood & Metal Skills ●●●●○○

Hand Drafting ●●●●●●

## PERSONAL INTERESTS

*Analog Photography with Soviet Russian Vintage Camera Zenit 18*

*Sculpting in wood, metal and auterated concrete*

*Drawing and sketching in charcoal*

*Playing the piano and trumpet*

*Playing basketball, swimming and working out*

*Performed ballet for ten years*

*Traveling*

## REFERENCES

*Visiting Associate Professor, Mark Paul Frederickson*

*Department of Architecture, Bilkent University*

*e-mail: [mpf@u.arizona.edu](mailto:mpf@u.arizona.edu) / [frederickson@bilkent.edu.tr](mailto:frederickson@bilkent.edu.tr)*

*Associate Professor, Founding Chair, Meltem O. Gürel*

*Department of Architecture, Bilkent University*

*e-mail: [mogurel@bilkent.edu.tr](mailto:mogurel@bilkent.edu.tr)*

*Associate Professor, Glenn Kukkola*

*Department of Architecture, Bilkent University*

*e-mail: [glenn.kukkola@bilkent.edu.tr](mailto:glenn.kukkola@bilkent.edu.tr)*

# ***TABLE OF CONTENTS***



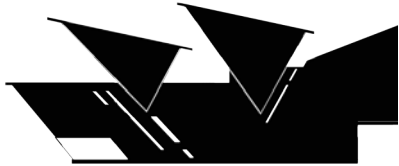
***Biomass Powerplant and Algae Farming  
2016***



***Space, Science and Technology Centre  
2015***



***Townhouse Design in Milan  
2015***



***Dormitory for Students  
2014***



***Between Transient and Permanent:  
A Guesthouse for an Artist  
2013***



***Kilim Project  
2014***



***Various Art and Photography***



## ***Biomass Powerplant and Algae Farming***

*Project Type: Individual Academic Work*

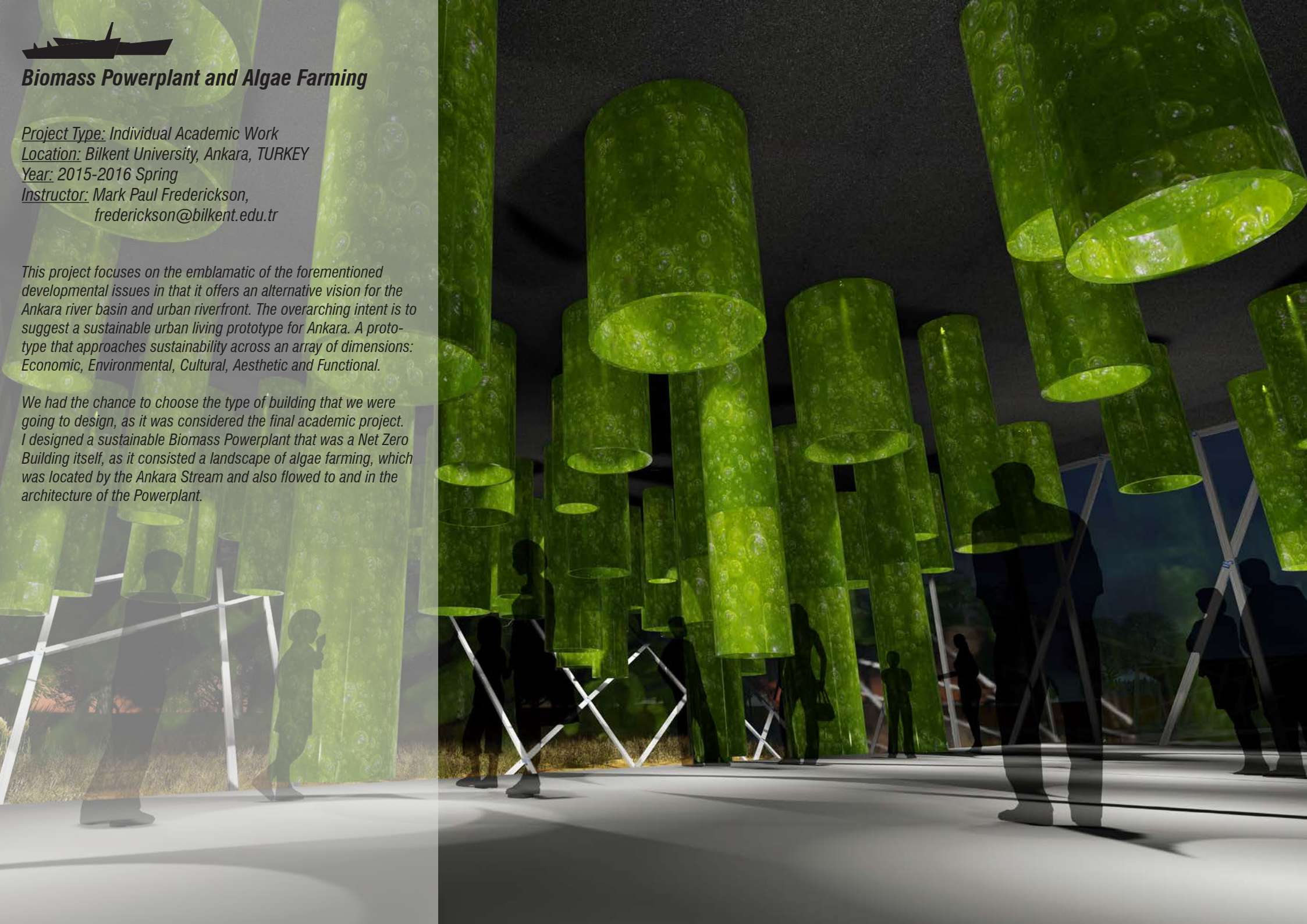
*Location: Bilkent University, Ankara, TURKEY*

*Year: 2015-2016 Spring*

*Instructor: Mark Paul Frederickson,  
frederickson@bilkent.edu.tr*

*This project focuses on the emblematic of the forementioned developmental issues in that it offers an alternative vision for the Ankara river basin and urban riverfront. The overarching intent is to suggest a sustainable urban living prototype for Ankara. A prototype that approaches sustainability across an array of dimensions: Economic, Environmental, Cultural, Aesthetic and Functional.*

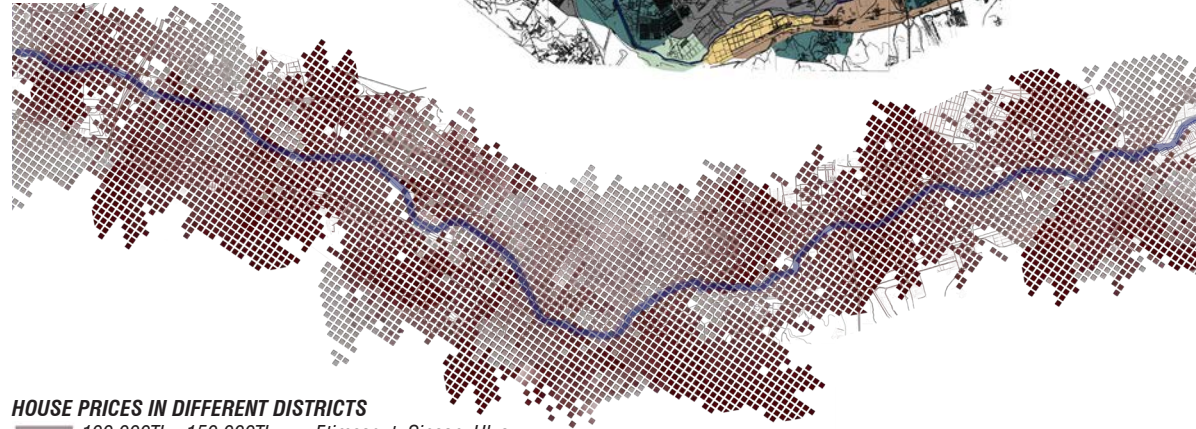
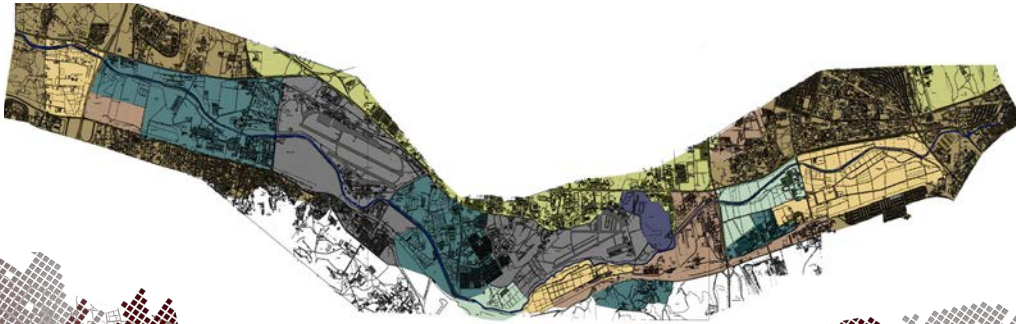
*We had the chance to choose the type of building that we were going to design, as it was considered the final academic project. I designed a sustainable Biomass Powerplant that was a Net Zero Building itself, as it consisted a landscape of algae farming, which was located by the Ankara Stream and also flowed to and in the architecture of the Powerplant.*



# SITE ANALYSIS

## LAND USE

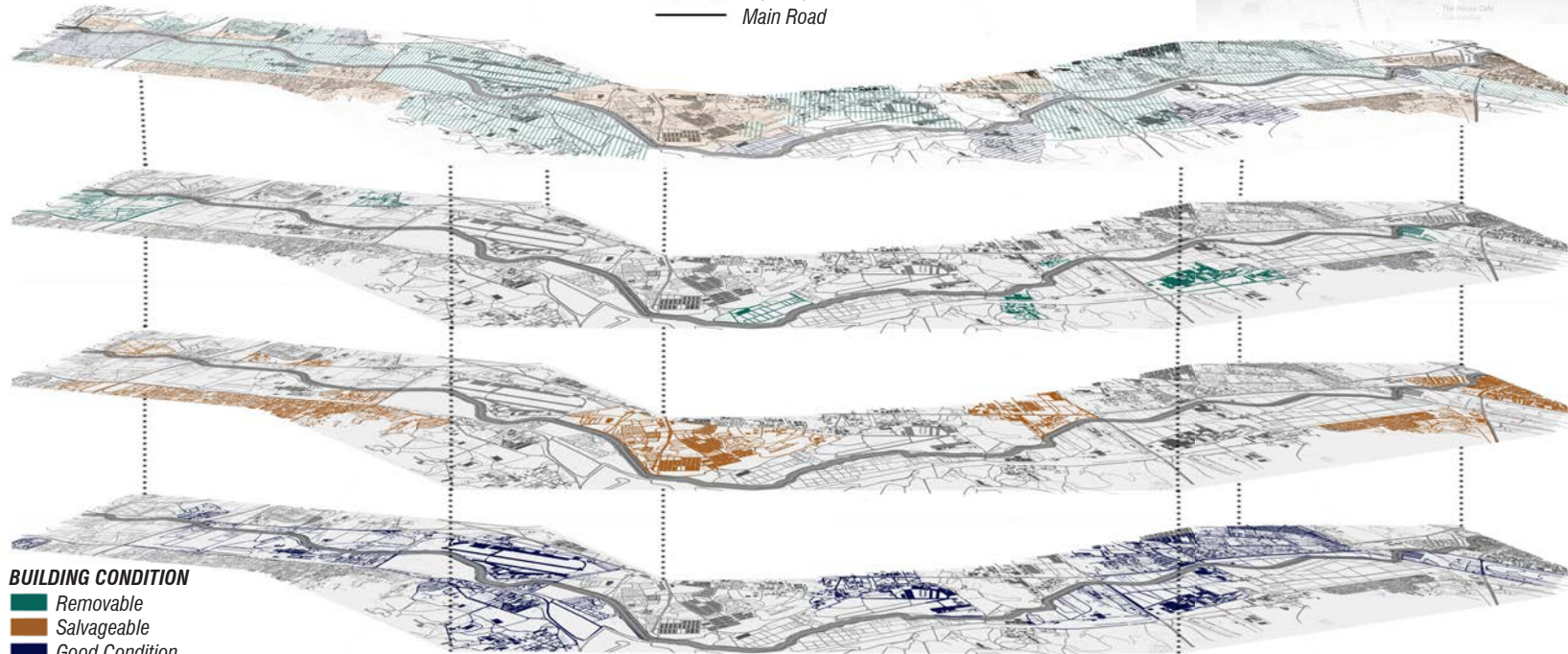
- Agricultural
- Residential
- Government
- Industry
- Military
- Mixed-Use
- Brownfield
- Open Areas



## HOUSE PRICES IN DIFFERENT DISTRICTS

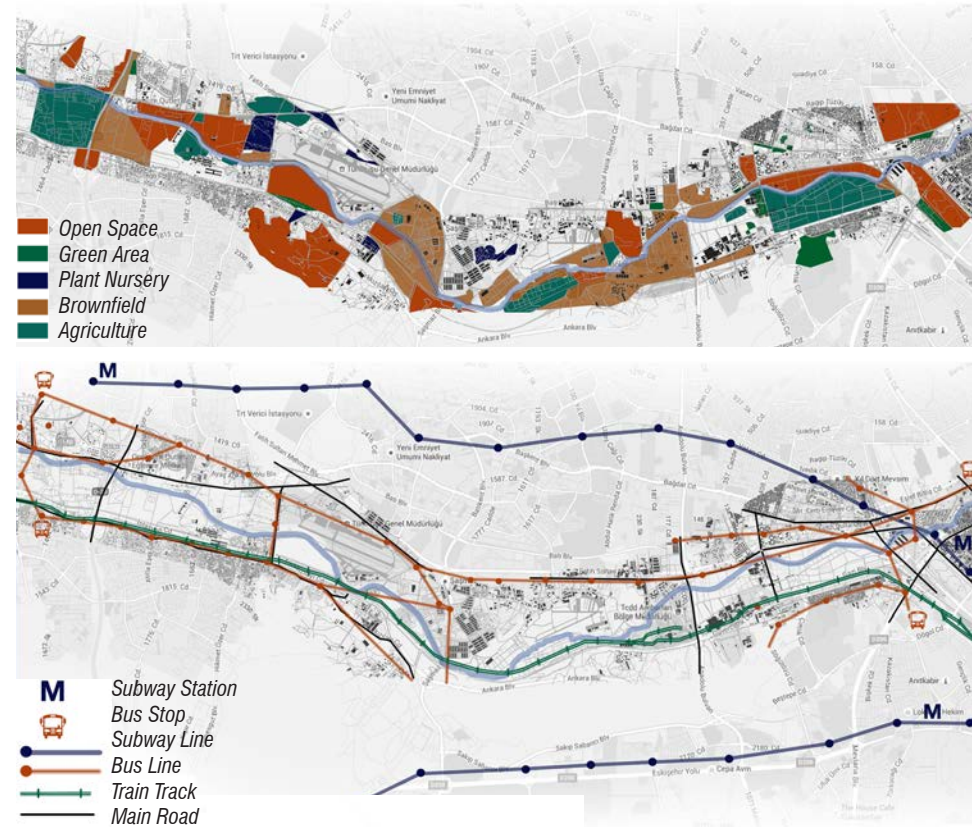
- 100,000TL - 150,000TL Etimesgut, Sincan, Ulus
- 150,000TL - 300,000TL Elvankent, Eryaman
- 200,000TL - 450,000TL Batikent, Gazi Mah., Varlik Mah., Yenimahalle
- 450,000TL - 1,000,000TL Beştepe

Land use mostly varies among residential, industrial and military along Ankara Stream. Residential and large-scale industrial areas are located in the western sector; while the middle sector is dominated by the presence of two military airports and small-scale industry. The eastern sector has Atatürk Forest Farm as well as older residential neighbourhoods such as Varlık and Gazi. As the site was designed as a class, it was divided into three parts being, western, middle and eastern sectors. I decided to choose the western sector as it was planned to be an eco-village, where residents produce all of the energy or food they require, making it a sustainable prototype. In order to minimize influence from the rest of the urban fabric, the eco-village is designed to have greenhouses and parks acting as a buffer zone around the areas. Connections to the neighbouring districts are maintained, however via open areas that act as gathering areas such as the piazzas in Italy.



## BUILDING CONDITION

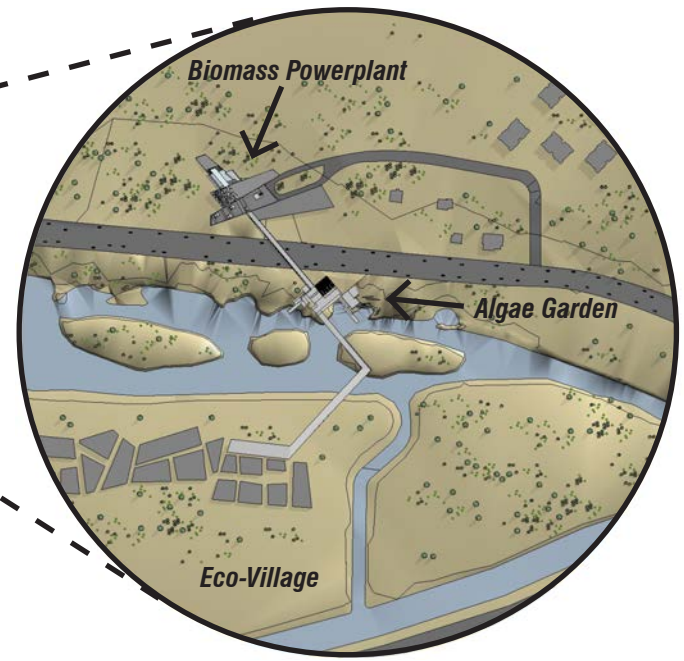
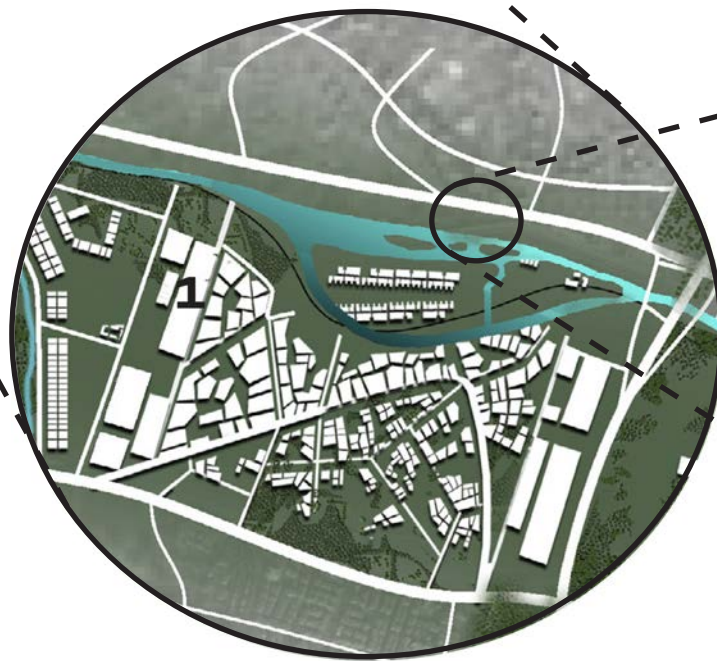
- Removable
- Salvageable
- Good Condition



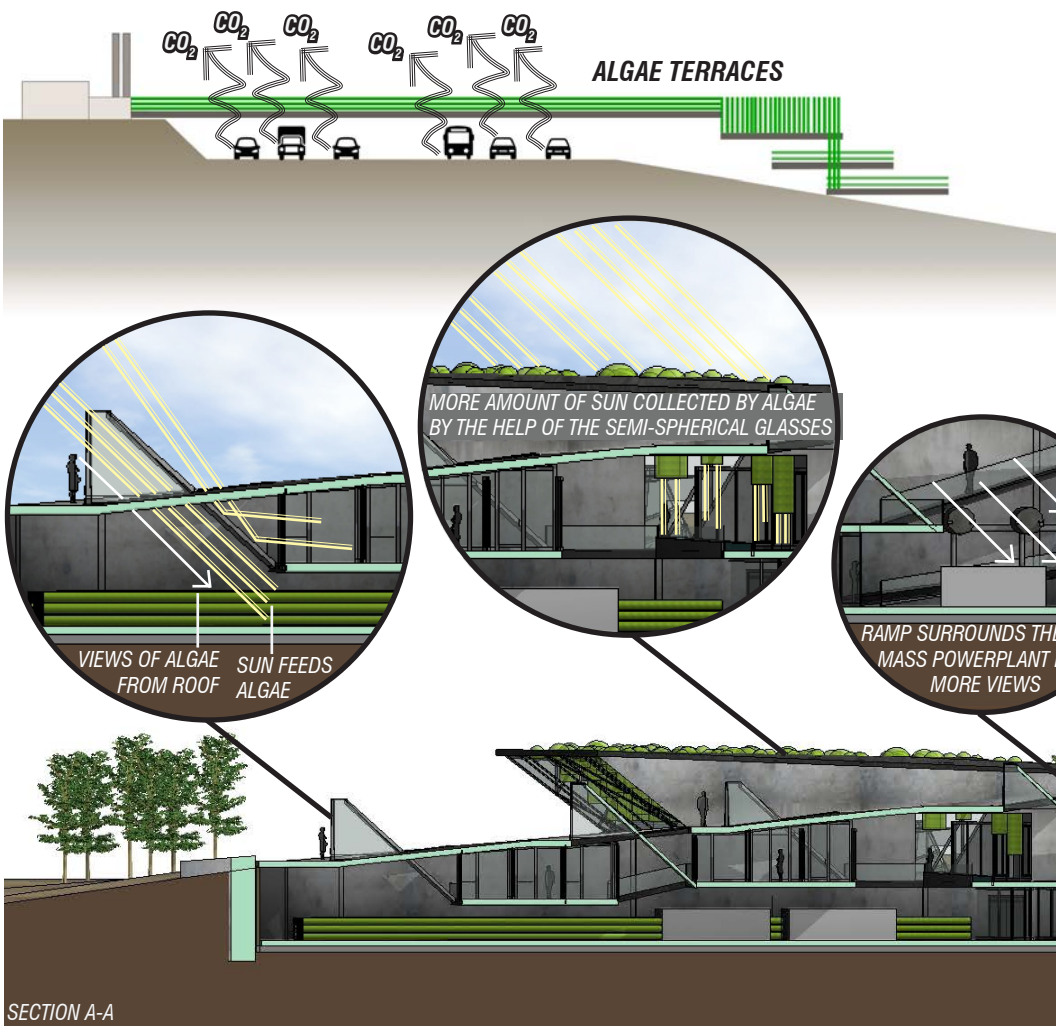
# SYNTHESIZED MASTERPLAN



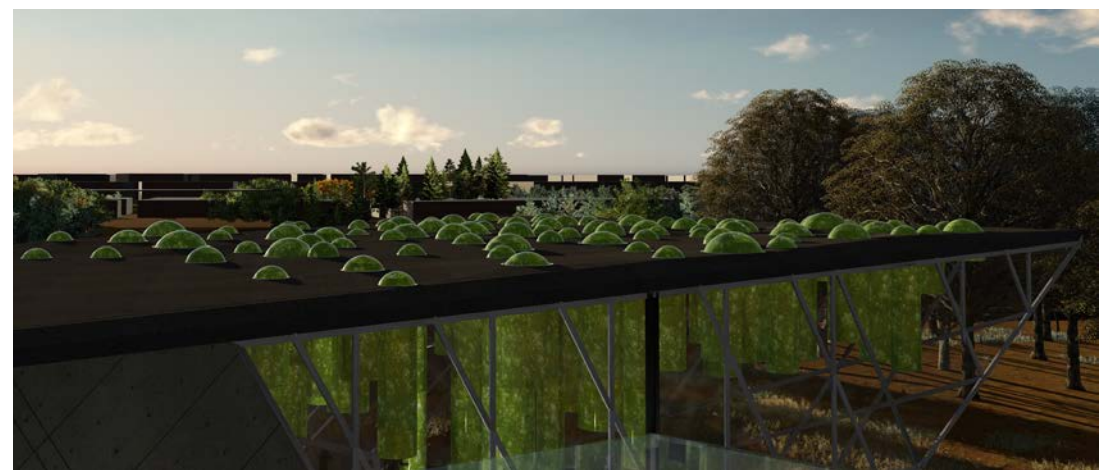
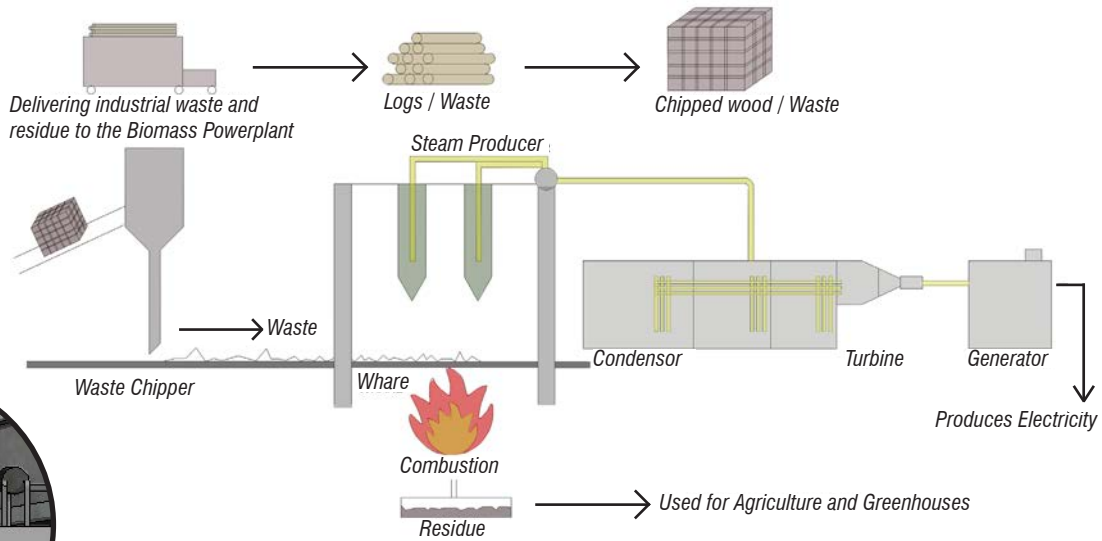
- 1. Eco-Village
- 2. Water Treatment
- 3. Mixed-Use
- 4. Park with Sport Facilities
- 5. Preserved Area
- 6. Vocational School
- 7. Residential Area
- 8. Research Center
- 9. Eco-Village
- 10. Green Houses
- 11. Affordable Housing
- 12. Wild-Life Observation Park
- 13. Green Houses and Botanical Garden
- 14. Wholesale Food Market
- 15. Affordable Housing
- 16. Mixed-Use



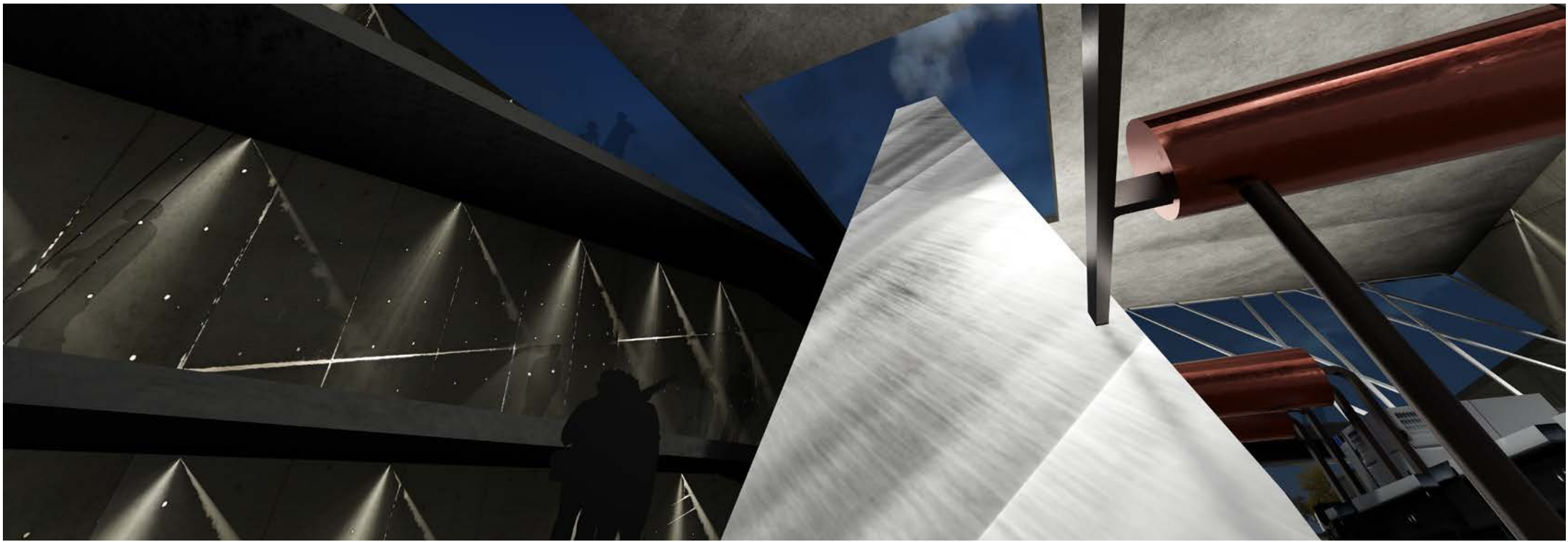
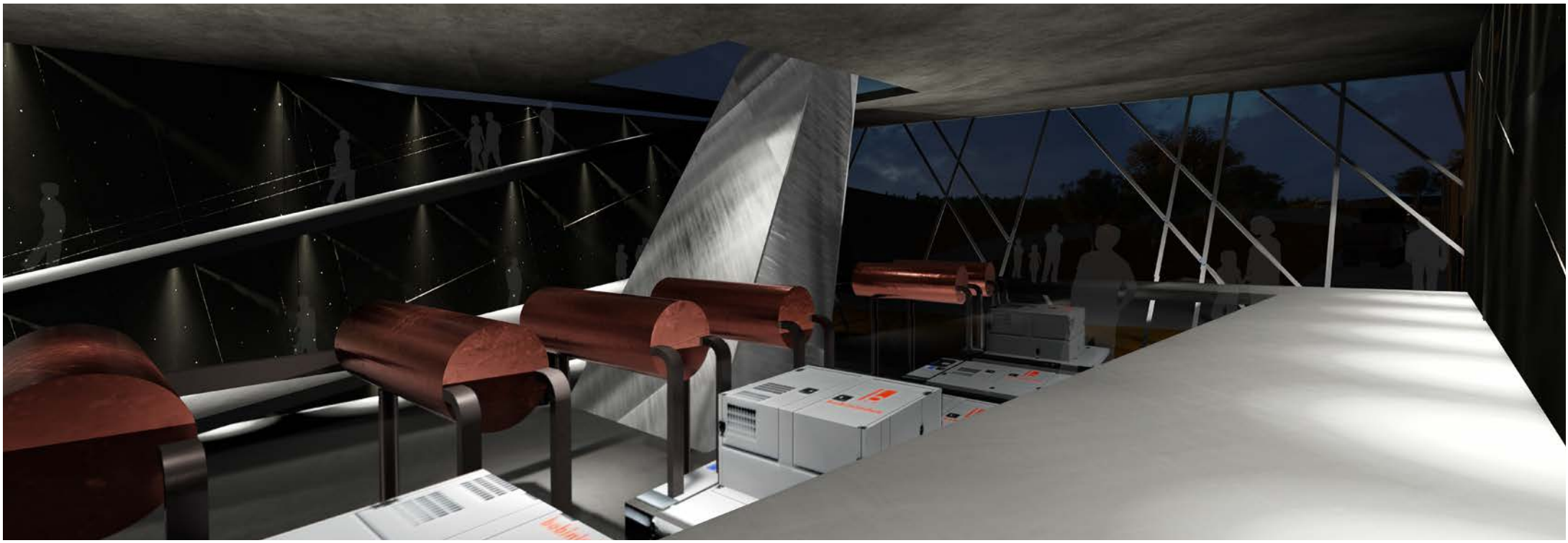


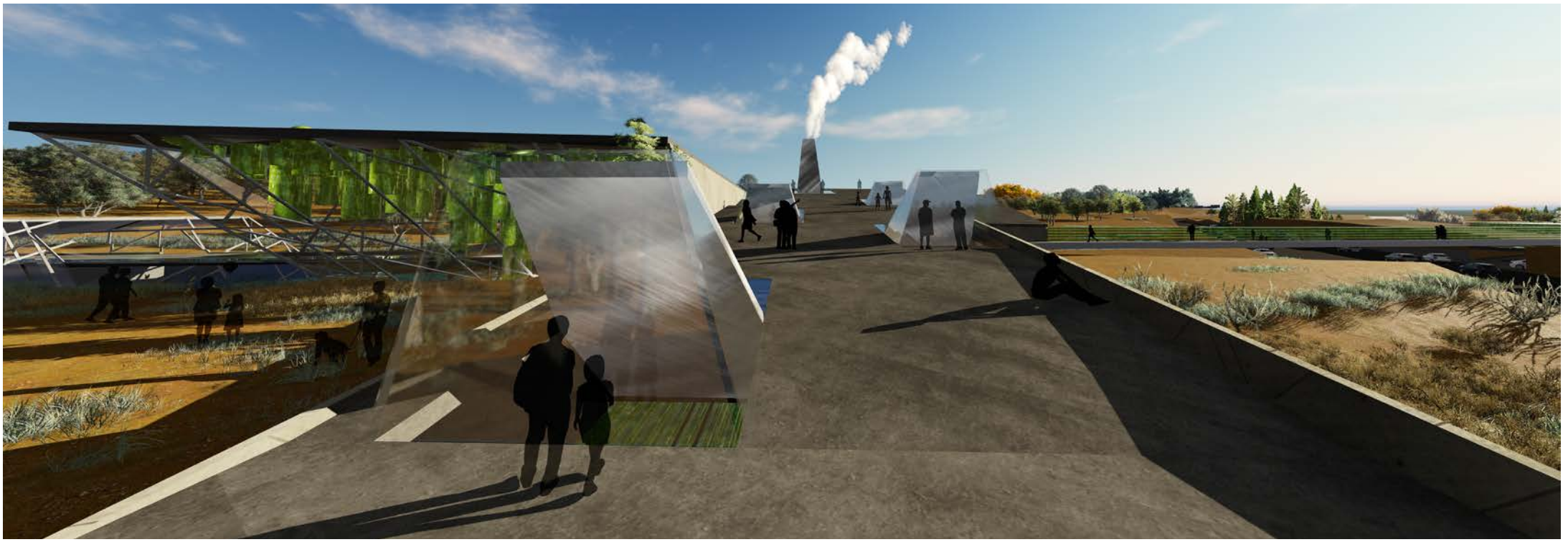


**BIOMASS PRODUCTION**











## **Space, Science and Technology Centre**

*Project Type: Individual Academic Work*

*Location: Bilkent University, Ankara, TURKEY*

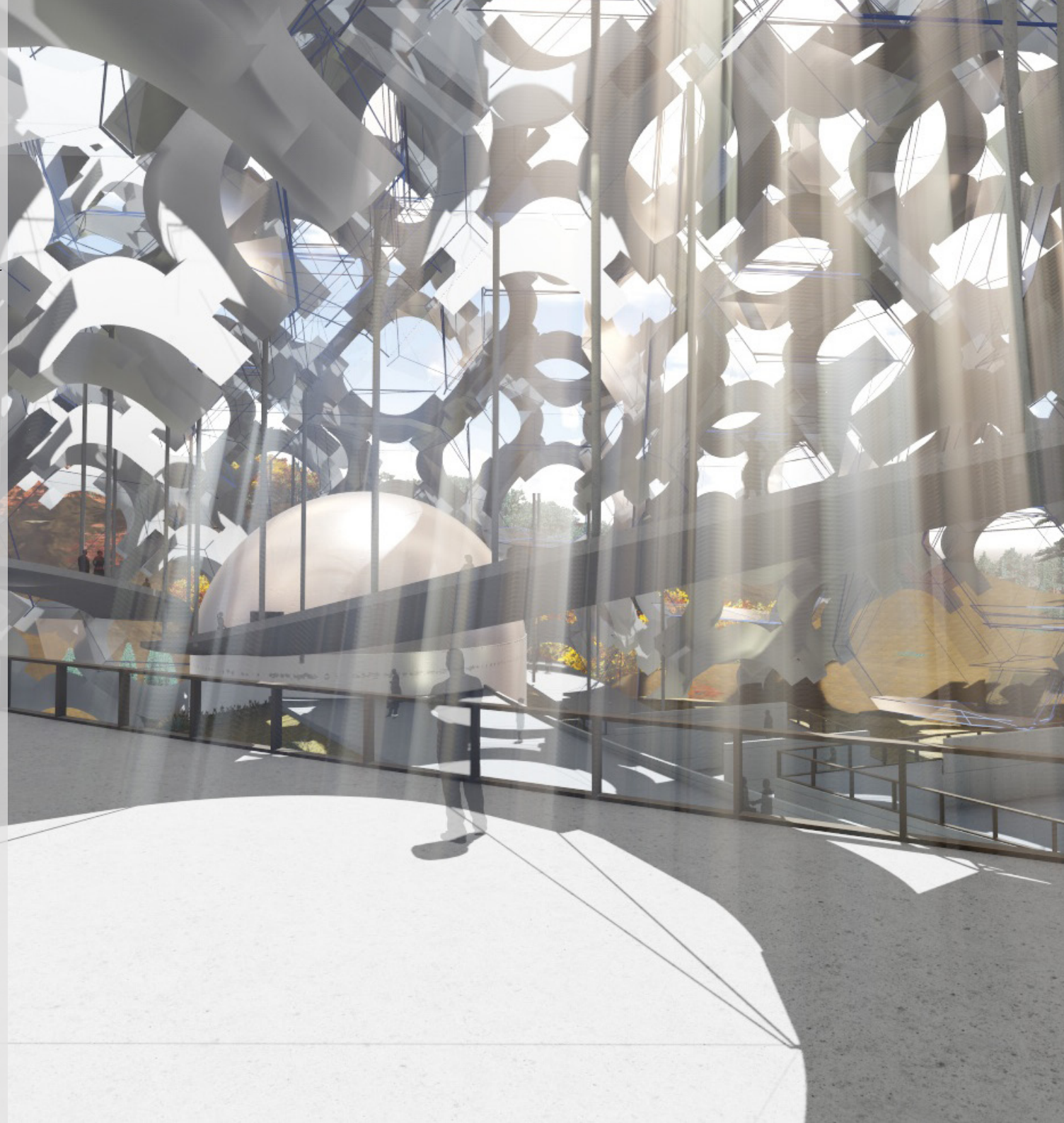
*Year: 2015-2016 Fall*

*Instructors: Glenn Kukkola, [glenn.kukkola@bilkent.edu.tr](mailto:glenn.kukkola@bilkent.edu.tr)*

*Yasmin Kaygusuz, [yasmin.kaygusuz@bilkent.edu.tr](mailto:yasmin.kaygusuz@bilkent.edu.tr)*

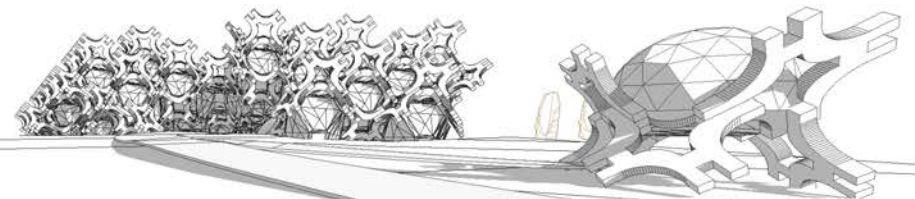
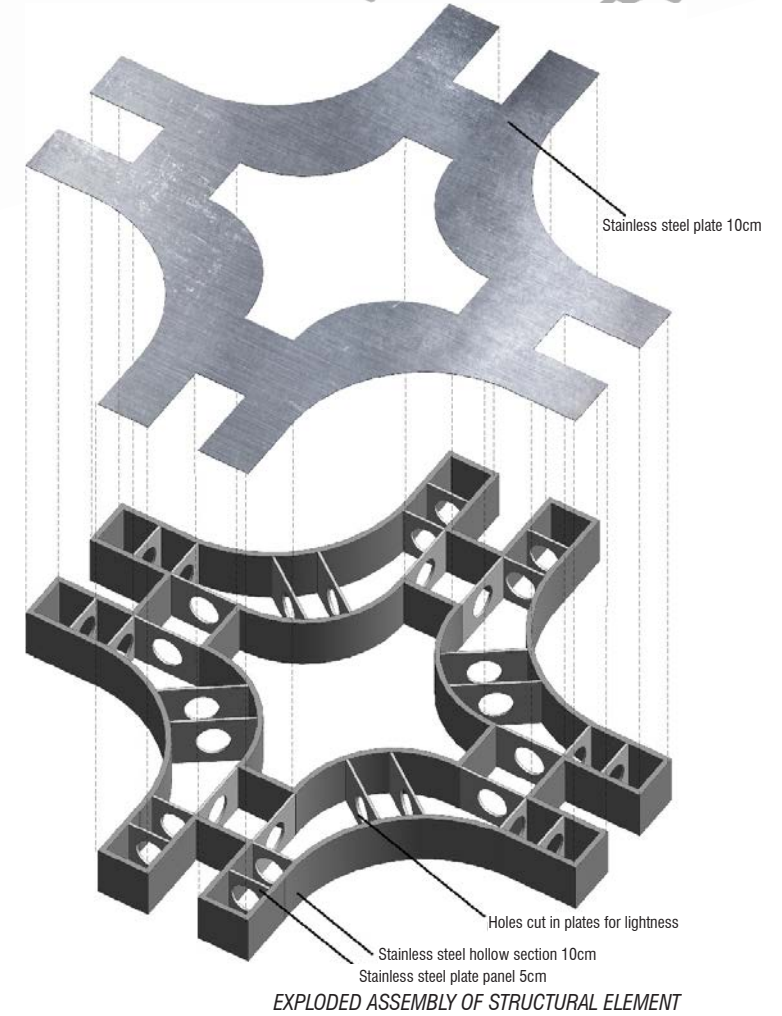
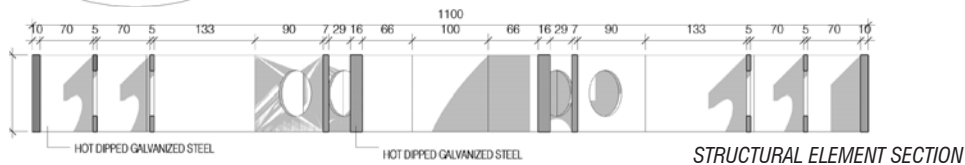
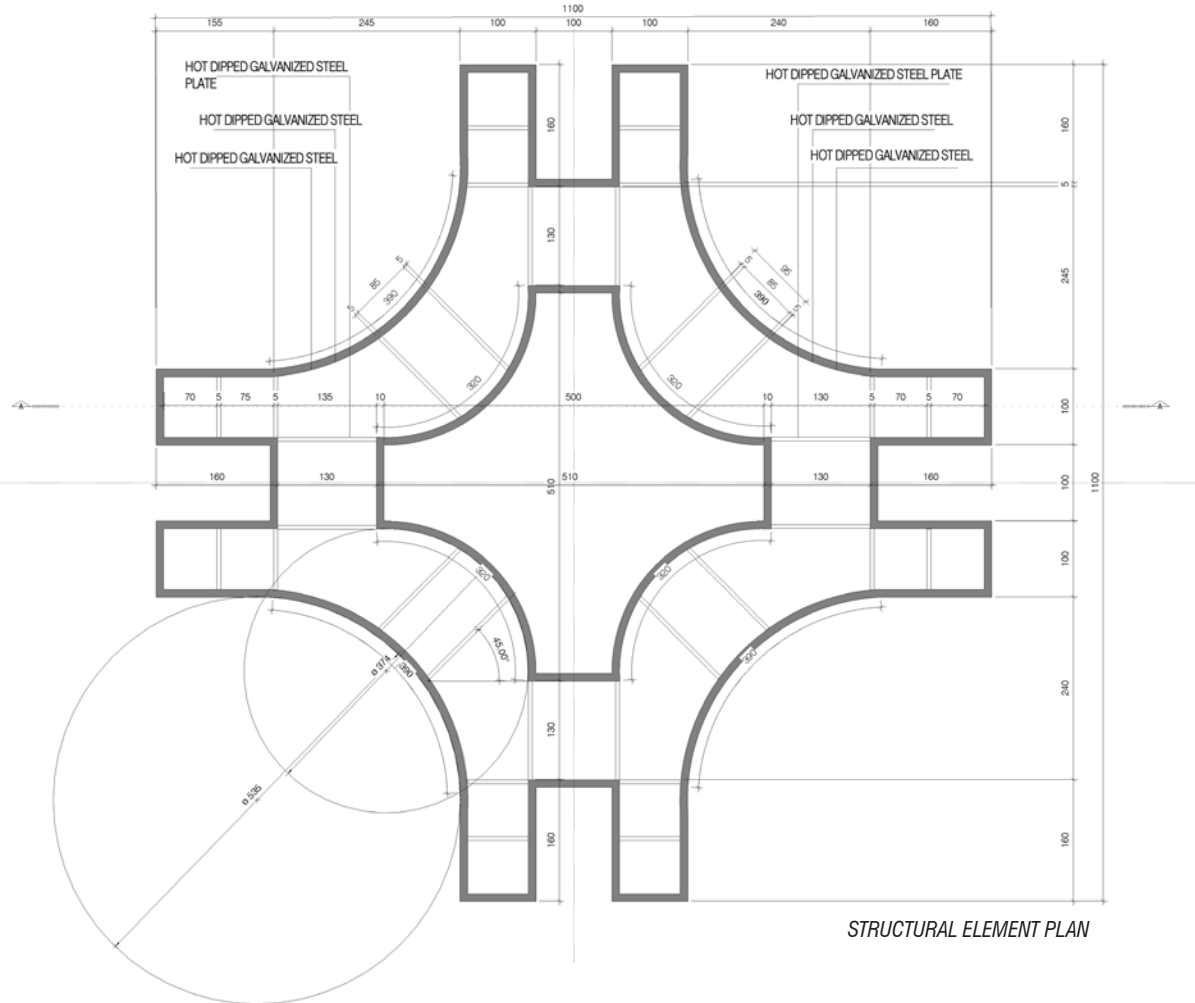
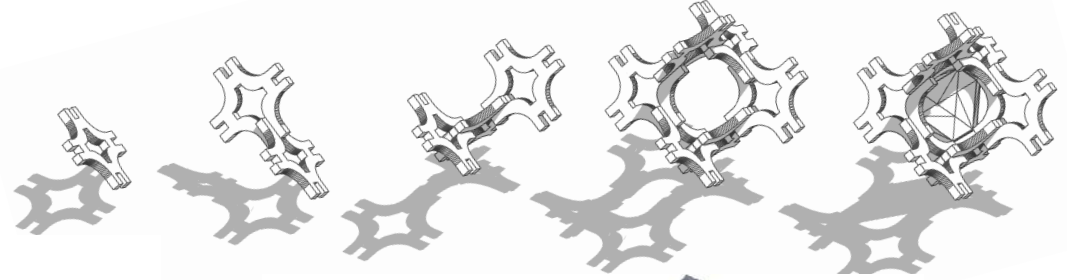
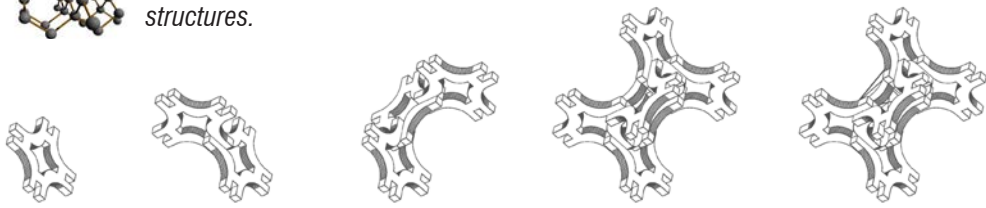
*The Centre is to be designed using new building technologies and should be selected to reflect the theme and purpose. It is an architectural response to both the program and the desire to highlight advances in space, science and technology. In addition, the process of design should engage both new building technology and the new technology to model and develop the design using software and modeling tools such as 3D printers and laser cutting. The design will have a maximum building footprint of 3000 sqm and may be a maximum of 3 levels excluding special purpose buildings, such as observatory.*

*The Space, Science and technology Centre is located on the Bilkent University Campus, which is designed to educate and inform the public on technology that exists and advances being made in the areas of Astronomy, Space exploration, Science, and technology (genetics, medical, and information technology). The Centre has many exhibition spaces, public education areas, a demonstration lab, multimedia presentation spaces, conference rooms, offices, a fully functional observatory with a mounted telescope with imaging systems, as well as a hydroponic garden, a physical energy plant, an Imax theatre, and a planetarium. It also consists of a storage for the exhibitions and a loading bay next to it for easy transportation.*

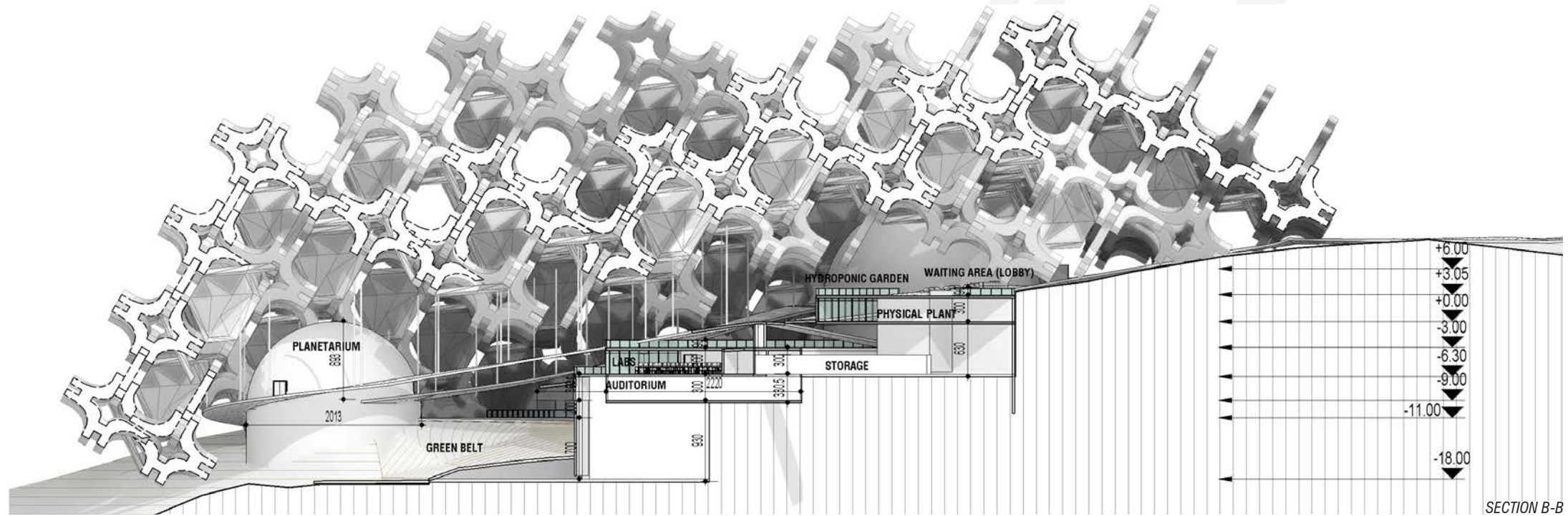
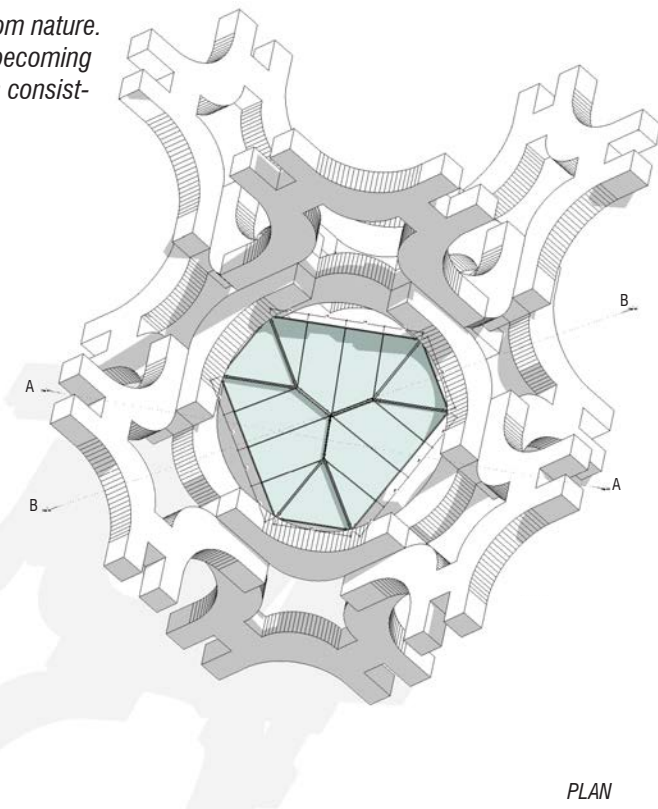
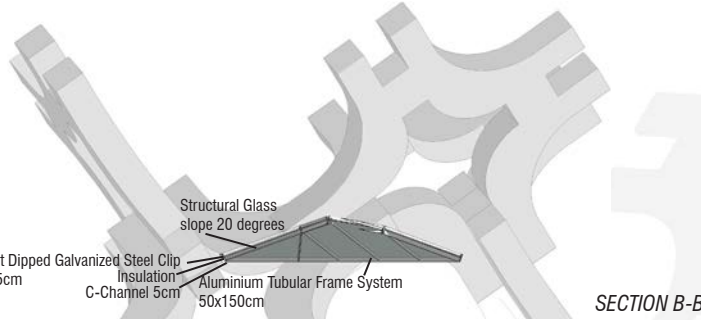
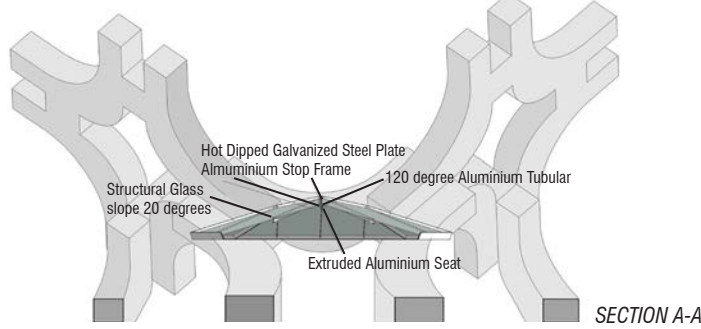
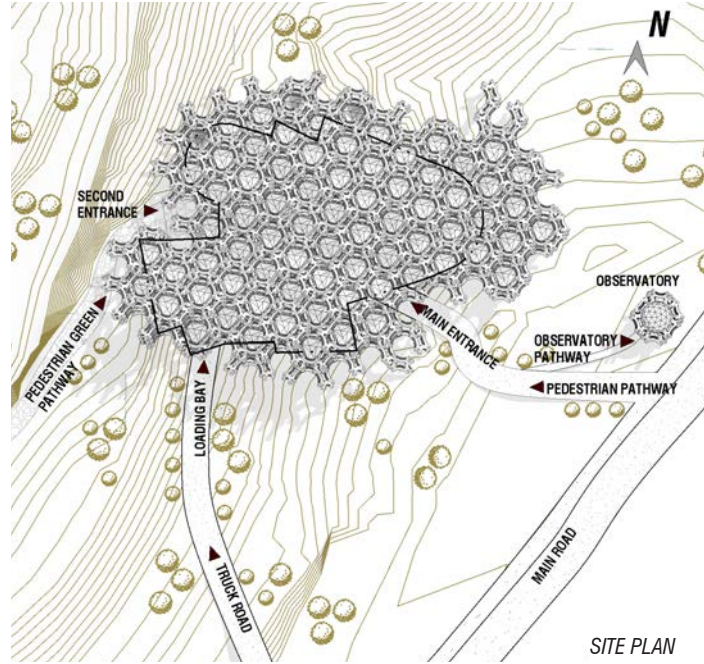


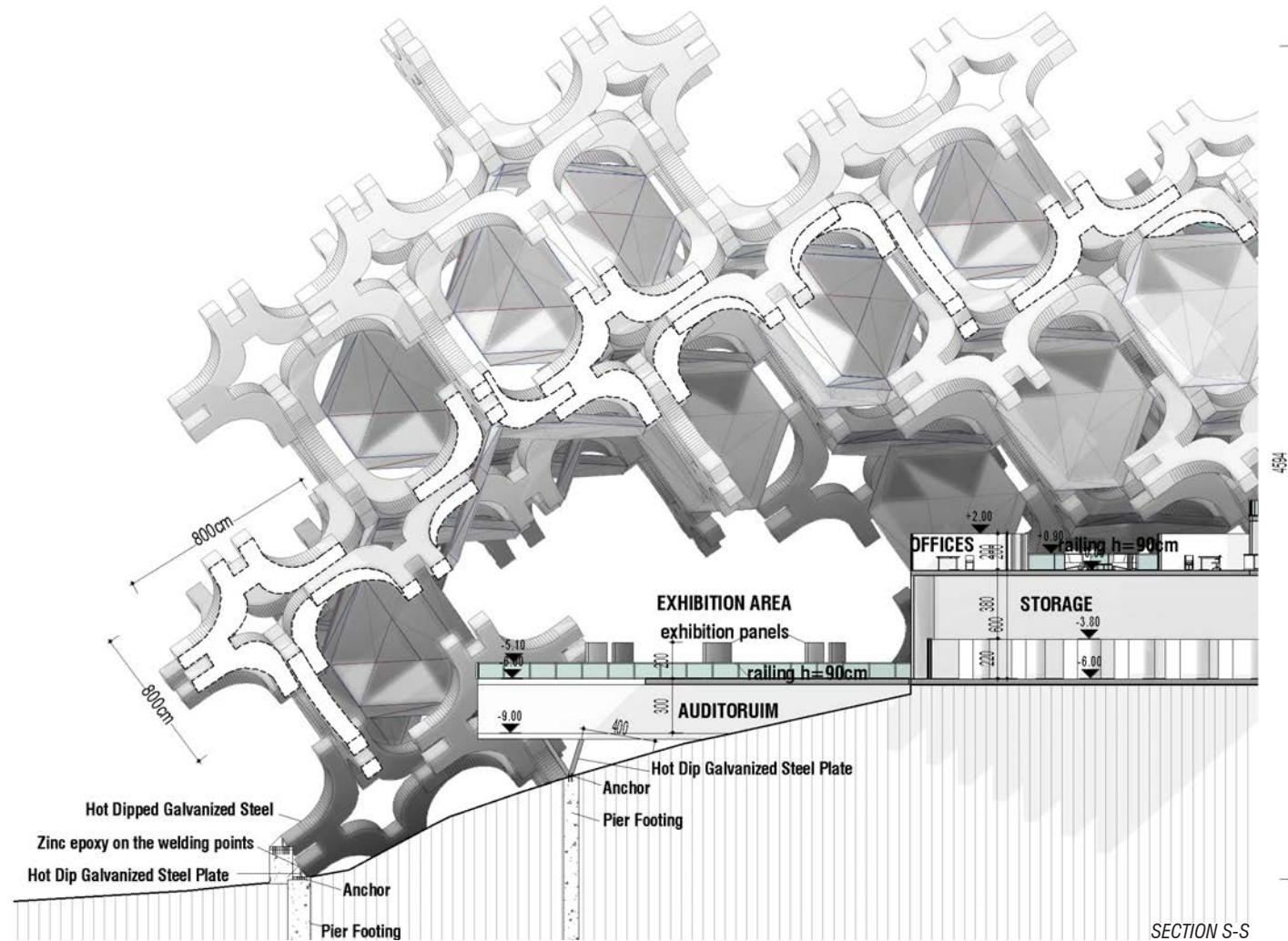


The structural system is unique in itself as the connection between each chain-linked element gives the resemblance of a complex molecular structure. Thus, the design is inspired by the purpose of the centre itself. The arrangement of the glass system, while isolating the interior, creates three dimensional spaces within the connected structural system, showing semblance to crystalline structures.

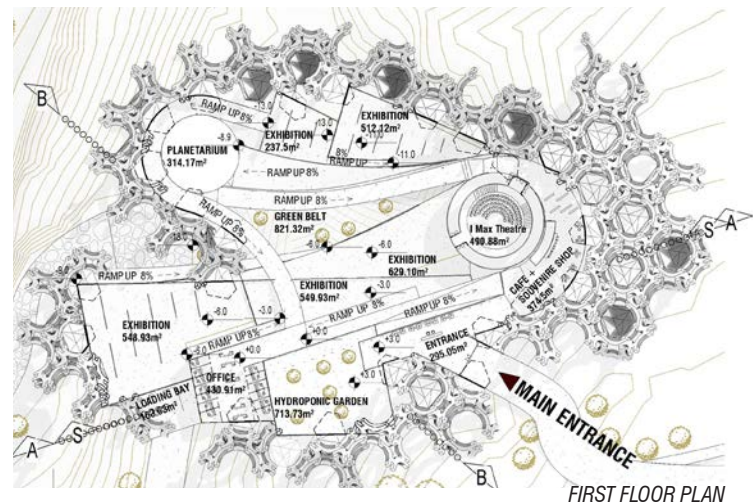


There are two entrances to the centre, one is the main entrance, which is right across the Bilkent University Campus. The other entrance however, is from nature. It brings inside a green belt which surrounds the centre, having the exhibition spaces around it. The interior spaces are mainly connected with ramps, becoming a handicapped-friendly centre. They surround the planetarium and the Imax theatre along with the other functioned spaces. Having a circulation system consisting of ramps makes the spaces seem endless and also allows the users to explore the structural system on different levels.

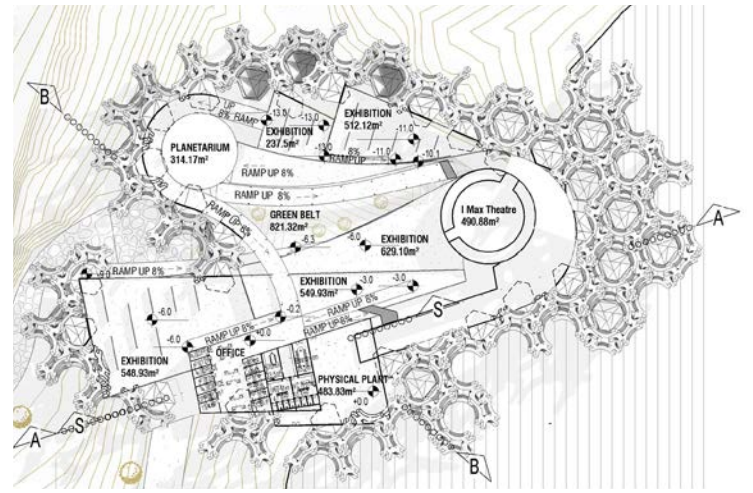




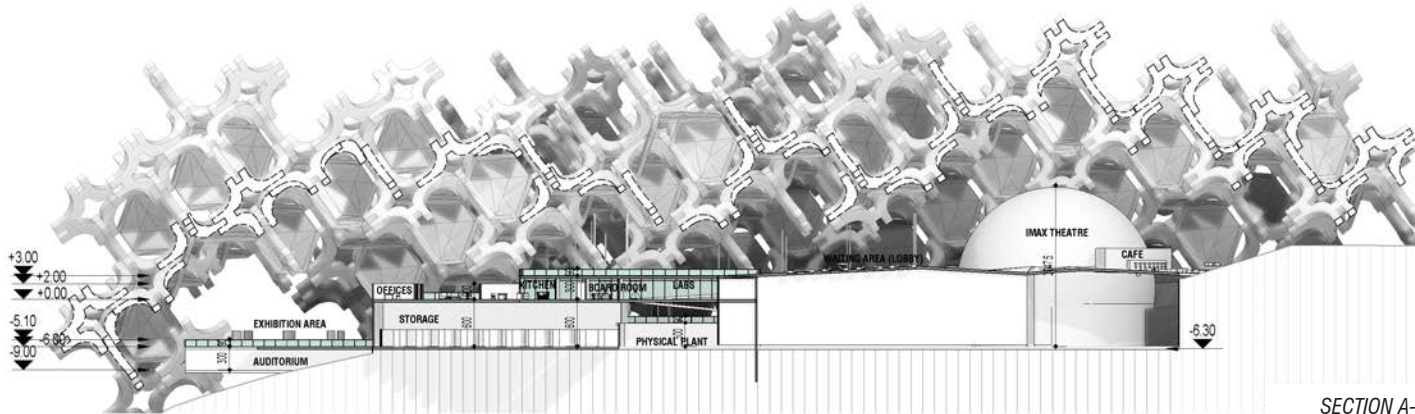
SECTION S-S



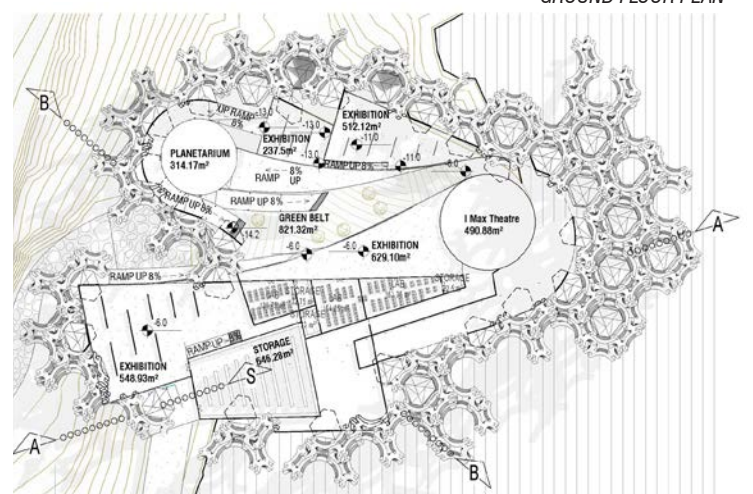
FIRST FLOOR PLAN



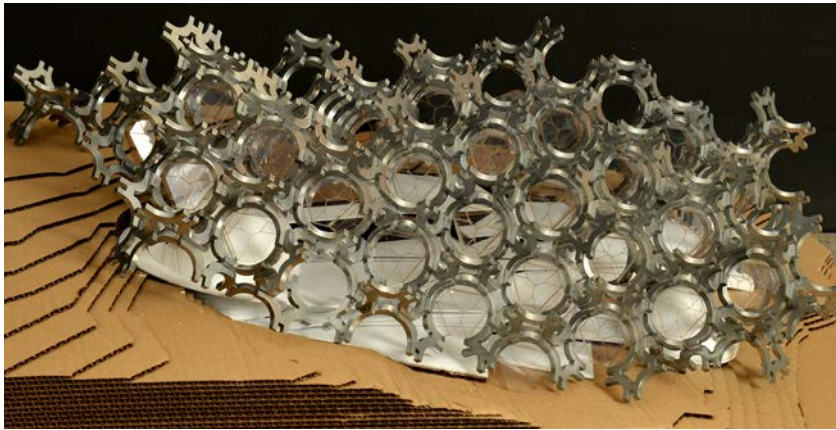
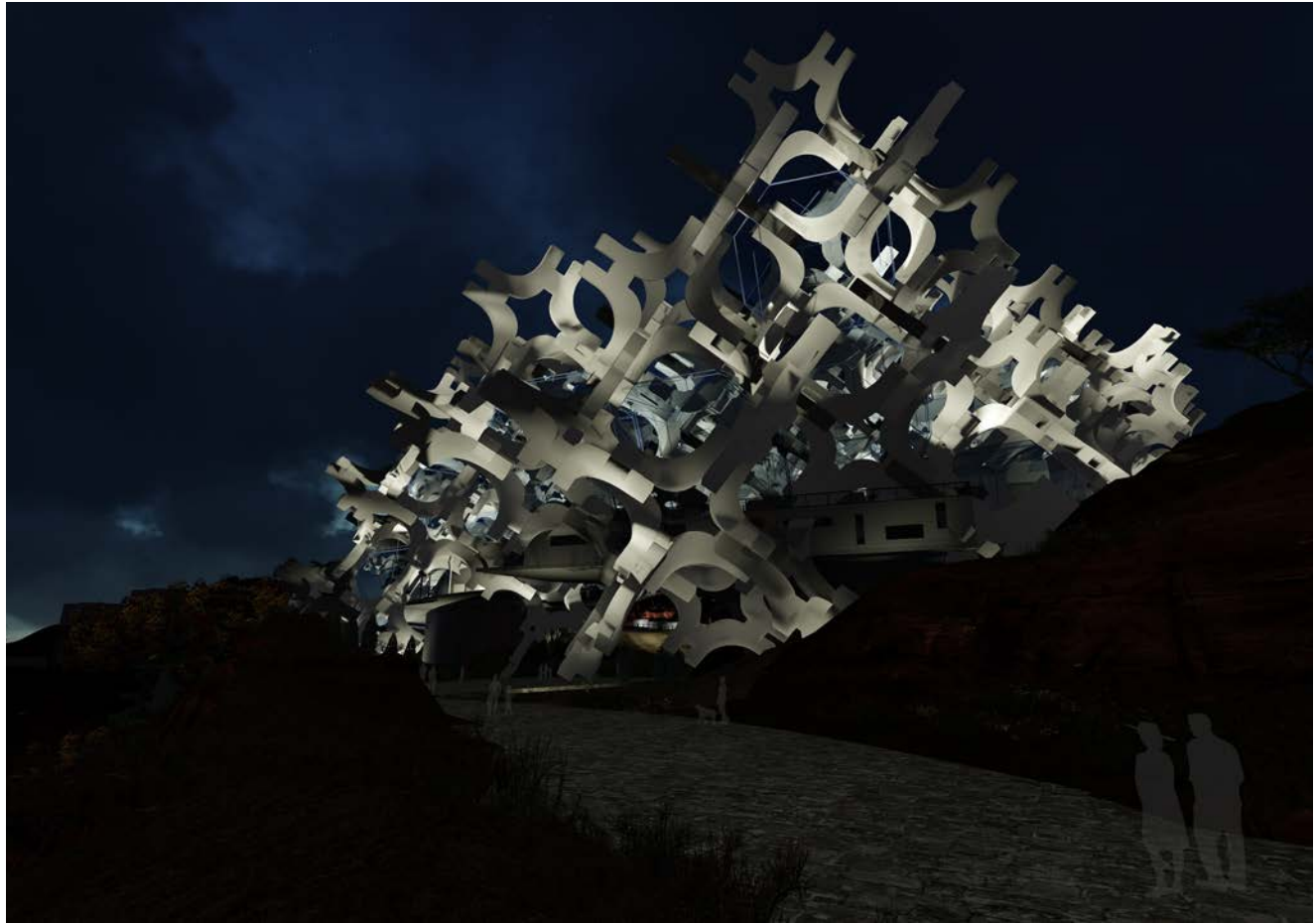
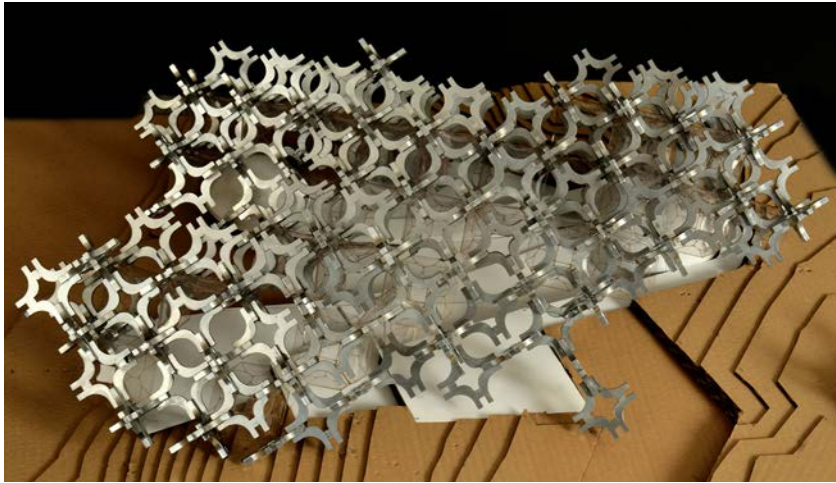
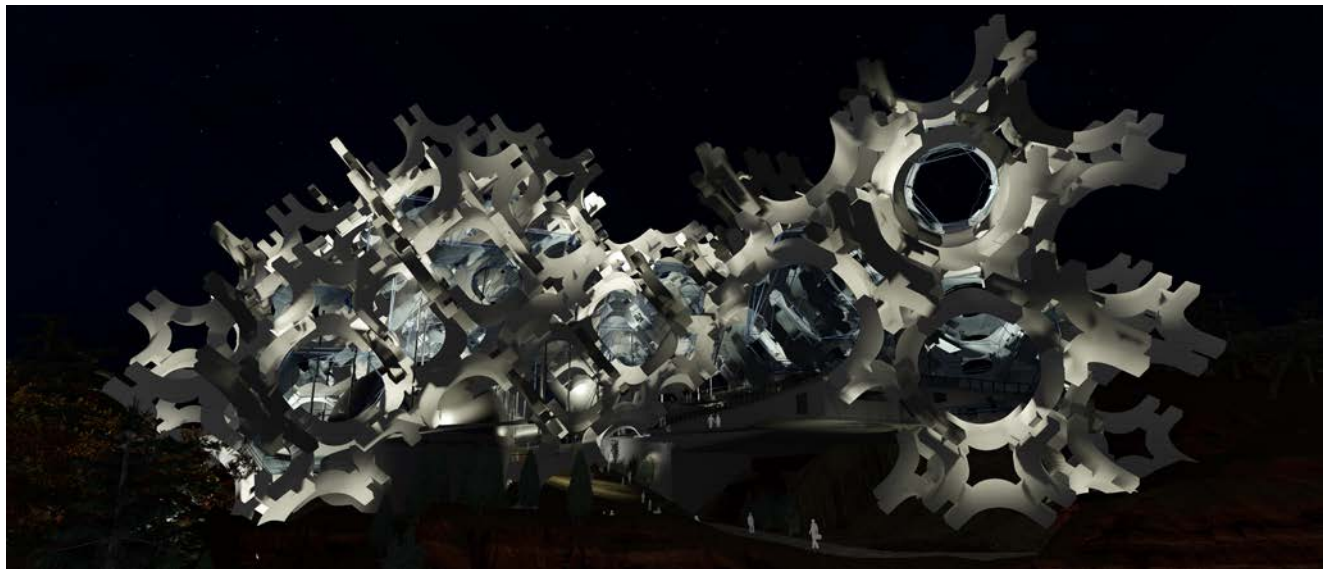
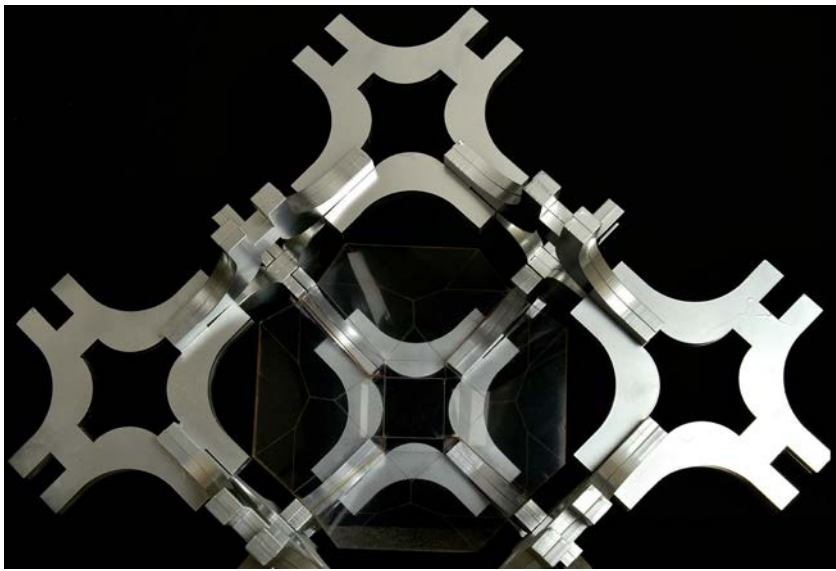
GROUND FLOOR PLAN

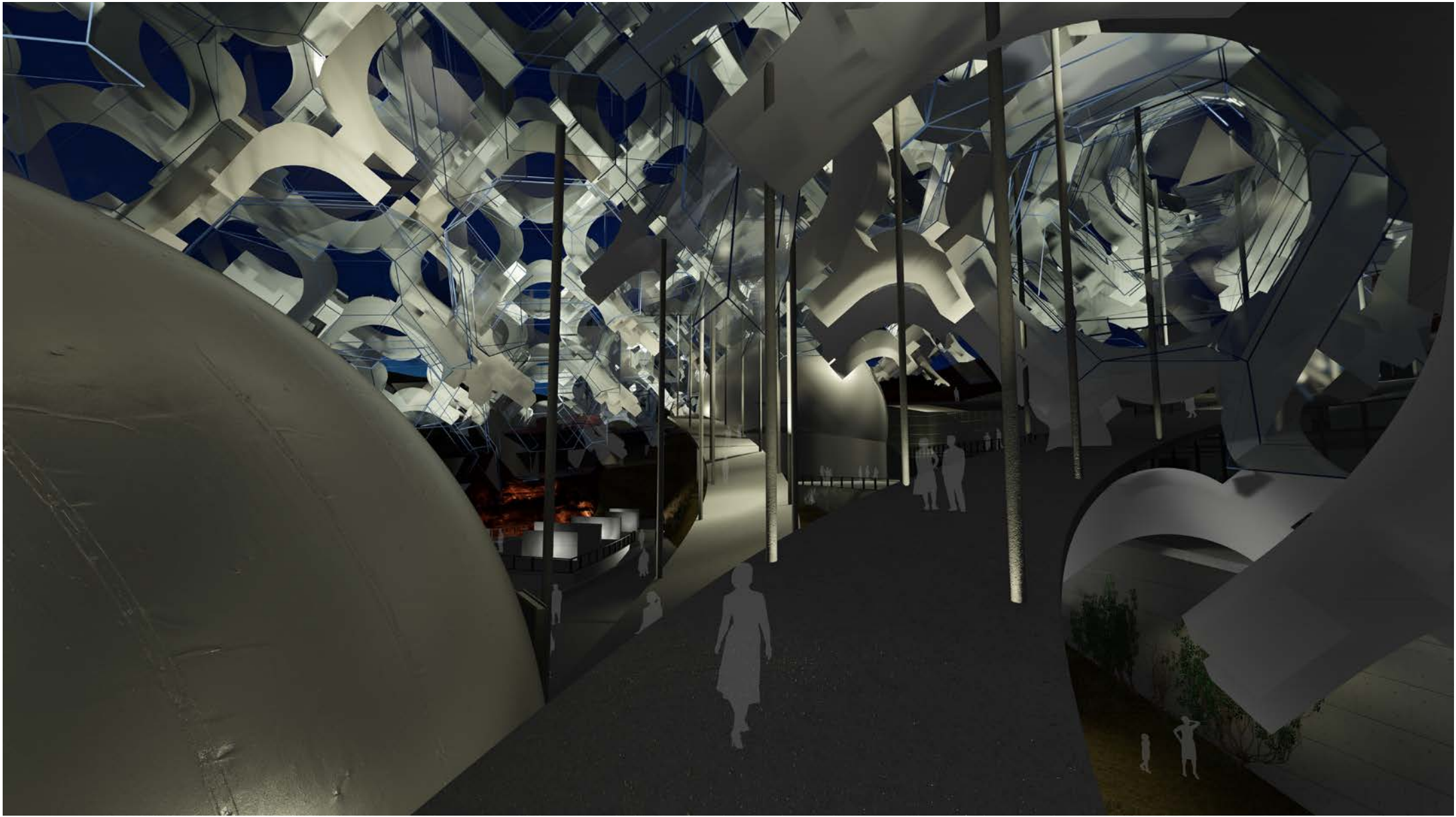


SECTION A-A



FIRST BASEMENT FLOOR PLAN











## **Townhouse Design in Milan**

Erasmus Exchange Programme - Politecnico di Milano  
Scuola di Architettura Civile - Architectural Design Studio II

Project Type: Group Work of Three - Academic Work

Location: Via Fratelli Castiglioni, Milan, ITALY

Year: 2014-2015 Spring

Instructors: Caja Michele Giovanni, [michele.caja@polimi.it](mailto:michele.caja@polimi.it)  
Pensa Elvira, [elvira.pensa@polimi.it](mailto:elvira.pensa@polimi.it)

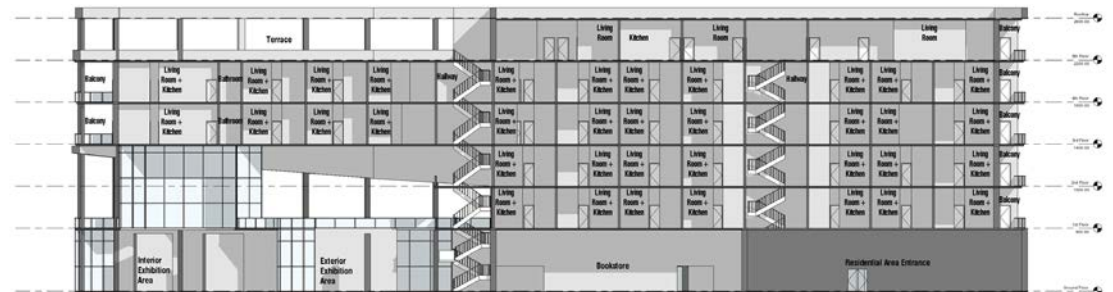
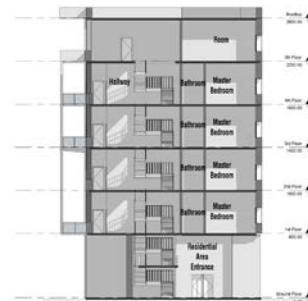
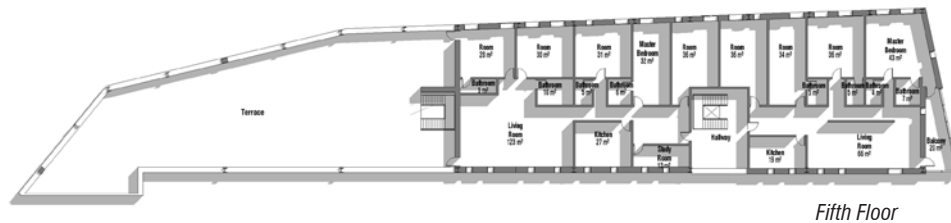
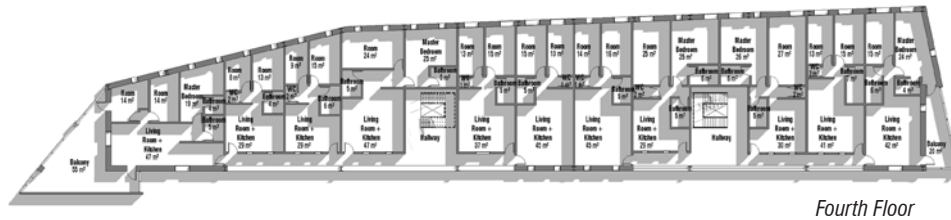
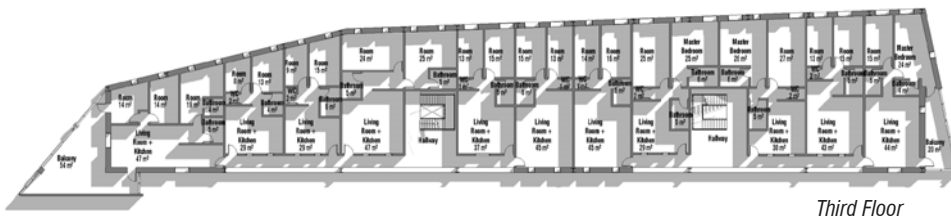
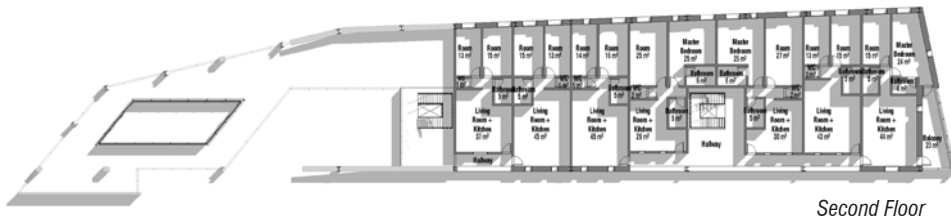
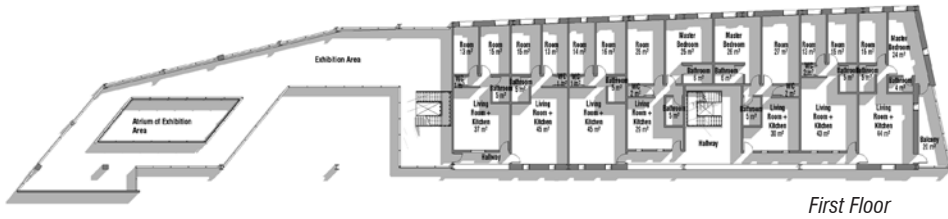
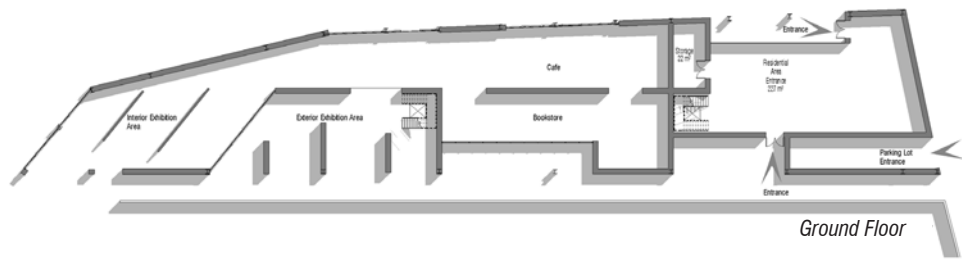
*This project was proposed to re-purpose an empty land right next to Milan's modern district, Porta Nuova. As a group of three, we were responsible to design a townhouse where the ground floor was open to public and the upper floors were functioned to be residential.*

*We designed a townhouse having the ground floor to be an art gallery with a two storey high space. This space could be viewed from the second floor as it was an atrium, allowing free circulation around it.*

*The residential apartment flats are located from the first floor to the fifth floor. As we get higher to the top, the number of flats decrease from eleven apartment flats per level to only two large flats, also consisting a large terrace.*

*The Townhouse completes its surrounding buildings with its straight corners, forming a longitudinal shape as seen in the site plan below. The thin L-shaped barrier around the building is an existing wall, which isolates the military apartments behind it, for safety reasons.*





Section A-A



## **CO-HOUSING PROJECT: Dormitory for Students**

*Project Type: Individual Academic Work*

*Location: Bilkent University, Ankara, TURKEY*

*Year: 2014-2015 Fall*

*Instructor: Mark Paul Frederickson,*

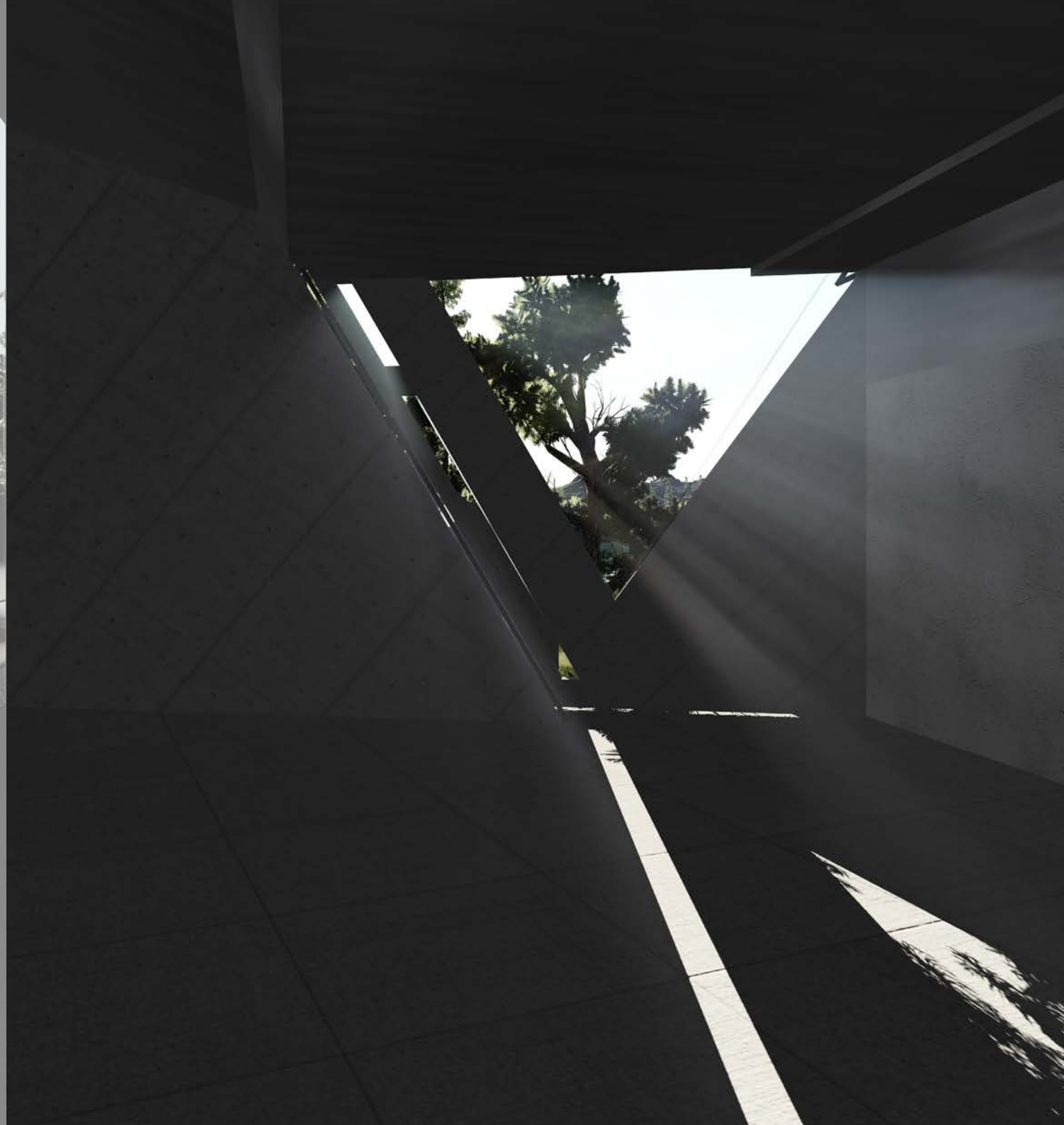
*frederickson@bilkent.edu.tr*

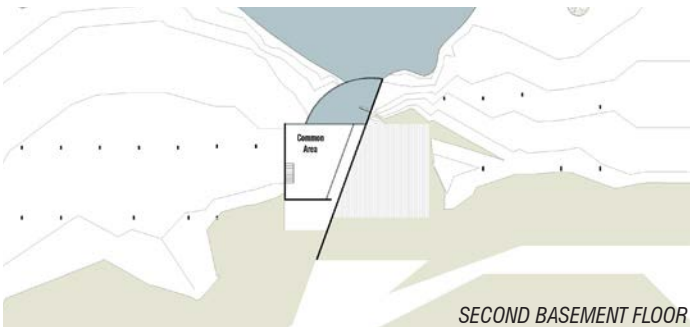
*Giorgio Gasco, giorgio.gasco@bilkent.edu.tr*

*The co-housing project started by developing a master plan for the whole site and then focusing on a functional building that is appropriate for the site. The function of the co-houses were planned mainly for academic instructors, students and admins of Bilkent University. The site is located around a small lake which is located in the east campus of Bilkent University.*

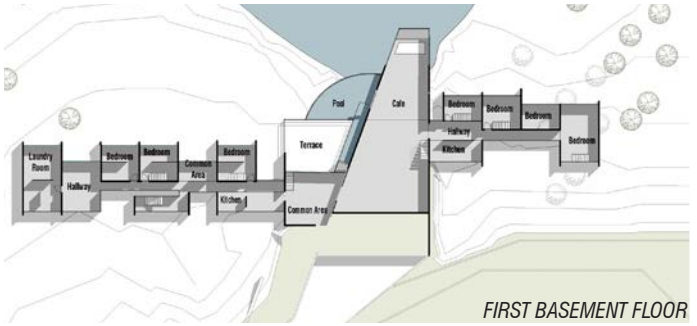
*The design of the co-housing project was done in groups of three. I designed a dormitory for students whereas my other two groupmates designed a common area and a dormitory for the instructors.*

*My design of the dormitory consists of single and double bedrooms as well as studio rooms, where certain room-types have a top floor. The laundry rooms and kitchens are placed accordingly. There are also common areas for relaxing, working and gathering. The central part of the dormitory has a two-storey high cafe where the two triangular prism-like areas, being the common areas are visible. The building has openings for light and viewing mostly around the common areas, where students can enjoy the nature of the area. The building also encloses nature in between the bedrooms, as the trees achieve privacy.*

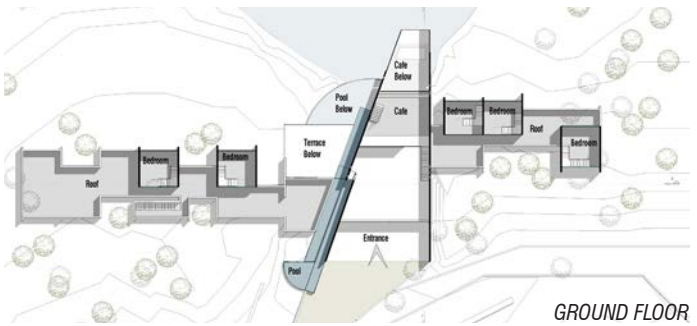




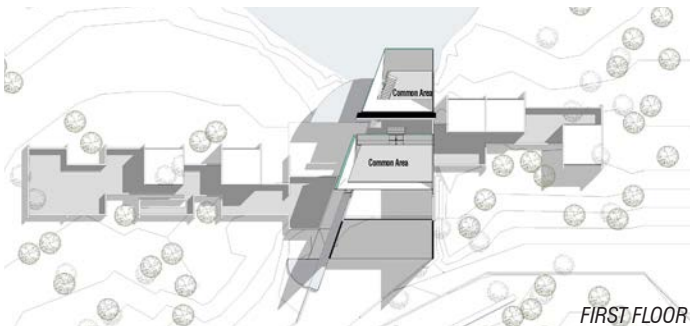
SECOND BASEMENT FLOOR



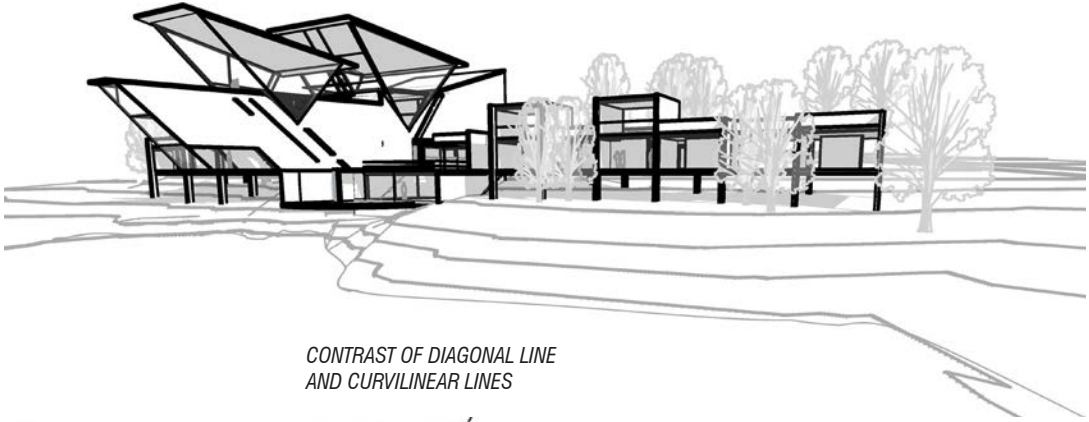
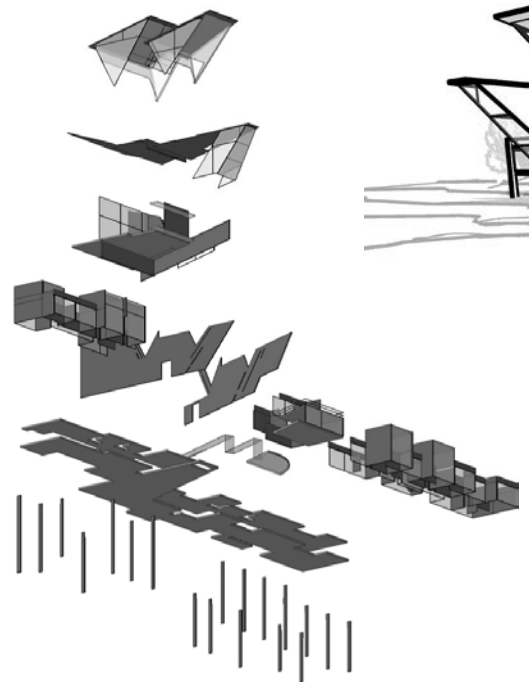
FIRST BASEMENT FLOOR



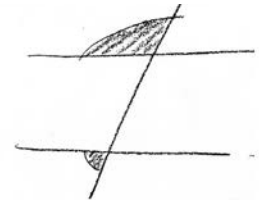
GROUND FLOOR



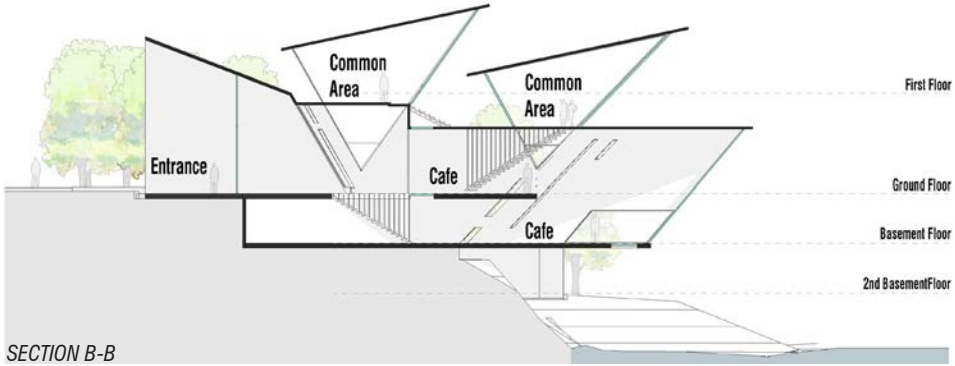
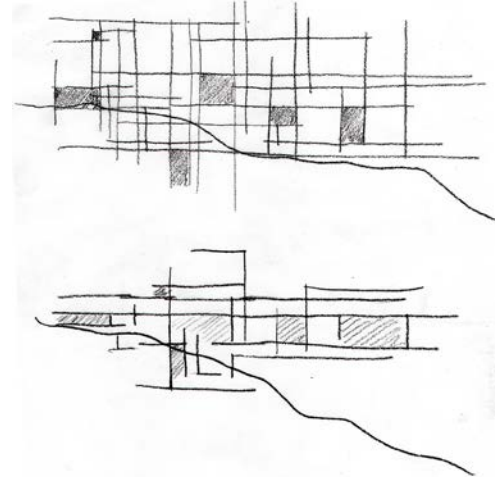
FIRST FLOOR



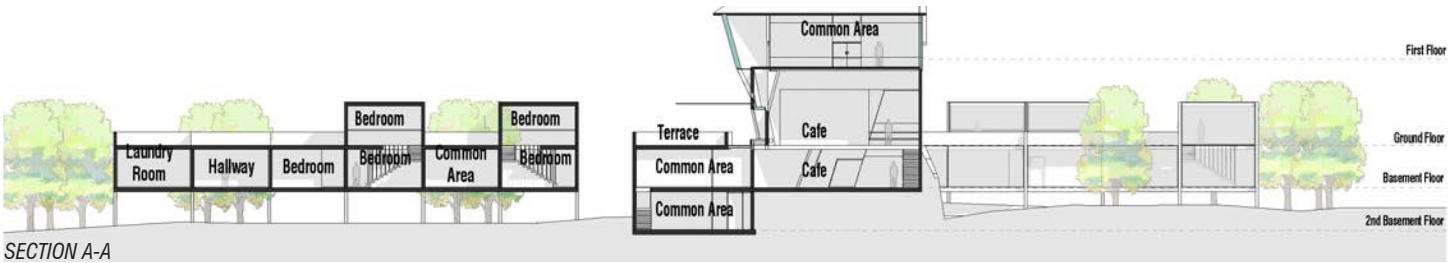
CONTRAST OF DIAGONAL LINE AND CURVILINEAR LINES



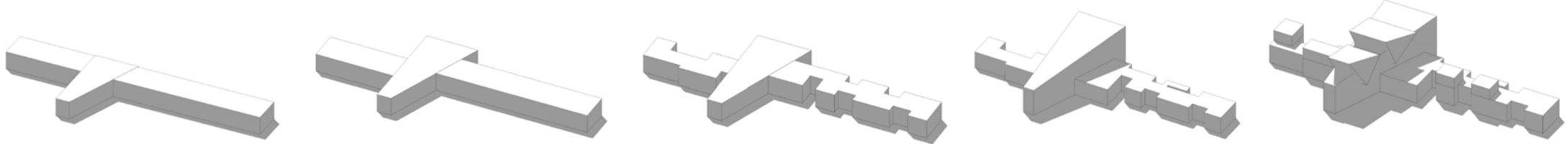
INFLUENCED BY MONDRIAN GRID FOR PLAN AND SECTION

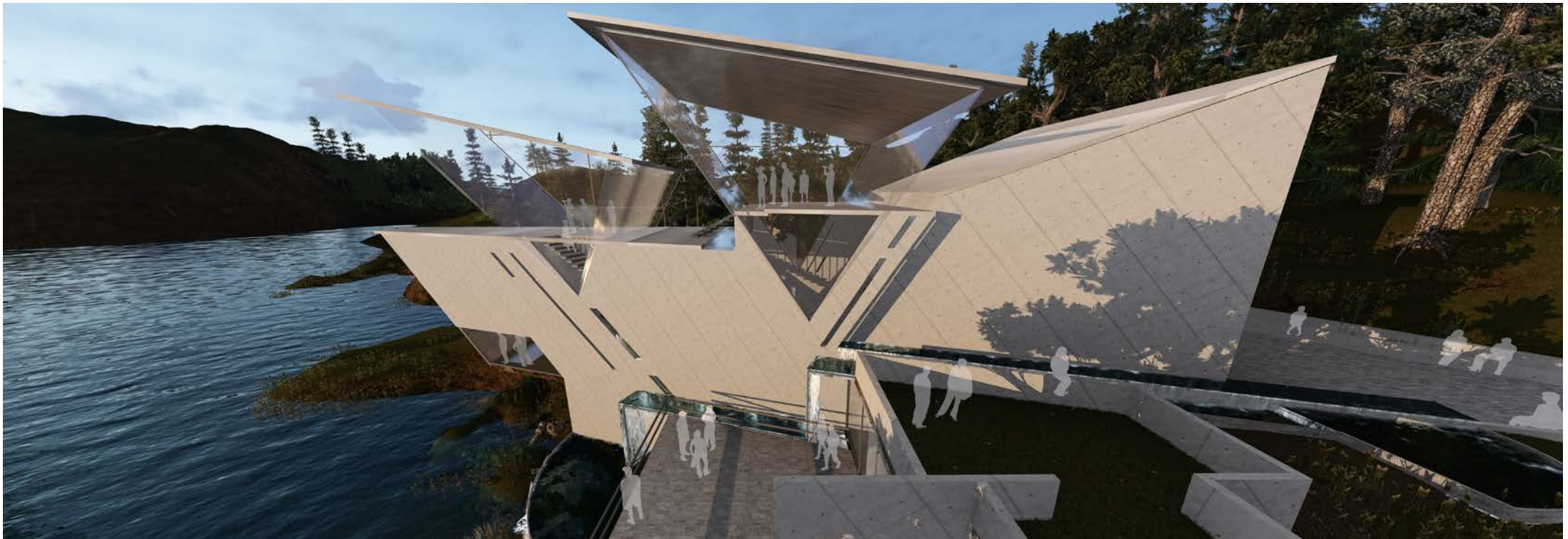
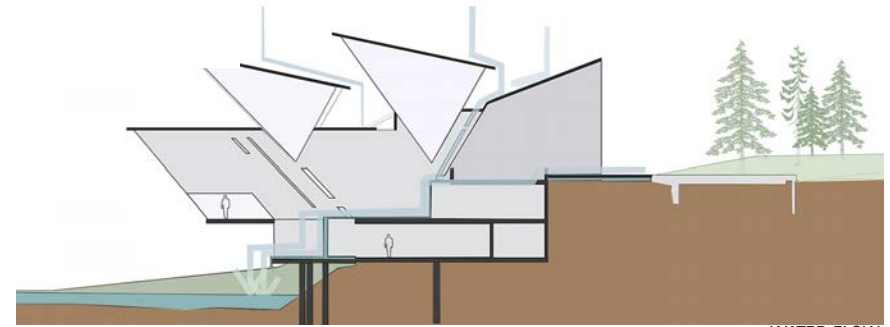
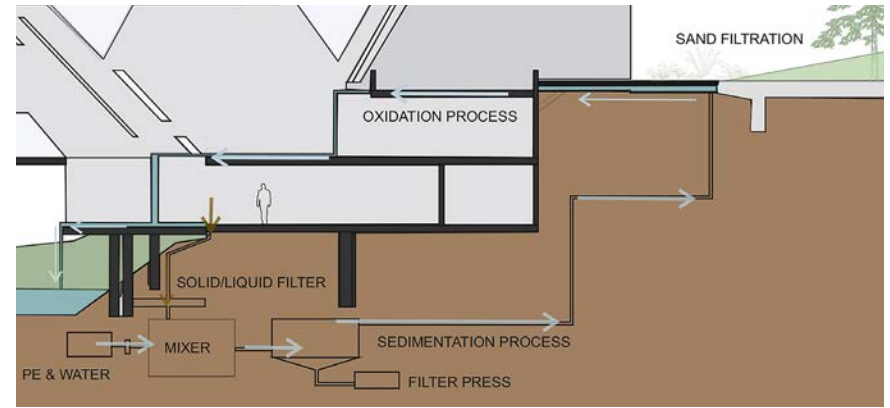


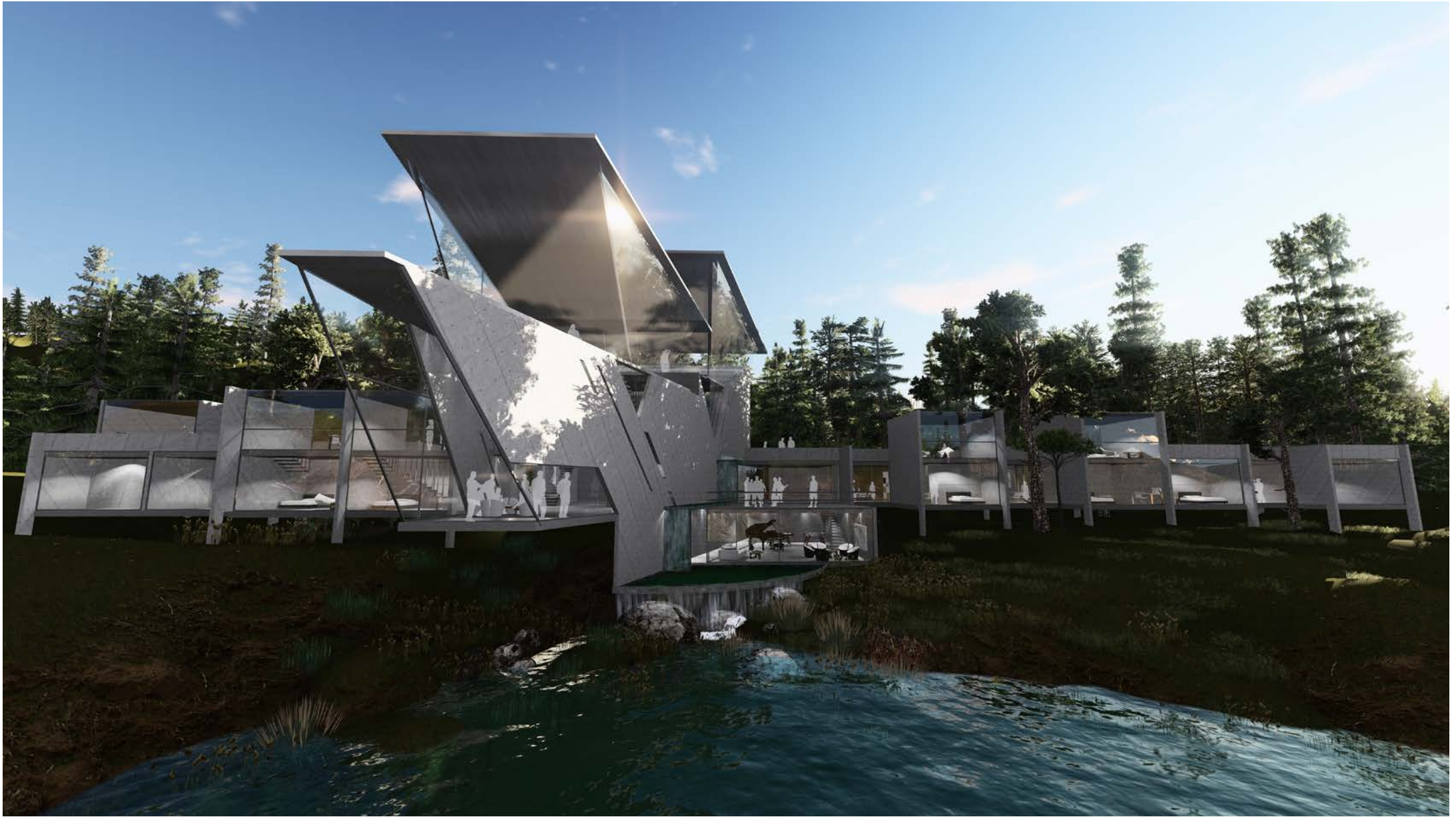
SECTION B-B



SECTION A-A









## ***BETWEEN TRANSIENT AND PERMANENT: A Guesthouse for an Artist***

*Project Type: Individual Academic Work*

*Location: Florya, Istanbul TURKEY*

*Year: 2013-2014 Fall*

*Instructor: Meltem E. Gürel, [mogurel@bilkent.edu.tr](mailto:mogurel@bilkent.edu.tr)*

*The purpose of this project was to design a guesthouse for a visiting scholar. The guesthouse should be designed for a temporary residence for such a visitor to have a comfortable stay for a period of time. It was designed in such a way that the number and staying condition of people, may vary according to the visitor's status. The visitor may come alone or with family and friends. Furthermore, the guesthouse was designed in a flexible way. The total indoor area of the temporary guesthouse does not exceed 250 square meters.*

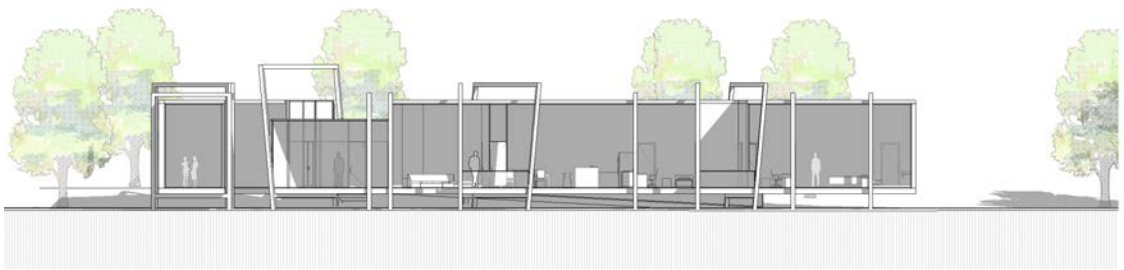
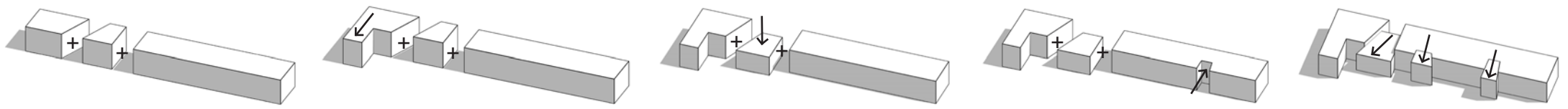
*The site for the guesthouse is the property of the Florya Atatürk Marine Mansion (1935), designed by a famous Turkish architect Seyfi Arkan. The mansion is located in the sea, with a wide view of the sea and landscape. As it is located in the sea, I designed it so that it would be standing on steel legs.*

*As I was very influenced by the Florya Atatürk Marine Mansion, I decided to make my building in such a way that it fits the mansion like a jigsaw puzzle, with its L-shape. However, I didn't want the building to be more arrogant than the mansion therefore I placed it half in water and half on land. I thought that the uniqueness and individuality of the mansion should be protected prudently.*

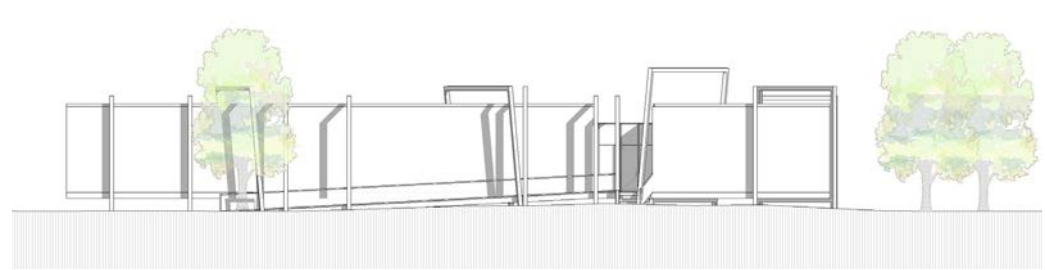




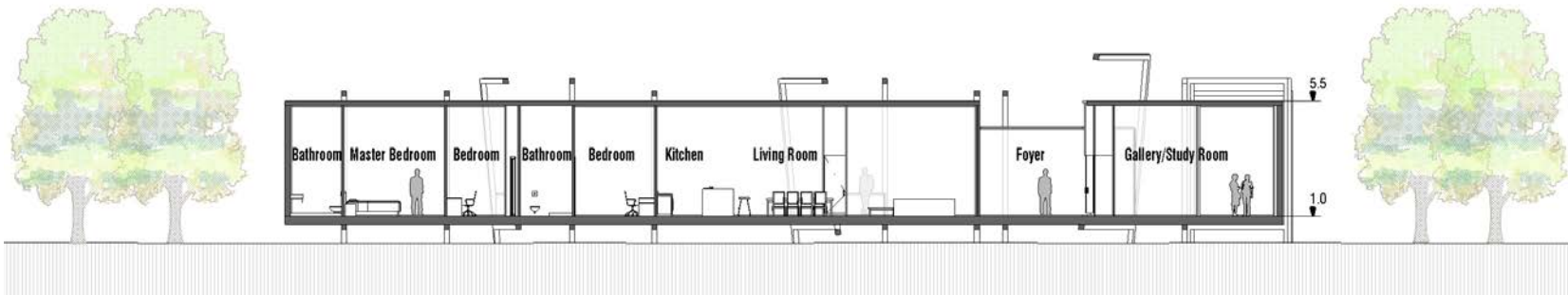
The guesthouse is standing up one meter above the ground by the help of steel frames and beams. The system will be mostly made by the help of I-beams, which will be located under the building, and around it too. The beams on the façade will surround the building, emphasizing many things. Mostly, the public and private space will be emphasized by the beams, as it divides the building in parts. Another important aspect is that the beams will show an emphasis on the entrance. I showed this by density; placing more beams close to the entrance and less beams away from the entrance. Also I used the placing of straight beams and angled beams; this is seen as a pattern with relation to how the public and private space is divided. The façade of the building that is facing the sea is completely open, whereas the opposite façade is closed for privacy.



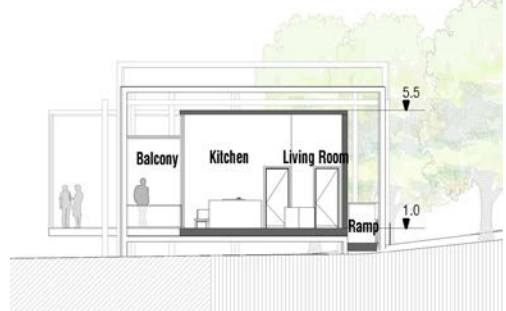
Front View



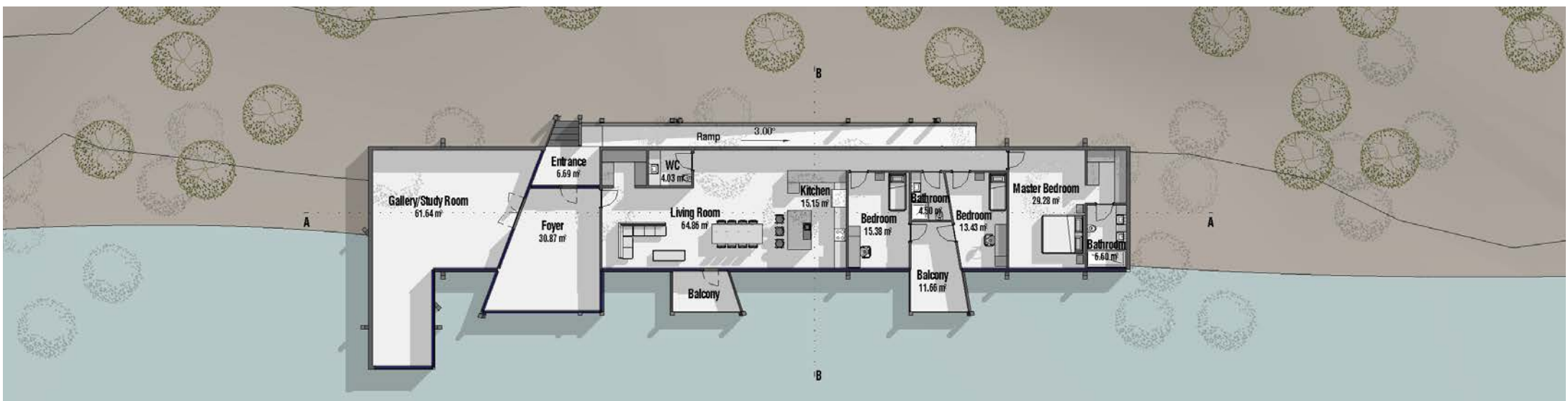
Rear View

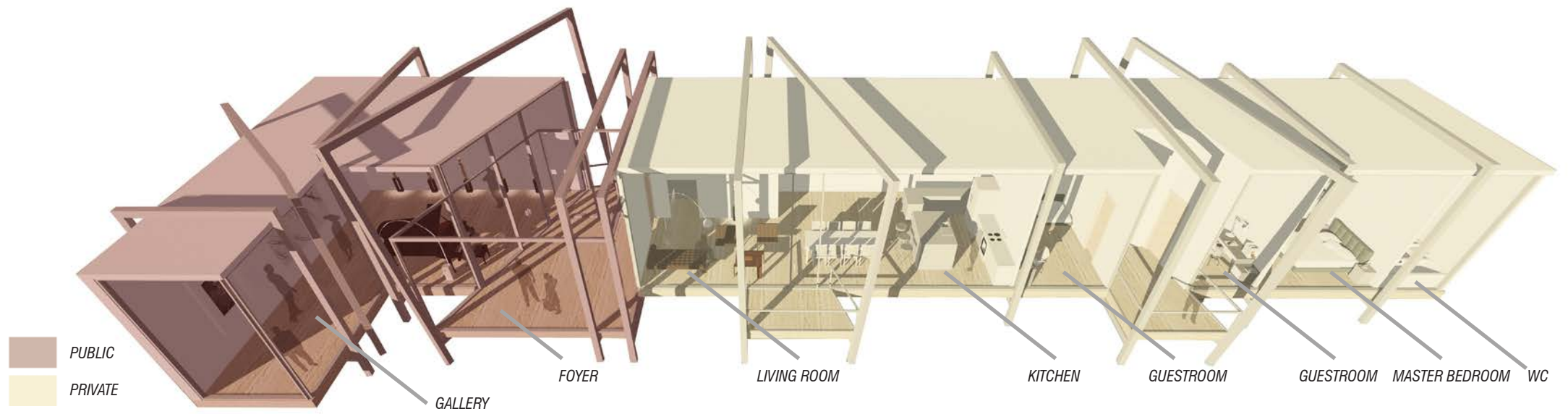


Section A-A



Section B-B





The material I chose for the façade that is closed is marble. In the detail of the marble, fossils of marine life are visible, giving a close relation to where the building is close to, the sea. The interior consists of a travertine flooring, where the deep textures emphasize the material. The frames and beams are steel. The roof is a material called polyester membrane, which is water impermeable. I chose these materials, thinking about every condition of the landscape, for example a stormy weather, due to its environmental location.





## **Kilim Project**

*Project Type: Academic Group Work*

*Location: Bilkent University, Ankara TURKEY*

*Year: 2013-2014 Spring*

*Instructor: Ahmed Kamal Ali*

*The Design/Build Lab is a part of ARCH 252 Construction and Building Materials Course, which aims to teach construction methods by personally participating the course. The BT-MFL intends to support the education of architecture by demonstrating building products, process, innovation and multidisciplinary collaboration.*

*We were inspired by the Kilim Vase from the Paşabahçe/ Zevk-i Selim Collection. The art of weaving, the history that spans as far back as the days of humans early settlements. Our Turkish textile arts have won the admiration of the world with their motifs, colors and materials. The Kilim Vases use motifs and forms that symbolize the sacredness of the male and female figures.*

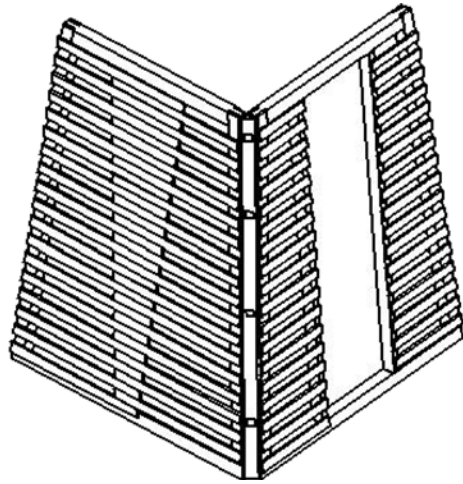




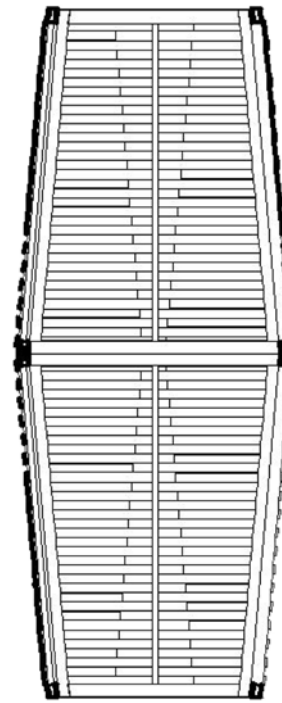
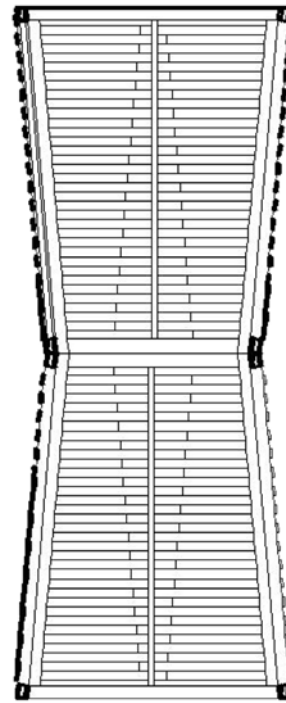
As this was a group work consisting of 20 students, we were divided in teams. I volunteered to do the drawings and help with the 3D-model-making. The project turned out to be very organised as every student worked during weekdays and weekends.

INSPIRATION OF THE KILIM VASES

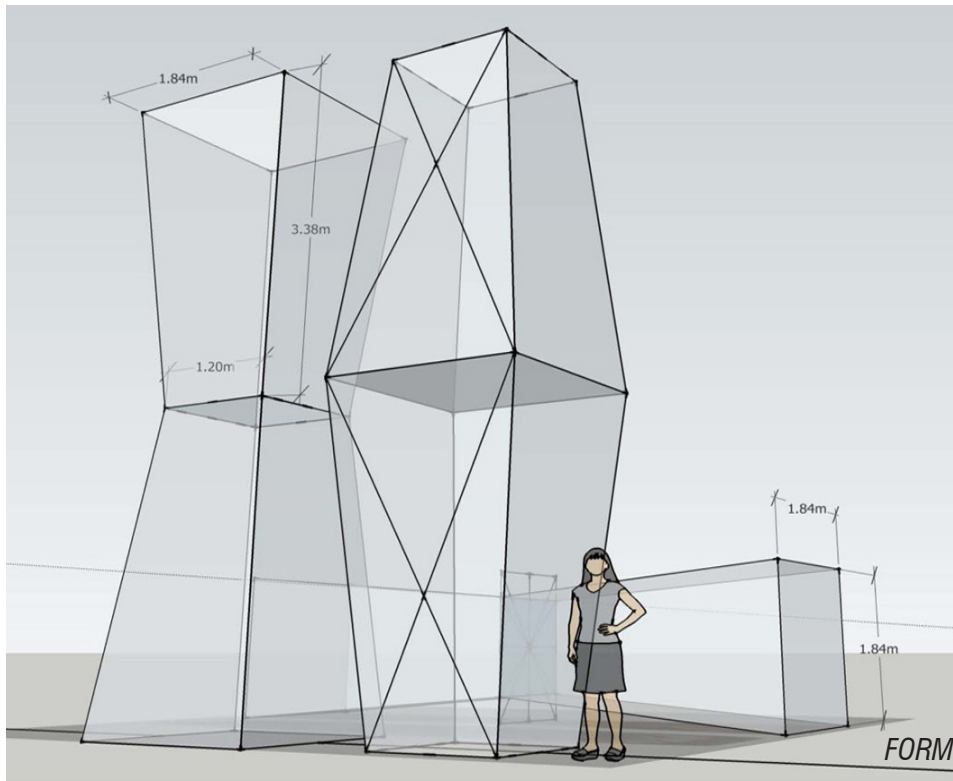
The project took one whole semester to finish, as collecting the wood pallets and dismantling them one by one took a vast amount of time. However, we assembled our group project by June 2014. It is still being exhibited on the university grounds.



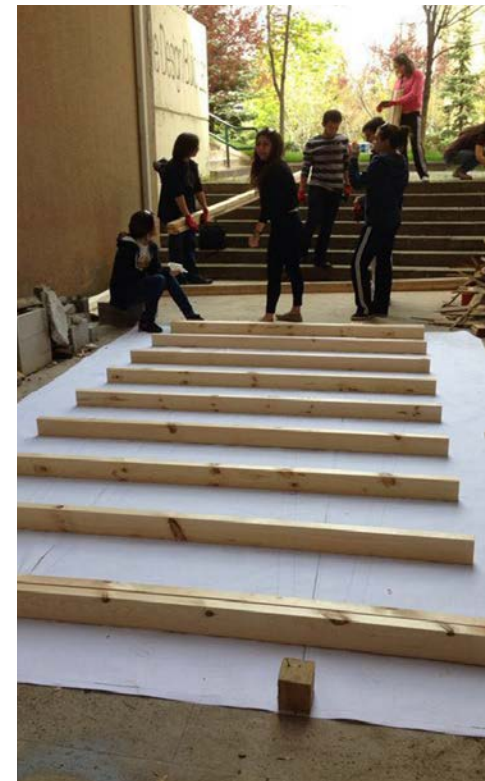
ISOMETRIC CORNER DETAIL

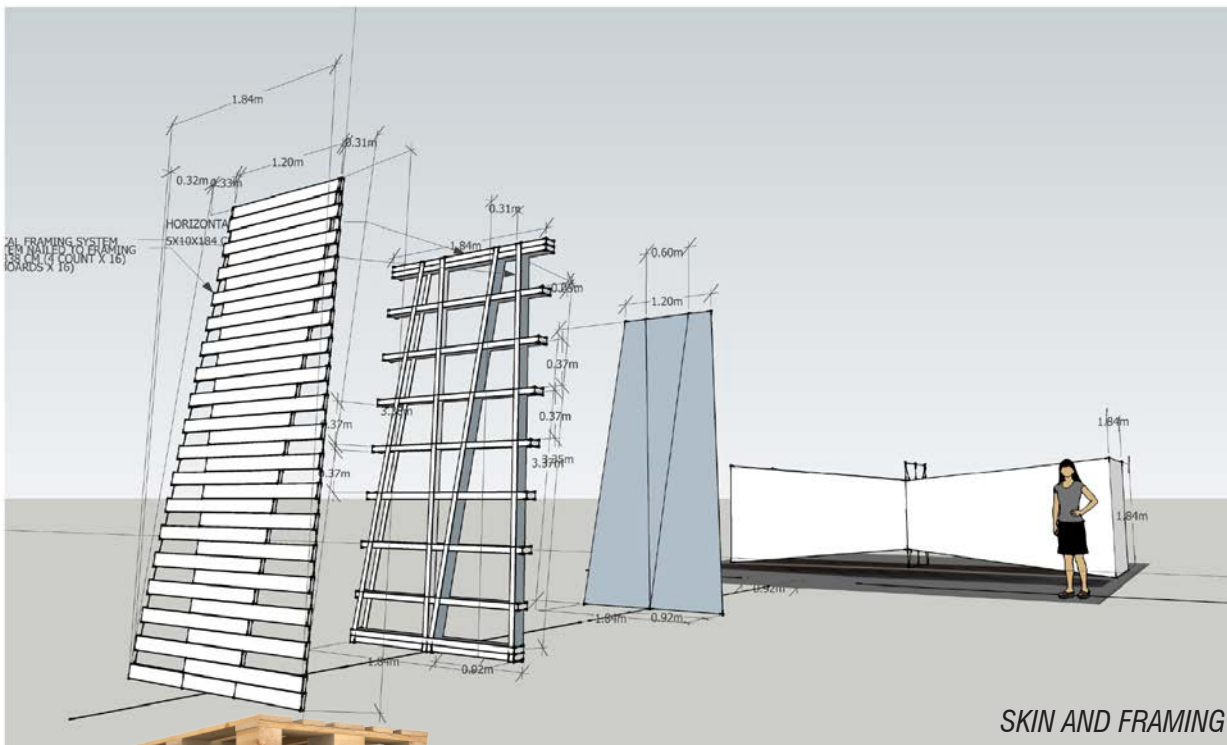


SECTION

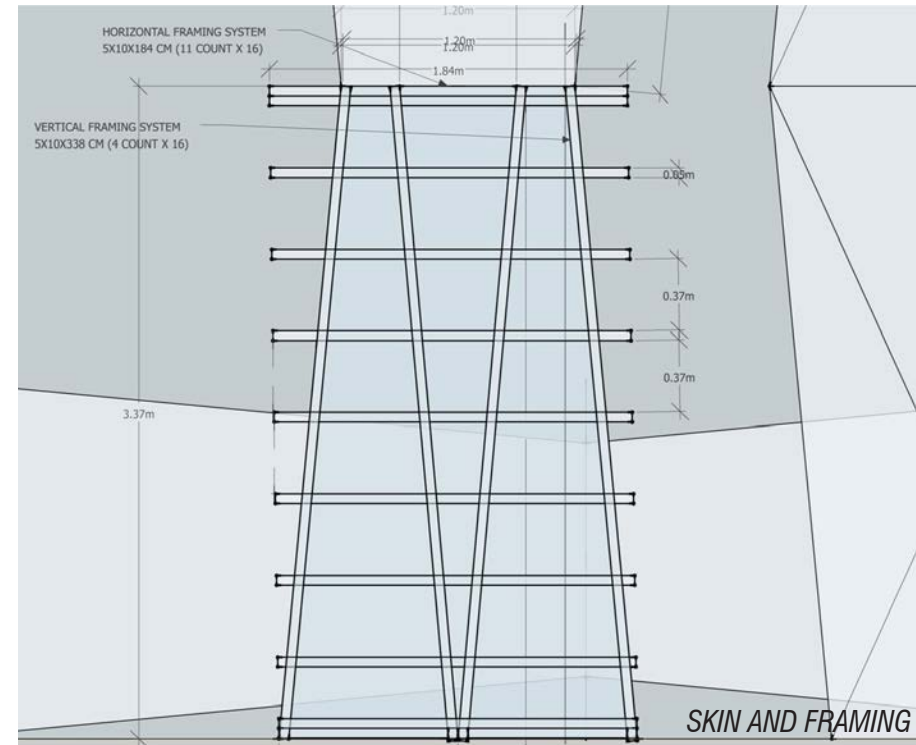


EXPLODED JOINT DETAILS





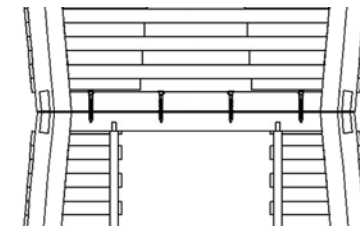
SKIN AND FRAMING



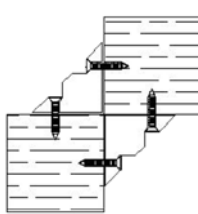
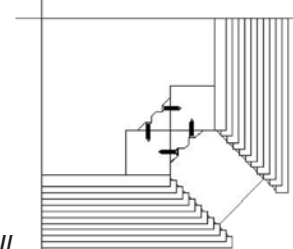
SKIN AND FRAMING



*We incorporated similar principles of weaving using dismantled wood from shipping pallets, this way, we increased awareness of material reuse and enhanced sustainable design thinking.*



MODULE DETAIL

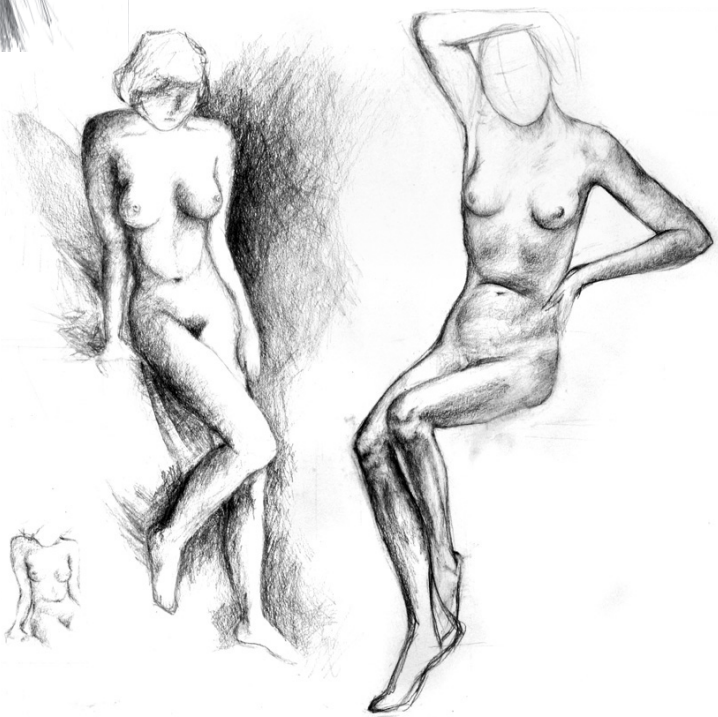
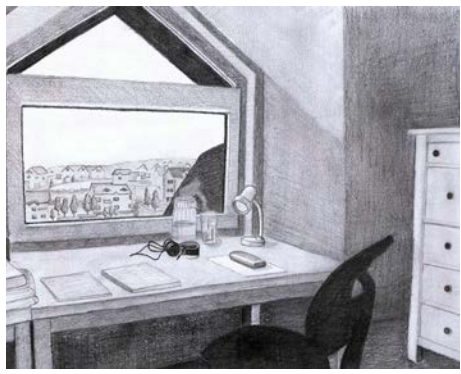
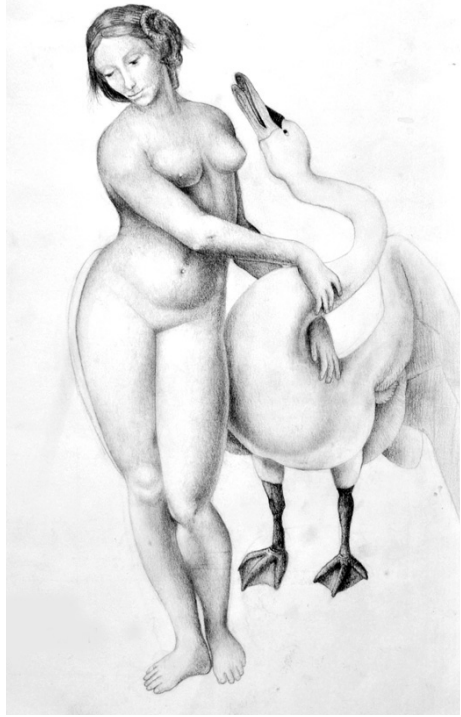
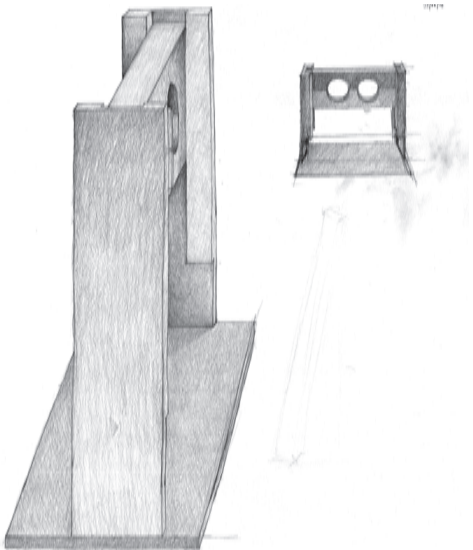


CORNER DETAIL





**Various Art and Photography**



*Charcoal pencil drawings from 2010 to 2016*



*Tiki Sculpture, carved from aerated concrete, 2016*



*Tiki Sculpture, carved from wood, 2011*



*Collage of self portrait, using leaves and colored paper, 2012*



*Marble Table, motifs carved by acid etching method, 2012*



*Bicycle design and prototype*

*Design of a bicycle, using welded steel tubes and bicycle tires, 2010*



*Life in a Hourglass, glass sculpture, 2011*



*Watercolor of a garden, 2012*

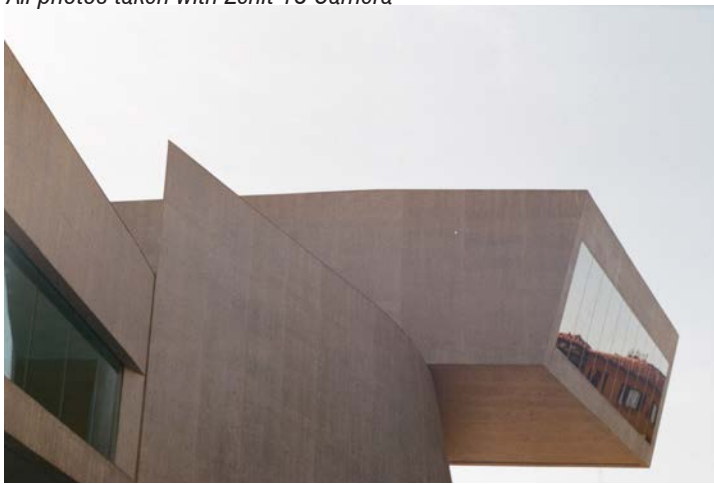


*Perception of Travel, using analogous and complementary colors, watercolor, 2012*

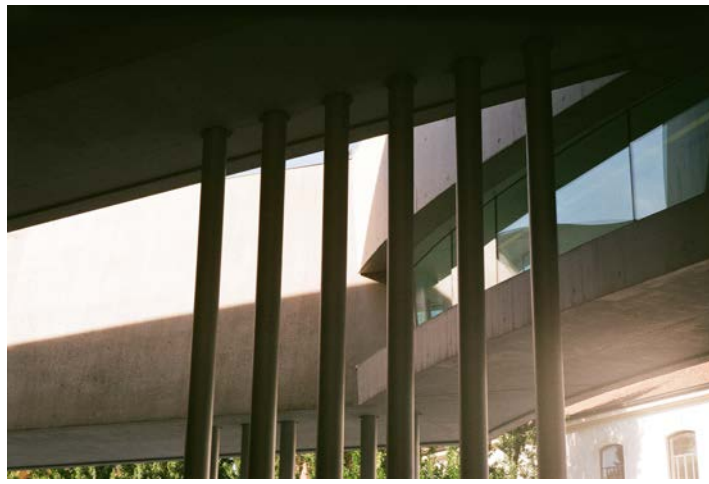


*Sun printing studies using potassium dichromate, photos of Istanbul, 2011*





MAXXI Museum, Rome, ITALY



MAXXI Museum, Rome, ITALY



MAXXI Museum, Rome, ITALY



Reichstag Building, Berlin, GERMANY



Shell House, Berlin, GERMANY



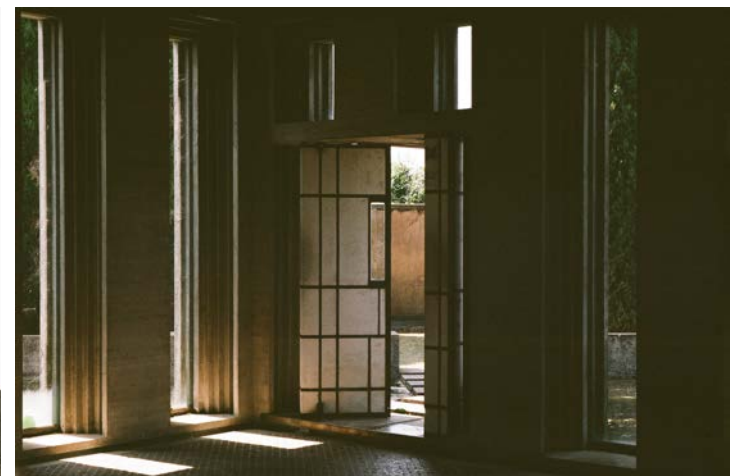
The Jewish Memorial, Berlin, GERMANY



The Jewish Museum, Berlin, GERMANY



The Brion Cemetery, Treviso, ITALY



The Brion Cemetery, Treviso, ITALY





Rome, ITALY



Rome, ITALY



Ankara Castle, Ankara, TURKEY



The Jewish Museum, Berlin, GERMANY



Metropol Parasol, Sevilla, SPAIN



The Sony Center, Berlin, GERMANY



Milan, ITALY



Plaza de España, Sevilla, SPAIN



Madrid, SPAIN



Asakusa Sensoji Temple, Tokyo, JAPAN



*From the presentation of when distinguished guests came to Bilkent University, Architecture Department*

*From left to right:*

- Prof. Glenn Kukkola
- Assoc. Prof. Meltem Gürel
- Assoc. Prof. Şule Taşlı Pektaş
- Prof. Michael Bell, at the School of Architecture, Planning and Preservation at Columbia University
- Hines Prof. Michelle Addington, Sustainable Architectural Design at Yale University School of Architecture
- Bilkay Begüm Peker (me)
- Prof. Mohsen Mostafavi, the Dean of the Harvard Graduate School of Design