STUDENT HOUSING IN TIRANA:
INTEGRATING PARAMETRIC ELEMENTS

A THESIS SUBMITTED TO
THE FACULTY OF ARCHITECTURE AND ENGINEERING
OF
EPOKA UNIVERSITY

BY

DANJA HYSI

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
ARCHITECTURE

2024

Approval sheet of the Thesis

This is to certify that we have read this thesis entitled “Student housing in Tirana: Integrating parametric elements." and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science.

_____

Assoc. Prof. Dr. Edmond Manahasa
Head of Department
Date: June, 26, 2024

Examining Committee Members:

Dr. Joana Dhiamandi (Head of jury)	(Architecture)	_____
Assoc. Prof. Dr. Odeta Manahasa (supervisor)	(Architecture)	_____
Assoc. Prof. Dr. Fabio Naselli (co-supervisor)	(Architecture)	_____
M. Sc. Nerina Baçi	(Architecture)	_____
M. Sc. Anisa Cenaj	(Architecture)	_____

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name Surname: Danja Hysi

Signature: _____

ABSTRACT

STUDENT HOUSING IN TIRANA:
INTEGRATIONG PARAMETRIC ELEMENTS

Hysi, Danja
M.Sc., Department of Architecture
Supervisor: Assoc. Prof. Dr. Odeta Manahasa
Co-Supervisor: Assoc. Prof. Dr. Fabio Naselli

The number of students enrolling in colleges or universities to further their education has gone up recently. There appears to be a strong demand for student housing based on this phenomenon. Every year, Tirana becomes a hot spot for the large influx of students from all across the country, which causes the city to have a high population density. The lack of appropriate housing options is one of the main issues students face. There are only three existing public dormitories that offer minimal living conditions at the moment. Even with the promise of a recently constructed student residence, its position on the outskirts of the city presents a considerable distance from academic institutions and the city center. This project aims to design a student housing complex in a strategic location, specifically targeting "Lady of Good Council University" as the site for this endeavor. Despite its location within the campus, the residence will be open to all students and the community. To comprehend functional dynamics and standard regulations, a thorough analysis of case studies and research articles on dormitory design is pursued. After choosing the site, a questionnaire is undertaken to understand the spatial demands of the students within the campus. The collected data is used as a starting point for the design process of a project that implements parametric elements to create an innovative living environment that enhances the quality of student life.

Keywords: *Parametric elements, Student Residence, University/City, Social Inclusivity, Student Well-being*

ABSTRAKT

REZIDENCË STUDENTORE NË TIRANË:
INTEGRIMI I ELEMENTEVE PARAMETRIKE

Hysi, Danja
Master shkencor, Departamenti i Arkitekturës
Supervizor: Assoc. Prof. Dr. Odeta Manahasa
Bashkë-Supervizor: Assoc. Prof. Dr. Fabio Naselli

Së fundmi numri i studentëve që vazhdojnë kolegjin ose universitetin për të përmirësuar edukimin e tyre, është rritur. Bazuar në këtë fenomen kërkesat për rezidenca stutentore janë rritur. Cdo vit Tirana bëhet epiqendra për ardhjen e studentëve nga rrethe të ndryshme të vendit, duke rritur kështu densitetin e popullsië në qytet. Një nga vështirësitë kryesore që hasin studentët me ardhjen e tyre është mungesa e opsioneve për vendqëndrim. Aktualisht, tre resizencat studentore publike ekzistente ofrojnë kushte minimale për të jetuar. Pavarësisht ndërtimit të një kompleksi studentor së fundmi, vendodhja e tij në periferi te qytetit krijon një distance të konsiderueshme me insitucionet akademike dhe me qendrën e qytetit. Ky projekt ka si qëllim të dizenjoje nje residence studentore në një vendndodhje strategjike, specifikisht brenda kampusit të Universitetit “Zoja e Këshillit të mirë”. Megjithate komplekti studentor do të jetë i hapur për te gjithë studentët si dhe për komunitetin. Për të kuptuar se si funksionojnë hapësirat e nje konvikti si dhe standartet e projektimit të tyre, janë analizuar një sërë artikujsh dhe shembujsh. Pas zgjedhjes së zones, u është bërë një pyetsor studentëve të kampusit. Informacioni i grumbulluar ka shërbyer si pikënisje e procesit të dizenjimit të një projekti, i cili implementon elemente parametrike për te krijuar nje ambient jetese inovativ që përmirëson jetesën e studentëve.

Fjalët kyçe: *Elemente parametrike, Rezidencë studentore, Universitet/Qytet, Gjithëpërfshirje sociale, Mirëqenia e studenteve*

Dedicated to my mother!

ACKNOWLEDGEMENTS

First and foremost, I would like to express my sincere thanks to my co-supervisor Assoc.Prof.Dr. Fabio Naselli for consistently guiding, motivating, and supporting me throughout my thesis journey. I appreciate the dedication he showed in improving my graduate experience.

I am deeply grateful to my friends for their continuous encouragement during all stages of my thesis.

Lastly, I would like to convey my gratitude to my family who with love, patience, motivation, wisdom, and support have an instrumental role in shaping the person I have become today.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

1.1 Problem Statement

The number of students attending the university is increasing annually. Unlike other countries, in Albania, the most preferred universities and other academic institutions are located in the capital city. Consequently, a considerable number of students migrate to Tirana for their studies, causing a high population density within the city. The main challenge faced by the students upon settling in Tirana is the finding of suitable and affordable accommodation. Rents have increased, and real estate agents attribute this surge to heightened demand. In many other countries, students prefer to live in dormitories rather than renting apartments to minimize costs and fully engage in student life. In Albania, this presents a challenge as there are only three existing public student residences, and they hardly meet the basic needs (*Figure 1*). There is also another private dormitory only for the students of University College Logos. A recently constructed private student residence called “Fole” offers accommodation and services with high standards, a lively, attractive, safe, comprehensive environment, and a wide range of services to make student life as dynamic as possible. Excellent conditions although the problem is the location. It is situated on Laprake St. November 29, near the gas station Bolv Oil, which poses a significant distance from academic institutions and the city center. Outside Tirana's ring, next to the Agricultural University, eight new dormitory buildings have been constructed. Even though promising in design, those dormitories are situated in the municipal unit of Kamez, further from Tirana's center.

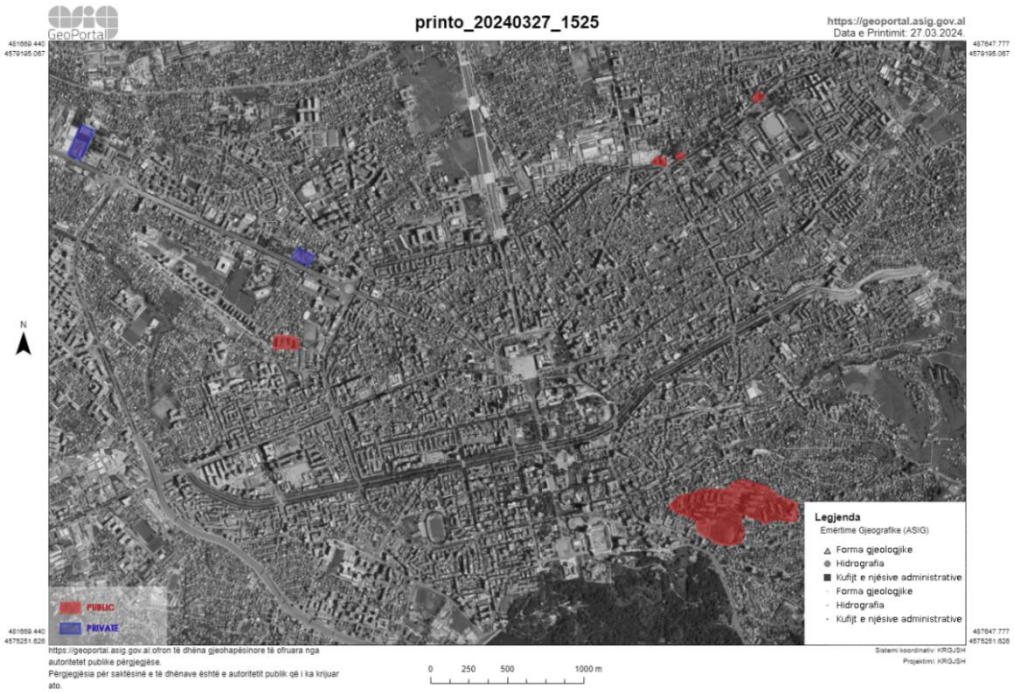


Figure 1. Map of existing dormitories in Tirana ***(By author,2024)***

Accommodations at University Student Residence No. 1(*Figure 2*), which is situated on Arben Broci Street in Student City, Tirana, are available for a 45,000 Lek annual fee. The residence has rooms that may accommodate one, two, or three beds, among other combinations of beds. Shared showers and toilets are available, and the fee includes drinking water and power. The house also provides laundry facilities for an additional fee. (Guida studentore, 2021)

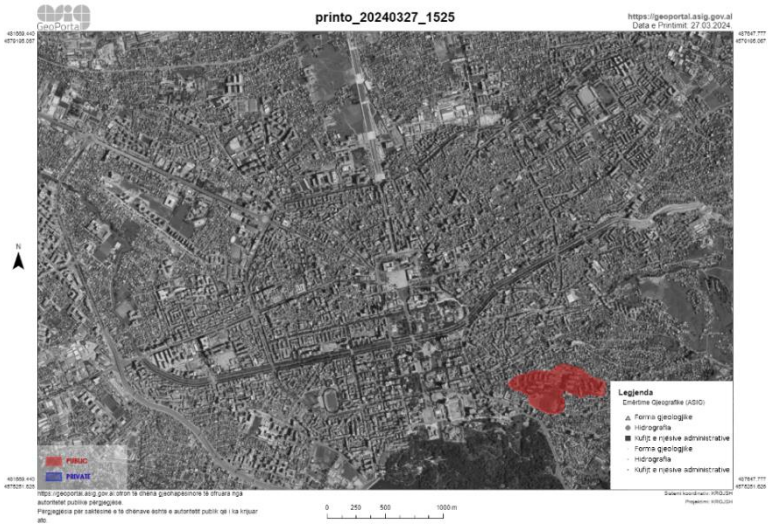


Figure 2. University Student Residence No. 1 ***(By author,2024)***

Located at the former Aviation Field on "Artan Lenja" Street next to the Faculty of Civil Engineering, University Student Residence No. 2 (*Figure 3*) offers housing for a fee of 63,000 ALL per year. The house consists of three useful buildings, A, B, and C. All three have the same amenities, such as rooms with two or three beds. In addition, the common areas have showers and toilets that can only fit five people. The cost includes 24-hour continuous access to water and electricity. (Guida studentore, 2021)

Figure 3. University Student Residence No. 2 ***(By author,2024)***

University Student Residence No. 3 (*Figure 4*) is situated near Tirana's medical university at Rruga e Dibrës 265. (Guida studentore, 2021)

Figure 4. University Student Residence No. 3 ***(By author,2024)***

1.2 Thesis Objective

Considering the previously mentioned challenges, this project aims to provide a suitable student housing residence in Tirana and consequently solve the accommodation problem for a considerable number of students. The approach combines proportional living units with parametric elements.

In order to gain an understanding of what parametric design means it is helpful to look briefly at definitions of "parametric" and "design" independently. "Parametric" is a derivative of "parameter" which itself originates from the Greek para, meaning a subsidiary or beside and metron, as in to measure (OED, 2002). A short but helpful dictionary definition of "design" is 'the art or action of producing a plan or drawing' (OED, 2002). Parametric design is not an unusual area for architects. It involves the exploration of multiple solutions to architectural design problems using parametric models. (Schnabel, 2007) "Parametric architecture uses an algorithmic scheme to design versatile, modern and creative structures. In architectural design, form emerges from under environmental conditions, which must be flexible and resilient." (Saeid Habibi, 2022) This allows architects to design complicated, adaptable, and dynamic buildings.

The main idea of this project is the joining of two separate volumes, one for boys and one for girls, by a common bridge, symbolizing connection and interaction. Parametric elements are added to the facade to emphasize the main living unit, creating shadows and dynamism. An inclusive landscape leads to shared spaces on the ground floor, engaging the community within the complex.

Despite the design, another advantageous aspect of this project is its location. The site is located in the "Former Aviation Field", within the campus of "Lady of Good Counsel" University, near "Zogu I Zi". It is a neighborhood that has been through a notable urban transformation. From a former aviation field to a diverse zone including residential/commercial spaces, parks, cultural venues etc. It has direct access to St. Dritan Hoxha through St.Ana Komnena. The nearest bus station is located within 300

meters of the site, offering good transportation options for students. The proximity of the Tirana International Bus Terminal, located approximately 600 meters from the site, significantly enhances transportation options for foreign students. This convenient access to the bus terminal makes travel much easier for international students, thereby having a highly positive impact on the attractiveness and functionality of the dormitory *(Figure 5).* Since most buses stop at this station, students can easily reach different parts of the city. The site is an empty, flat area of approximately 21,000 m2, surrounded by a concrete fence.

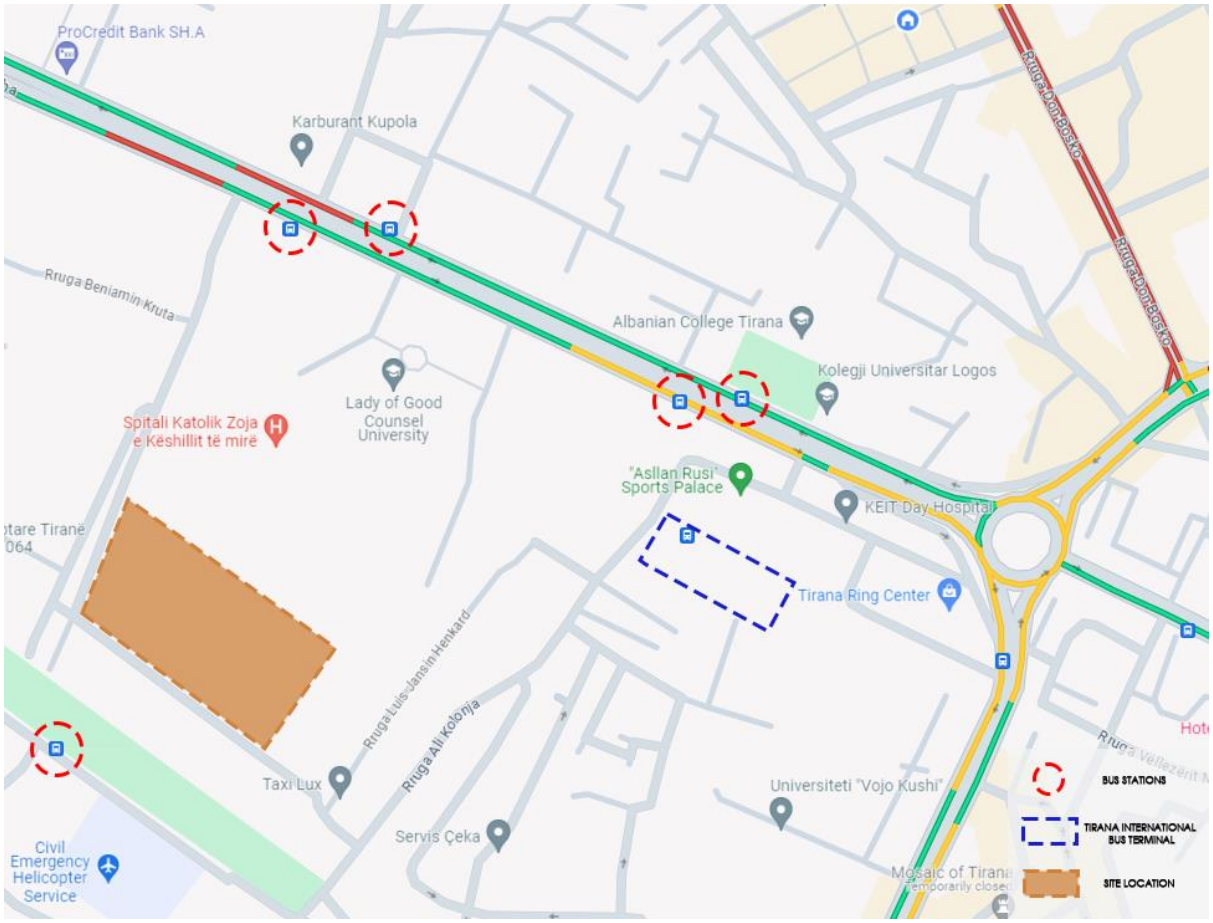


Figure 5. Site location, bus stations, bus terminal ***(By author,2024)***

1.3 Methodology

This section specifies the stages of the general framework of the thesis. The first phase includes data collection from different research papers and case studies related to the topic. Filtering this data helps us to identify the starting point for our thesis.

The second phase consists of site selection and analysis. The site analysis includes: plan update, greenery, building heights, building functions, circulation, and shadow map. This analysis provides us with indications to begin our design process while keeping the context in mind.

The third phase involves a questionnaire for the students of "Lady of Good Counsel" University to understand their needs and preferences regarding dormitory units and common spaces.

The fourth and most crucial phase is designing the student housing and integrating parametric elements. The parametric design is implemented with the help of Dynamo for Revit software. DYNAMO (Dynamic Architectural Memory Online), initiated in 1996, is a fully operational case base for architecture, allowing to easily access design cases online. (Heylighen, 2000) Utilizing parametric design volum are shaped based on algorithmic processes rather than direct manipulation. Through an interplay of elements, complicated forms are generated. Parametric design applications in daylighting and solar radiation can have an essential impact on improving daylight availability and energy saving. (Ahmad Eltaweel, 2017).

STEP 1	STEP 2	STEP 3	STEP 4
-Data collection from different research papers and case studies related to the topic. -Filtering the data to identify the starting point for our thesis.	-Site selection and analysis: plan update, greenery, building heights, building functions, circulation, and shadow map.	- Questionnaire Target: "Lady of Good Counsel" University Aim: To understand the students' preferences	-Designing the student housing and integrating parametric elements. -Software: Dynamo, Revit

Table 1. Methodology ***(By aouthor,2024)***

CHAPTER 2

LITERATURE REVIEW

2.1 Standard guidelines for dormitories

Designing spaces for students necessitates a thorough approach that considers a wide range of needs they may have during their study period. The objective is to provide residential undergraduate student accommodation that enhances the student experience by delivering high-quality living, social, and amenity space: improving the living and learning experience when in residence. (Chichester, 2016) “Student Residential Accommodation Standard Design Guidelines” covers three types of accommodation, en-suite bedrooms in cluster flats, non-en-suite bedrooms in cluster flats, and Townhouses. (Chansomsak, 2016.)

Cluster Flats with en-suite Bedrooms

Each unit consists of either five or six bedrooms along with a communal kitchen/dining space to foster community while maintaining practicality. In cases where it benefits efficiency, up to eight bedrooms can be accommodated whilst each bedroom itself ranges from 11.5 - 12.5 m² (excluding en-suite), allowing for ample personal space for residents' needs and well-being. The recommended size of the accompanying en-suite is approximately 2.5 m² with essential facilities including WC, sink, and broad shower enclosure. The bedroom is sensibly designed, with a standard 900mm single bed, bedside table, desk area, and adequate storage in the shape of a double closet. A typical en-suite bedroom layout can be found in Appendix A *(Figure 6).*

Figure 6. Appendix A ***(Chichester, 2016)***

Cluster Flats with non-en-suite Bedrooms

Each apartment is designed to have six bedrooms that share a common kitchen and dining area. However, certain instances permit the addition of up to two additional rooms while still maintaining an efficient layout. The 10.5-11 m² bedrooms are thoughtfully furnished with necessary amenities such as a standard 900mm single bed, bedside table, and desk unit with a fixed pedestal unit for added privacy or practicality in the living space. Shared spaces within the flat are meticulously planned, with separate WCs, shower rooms, and a well-equipped kitchen diner. A typical non-en-suite bedroom layout can be found in Appendix B *(Figure 7).*

Figure 7. Appendix B ***(Chichester, 2016)***

Townhouses

The townhouses, which are either two or three stories tall, come with six to eight bedrooms and a flexible layout that's customization to the residents' needs. The bedrooms are sized between 10.5 and 11 m² and furnished with necessary items such as a standard single bed (900 mm), bedside table, desk area, double wardrobe along drawers for ample storage space. Practical inclusions like bookshelves and full-length mirrors add more functionality while also making it aesthetically pleasing a separate washroom equipped with complete facilities including a toilet roll holder is present on the ground floor adding convenience when needed. Each townhouse includes two shower rooms per four-bedroom living quarters containing all necessary utilities: WC system basin & showering cubicle having an adequate size of at least 800 mm x 800 mm providing greater comfort during use. A typical townhouse layout can be found at Appendix C *(Figure 8)*

Figure 8. Appendix C ***(Chichester, 2016)***

2.2.1 Albanian Regulations

There is no standard manual for dormitories in Albania. The current dormitories either lack conformity to present design rules and needs or have been reconstructed or recently constructed following European standards. To derive regulations governing the functioning of dormitories in Albania, three studies are examined. The first is a technical report on the rehabilitation of buildings in RSU No.1 (Student City), the second is a case study of the winning project for the same university residence, known as Baukuh Masterplan, which operates according to European standards, and last one is the recently constructed modern student residence "Fole".

Rehabilitation of buildings in RSU no.1 (Student City)

From the technical report, I was able to extract information about the spaces located on both the ground floor and the upper floors. Though this plan is not clear enough to read the exact dimensions of the spaces, it does provide a clear understanding of the spatial organization. The Student City comprises: 29 residential buildings, out of which 26 are student dormitories and 3 are residential buildings for contracted families. Currently, the buildings are divided, with 6 being occupied by males and 20 by females. (Tender, 2019)

Ground floor:

Following the intervention, the ground floor of both buildings combined will feature the following premises:

- Entrance area – Hall
- Reception
- Manager's office
- Study room
- Computer room
- Storage facilities for sanitary workers

- Corridor connecting buildings no. 11 and 12 and inter-building corridors
- 35 student rooms, including two designed for people with disabilities
- 18 toilets
- 2 kitchens
- Staircases
- 2 warehouse premises
- Technical premises for the heating and sanitary hot water system
- Existing electrical technical premises serving the area

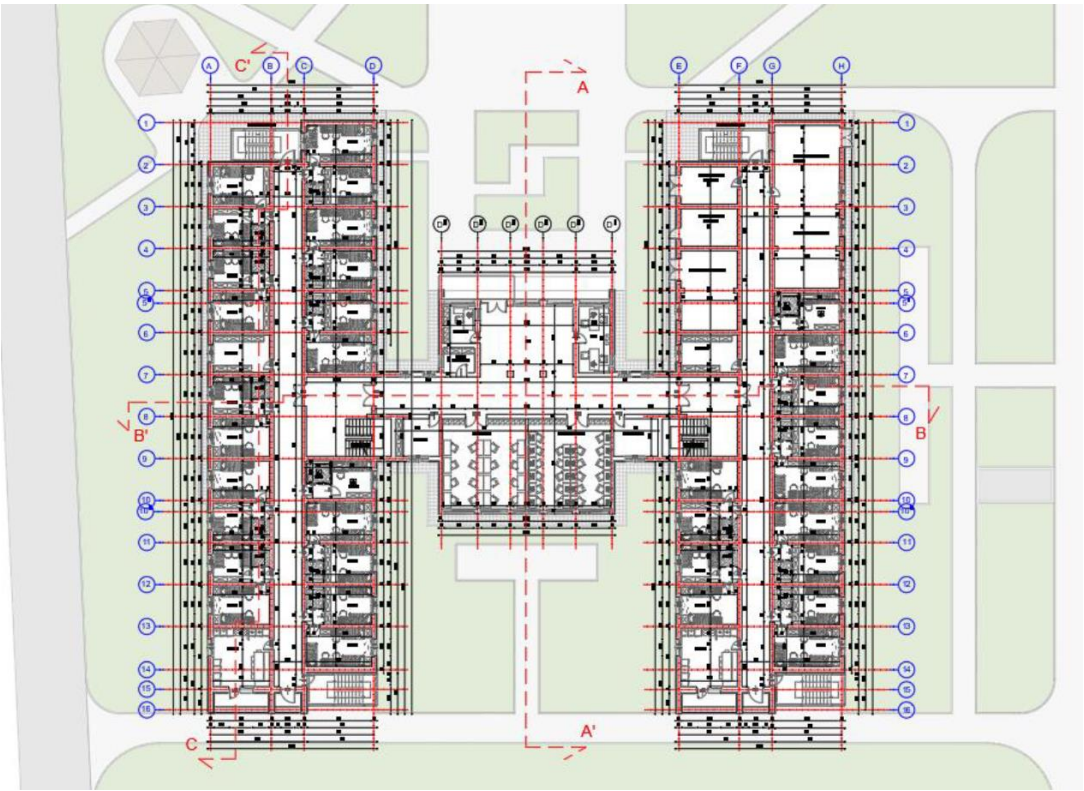


Figure 9. Ground floor after the intervention *(Tender, 2019)*

2nd, 3rd, 4th, and 5th Floor

Following the intervention, across the type 1, 2, 3, and 4 floors of both buildings combined, the following premises will be present:

- Corridors of buildings
- 44 student rooms
- 24 toilets
- 2 kitchens
- Staircases
- 2 warehouse premises

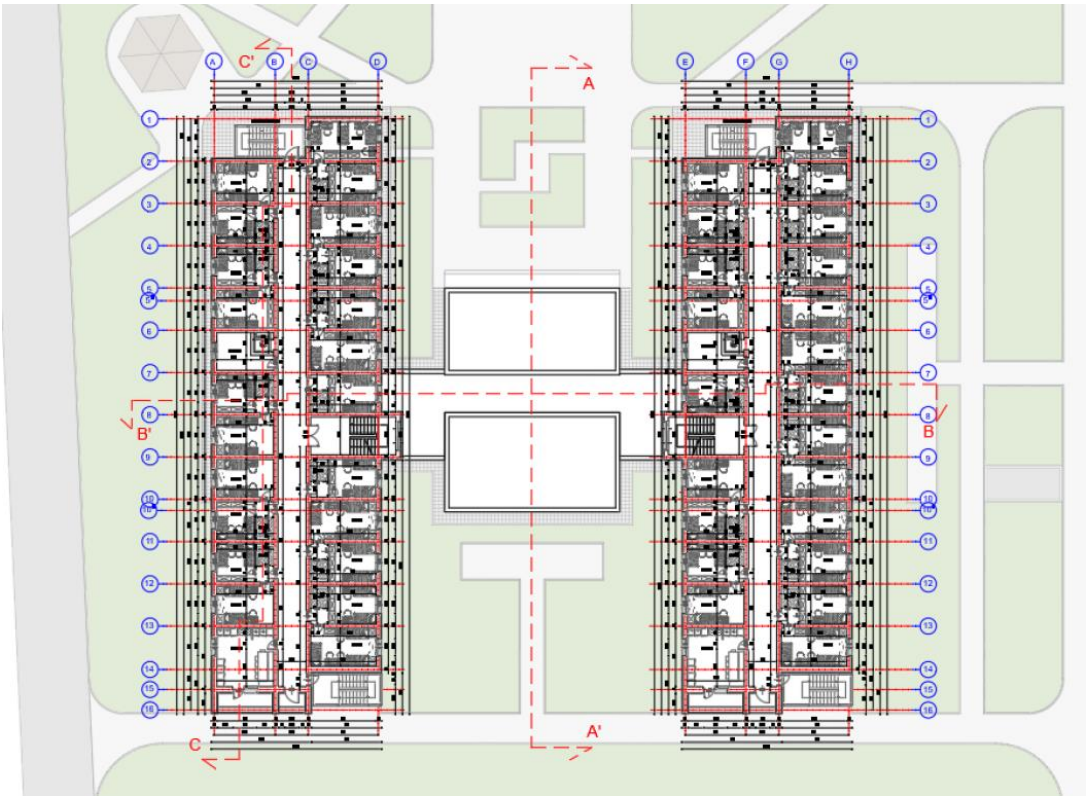


Figure 10. Upper floors after the intervention *(Tender, 2019)*

BAUKUH Masterplan

This project aims to reorganize the current buildings, enhancing shared spaces and expanding them where necessary. Each room now has its own bathroom, with the new layout ranging from 15 to 22 square meters per single unit. Additionally, emergency stairs and elevators have been incorporated. (AKPT, 2015)

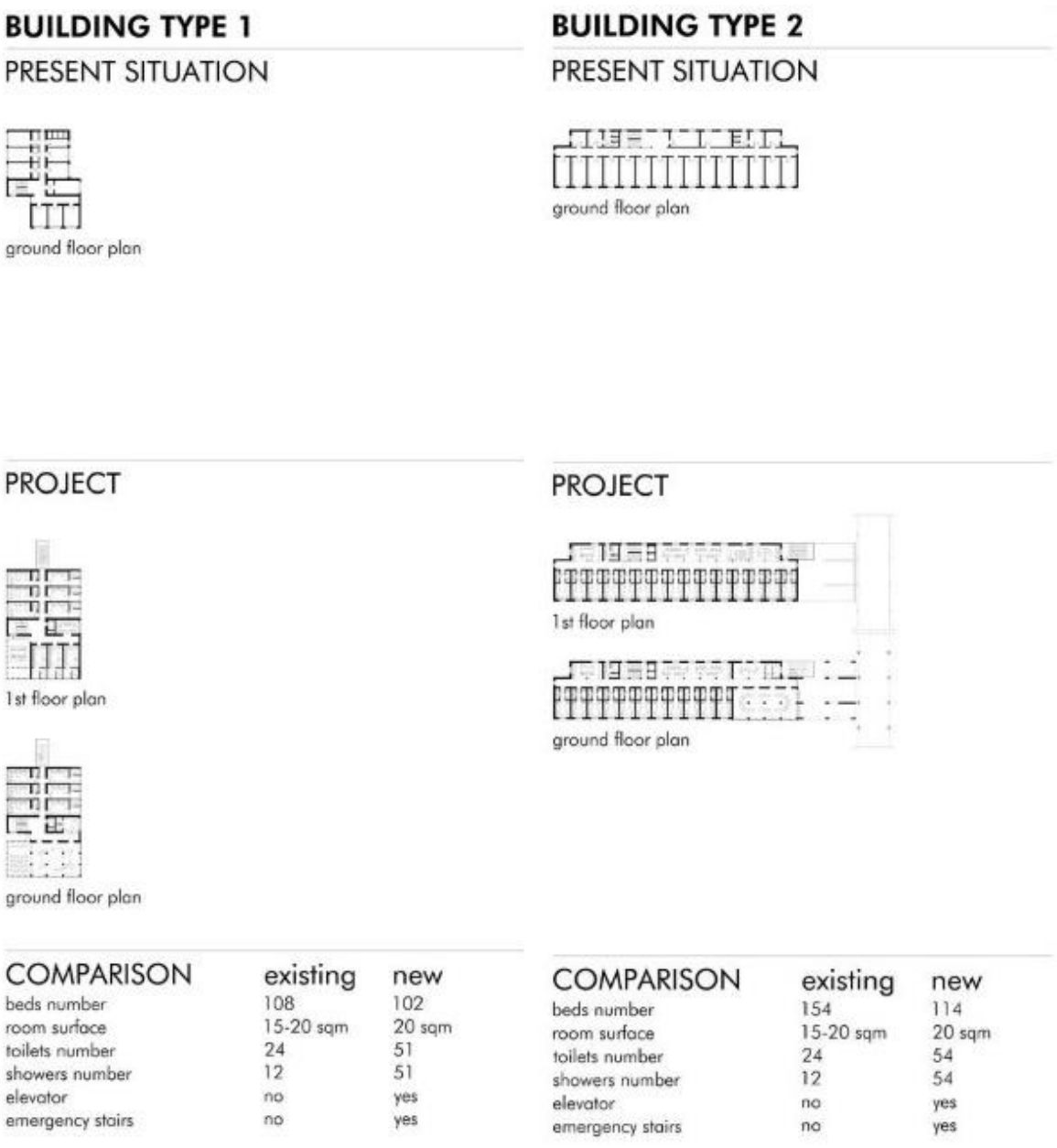


Figure 11. Baukuh Masterplan, Building type 1,2 *(AKPT, 2015)*

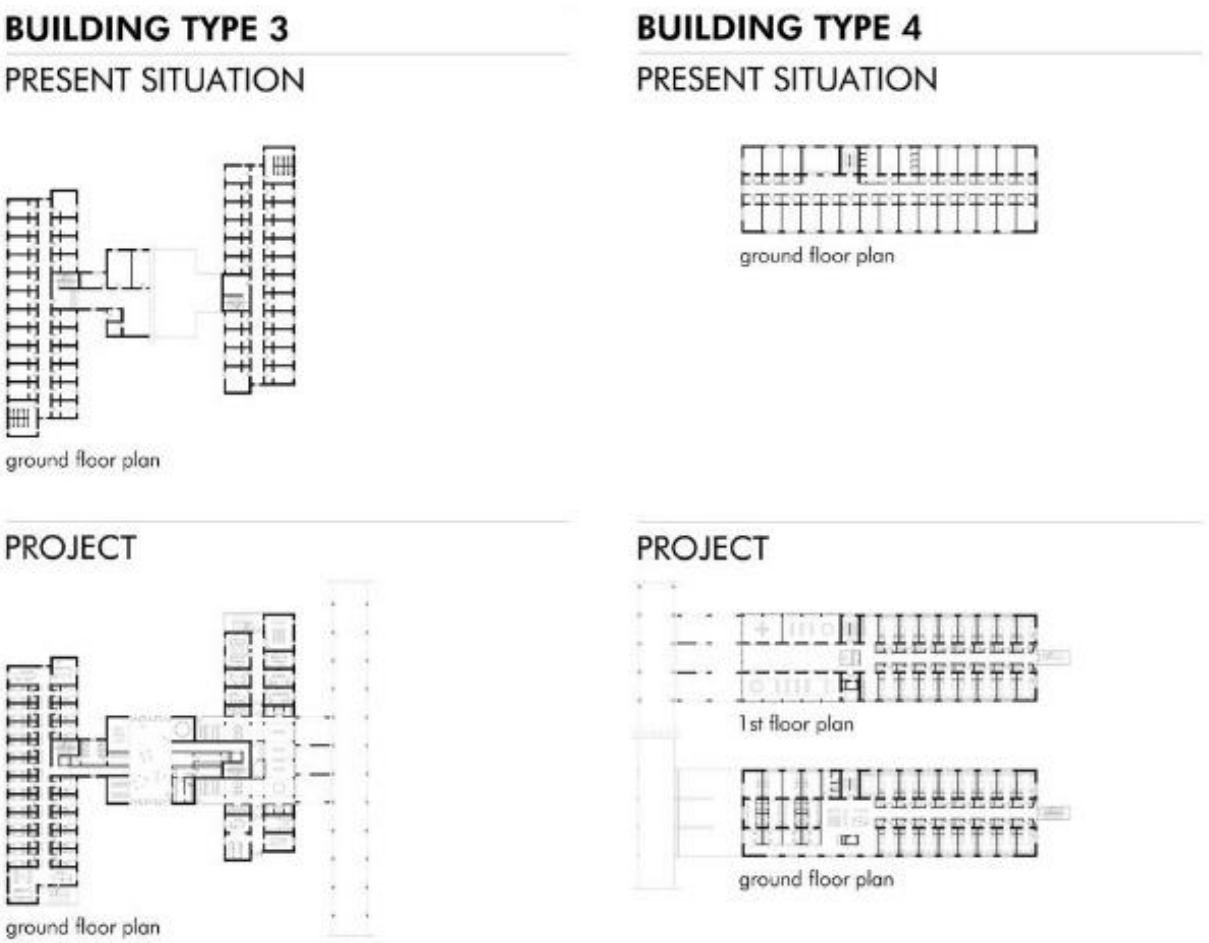


Figure 12. Baukuh Masterplan, Building type 3,4 *(AKPT, 2015)*

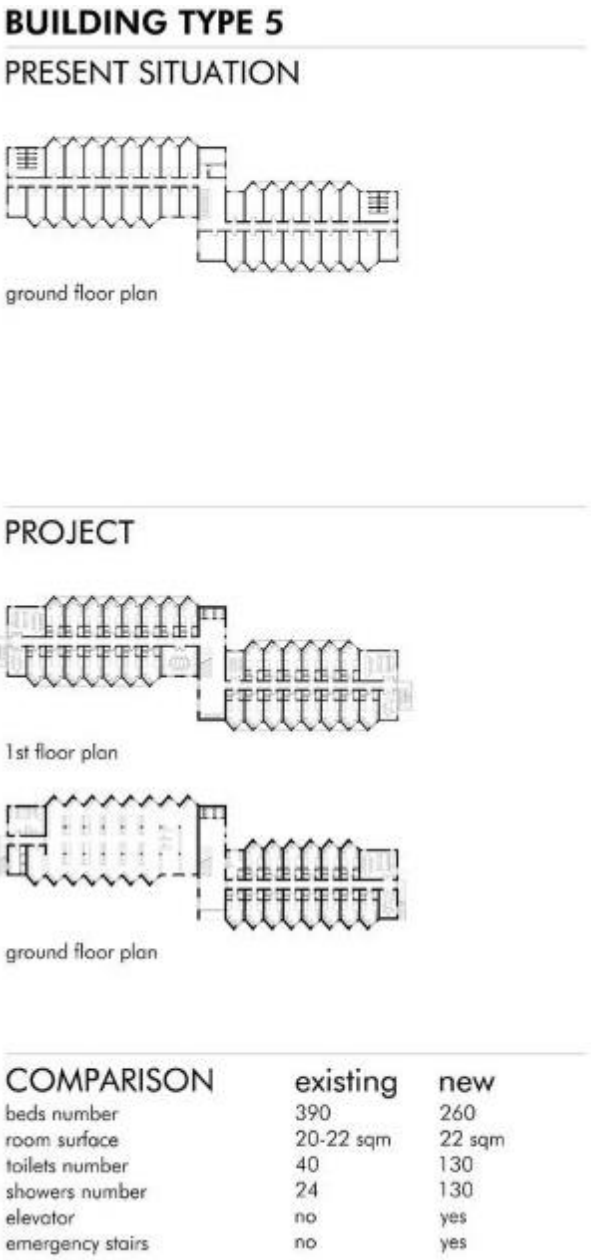


Figure 13. Baukuh Masterplan, Building type 5 *(AKPT, 2015)*

“Fole” residence

"Folé" residence consists of 4 accommodation buildings with high standards and the latest technology. Their goal is to provide students with a suitable environment for personal and academic growth, positive experiences, comfort, and security. The common spaces include a bar-Restaurant, free Wi-Fi, reception 24/7, a library facility with a study area, transportation to the city center, a private courtyard inside the accommodation with designated leisure and smoking areas, security, parking, car wash, electric car station, gym, spa, semi-Olympic pool, laundry, pharmacy/clinic. The three residential blocks offer a range of accommodation options: Single studio (for 1 person), One-bedroom apartment (for 2 people), Big Studio apartment (for 2 - 3 people), Two-bedroom Apartment (for 2 - 4 people). (Folè Residence, 2022)

Single studio (for 1 person)

- Surface: 21.5 m²
- Private Kitchen with a stove and Refrigerator
- Private bathroom with the toilet
- Standard Single Bed
- Wardrobe
- Study desk

Figure 14. Single studio *(Folè Residence, 2022)*

One-bedroom apartment (for 2 people)

- Surface: 40 m²
- Living room with a sofa
- Private Kitchen with a stove and refrigerator
- Dining table with 4 chairs
- Private bathroom with the toilet
- Bedroom with 2 single beds
- 2 Wardrobe
- 2 Study desks

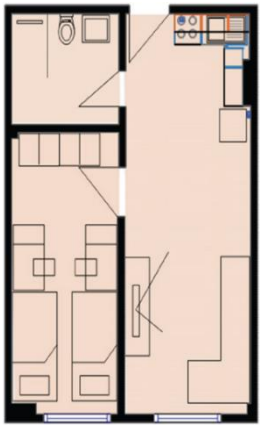


Figure 15. One-bedroom apartment
(Folè Residence, 2022)

Big studio apartment

- Surface: 38.8 m²
- Big studio room
- Private Kitchen with a stove and refrigerator
- Private bathroom with the toilet
- Dining table with 4 chairs
- 2 - 3 Single Beds
- 2 - 3 Wardrobe
- 2 - 3 Study desks

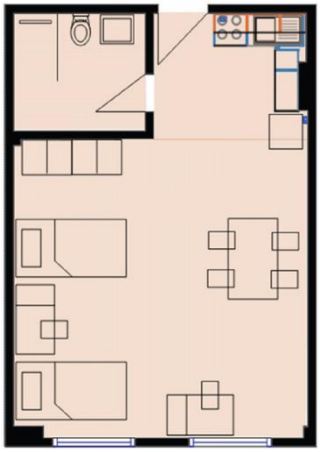


Figure 16. Big studio apartment
(Folè Residence, 2022)

Two-bedroom apartment

- Surface: 65 m²
- Living room with a sofa
- Private Kitchen with a stove and refrigerator
- Dining table with 4 chairs
- Private bathroom with the toilet
- 2 Separate Bedrooms
- 2 - 4 Single Beds
- 2 - 4 Wardrobe
- 2 - 4 Study desks

Figure 17. Two-bedroom apartment
(Folè Residence, 2022)

2.2 Student Residences Typologies

The typologies for student dormitories are affected by diverse elements such as: city location; accommodation capacity; university policies; architectural design preferences; cultural and regional incorporation; budget adherence; functional demands; sustainability practices; technological integration; and legal compliance. These diverse elements collectively shape the design, layout, and features of student housing. Generally speaking, the key differentiating factors forming the basis for classification into typologies include the length of the corridor, the form of the service core, the loading on the horizontal access and overall spatial structure. These features provide a comprehensive framework for understanding the diverse morphological characteristics of student residences. Five typologies are identified based on all the above criteria. (Amole, 2016.)

Type A is identified by its long horizontal access, end-located main access, and single loading along the corridor. The hall consists of distinct linear constructions connected at ground level only, displaying a unique physical layout and accessibility *(Figure 18).*

Figure 18: Type A ***(Amole, 2016.)***

Type B is characterized by a short horizontal access, fragmented by two or more vertical accesses located intermittently along the floor. It has a single loading on the horizontal access and is distinguished by linear structures linked together at all levels, forming a single and partially enclosed structure. (*Figure 19).*

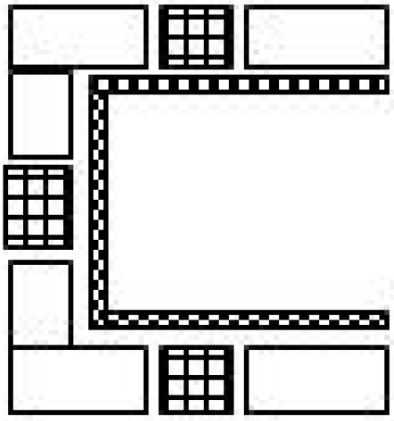


Figure 19: Type B ***(Amole, 2016.)***

Type C features a short horizontal access, a centrally loaded main access, and double loading on the horizontal access. The hall comprises separate linear structures linked at ground level only, showcasing a distinctive and efficient spatial arrangement *(Figure 20).*

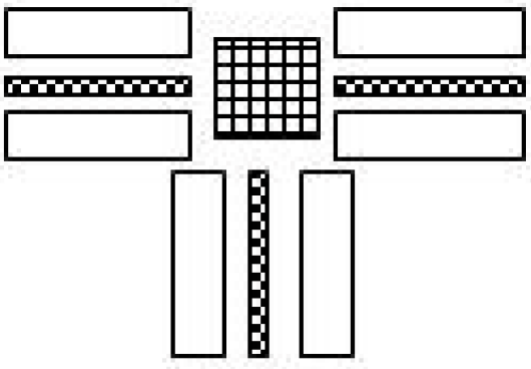


Figure 20. Type C ***(Amole, 2016.)***

Type D is defined by a short horizontal corridor, a centrally located main vertical access, and single loading on the horizontal access. The hall is characterized by a series of fully enclosed courtyard structures linked at ground level only *(Figure 21*).

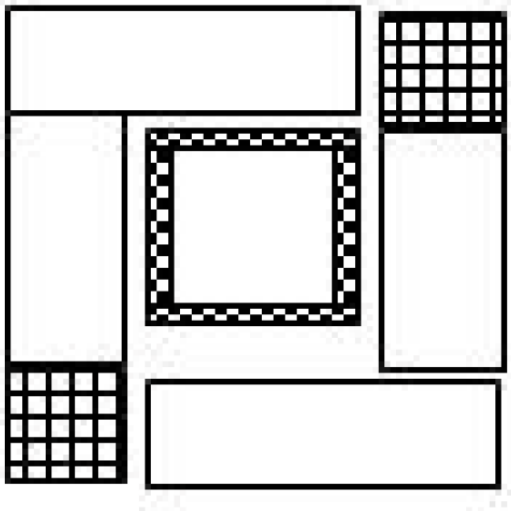


Figure 21. Type D ***(Amole, 2016.)***

Type E has an extended horizontal access, a single main end-located vertical access, and partial double loading on the horizontal access (*Figure 22).*

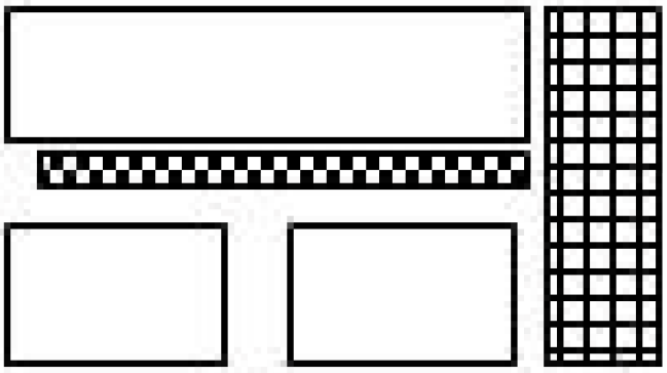


Figure 22. Type E ***(Amole, 2016.)***

2.3 Case studies typologies classification

The table below shows the classification of 7 case studies based on the typologies stated above.

Type A	iHouse Dormitory / Studio SUMO Siriphat Dormitory / IDIN Architects
Type B	Student Dormitory / Nickl & Partner Architekten
Type C	Monash University Student Housing / BVN OurDomain Student Housing / OZ Architects
Type D	Tietgen Dormitory / Lundgaard & Tranberg Architects
Type E	AMN Student Housing / SHAU Indonesia

Table 2. Case studies classification

2.3.1 Type A

iHouse Dormitory / Studio SUMO

The iHouse Dormitory, built by Studio SUMO, is a unique dormitory and international center that can comfortably accommodate 140 international students within 2650 m². (Rojas, 2022) The architectural marvel has a louvered surface with projecting balconies that successfully conceal exterior passageways while giving dormitory rooms an outward orientation that provides spectacular views of the neighboring rice fields *(Figure 23).*The use of shared areas, a well-designed walkway, and a balcony system successfully expands the limited living space into the outdoors *(Figure 24).*The facade is made mostly of metal louvers and features a weaving pattern, giving it a unified and visually pleasing look to the public. Simultaneously, the louver design generates shaded passageways, allowing for a dynamic interaction of light for the inhabitants. There are four different types of dorms in the structure.

Figure 23. Concept (left), Louvre facade (top right), Room types (bottom right) ***(Rojas, 2022)***

Figure 24. Functional analysis ***(By author,2024)***

Siriphat Dormitory / IDIN Architects

The Siriphat Dormitory, designed by IDIN Architects in Salaya, Thailand, is a distinguished female dormitory spanning an area of 6700 m². (Caballero, ArchDaily, 2019) Notably, the architects astutely utilized only half of the site, reserving the remaining portion for potential future expansion. The dormitory comprises two interconnected structures (the North and South buildings) running seamlessly from the front to the back of the land. The space between these buildings is ingeniously designated as a common area, benefiting from shade throughout the day courtesy of the strategically positioned South building. This well-designed common space serves a multifunctional role, housing a swimming pool, library, and garden, fostering a sense of community among residents. Considering its longitudinal approach, single loading on corridor in one part of the building and short horizontal access with centrally loaded main access in the other part, this building is a combination of type A and C. The main unit of a dorm typology consists on a kitchen opposite the entrance directly connected

to the living space enlightened by the glass door that separated it from the sleeping area *(Figure 25).*

Figure 25. Concept (top left), Room type (top right) ***(Caballero, ArchDaily, 2019)***, Functional analysis (below) ***(By author,2024)***

2.3.2 Type B

Student Dormitory / Nickl & Partner Architekten

The Student Dormitory in Germany covers 3800 m2 and accommodates 194 students. (Rosenberg, 2023) A two-unit terraced design that spans three or four storeys and smoothly blends provides ample space for nesting. The main courtyard is located in the middle of the complex and serves as the focal point for the residents' recreation spaces. First and foremost, the dormitory building design is based on folding, which gives the dormitory its unique and modern appearance. The heart of this student housing is the presence of a north-south crossroads designed exclusively for pedestrians and cyclists. Complementarily, this approach works as a core design element, not only boosting the overall accessibility of the complex but also creating a crucial connection to the surrounding university campus. The dorms are located along

one side of the passageway. The vertical circulation cores are centrally positioned *(Figure 26).*

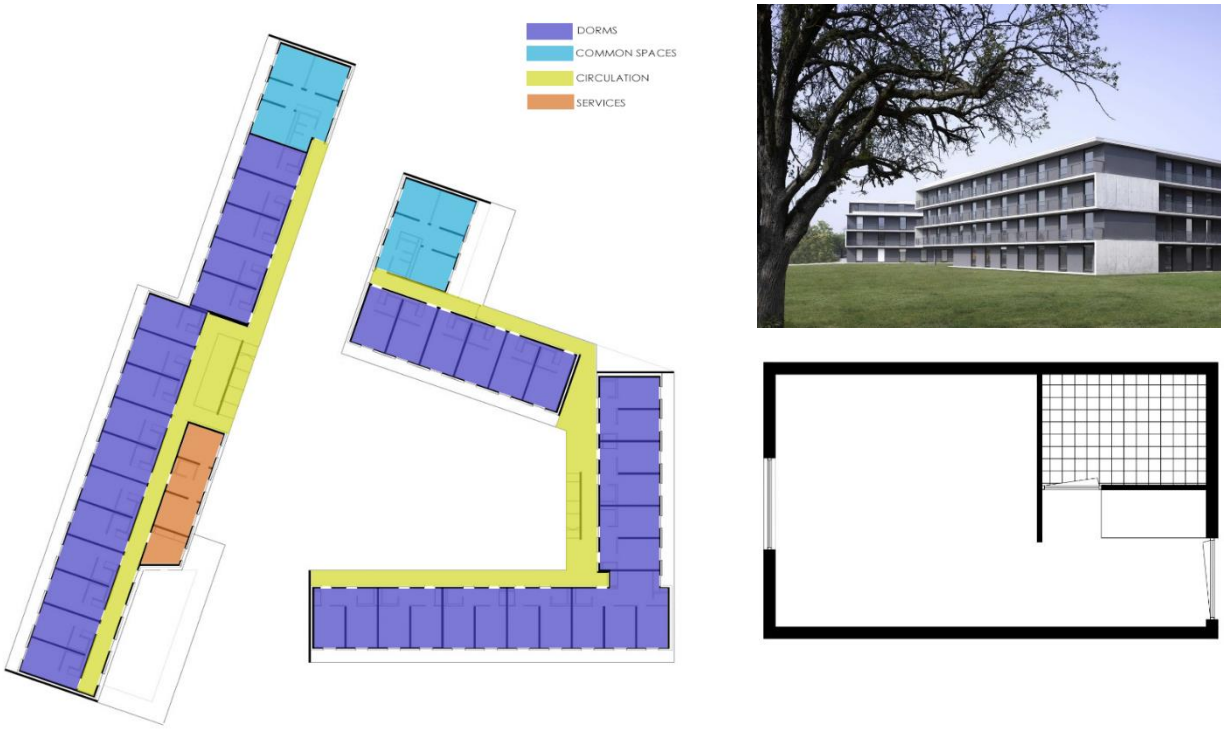


Figure 26. Functional analysis (left) ***(Rosenberg, 2023)***,
Perspective view (top right), Room type (bottom right) ***(By author,2024)***

2.3.3 Type C

Monash University Student Housing / BVN

The Monash University student housing in Canberra, Australia designed by BVN Architects is a testament to innovative design. (Ross, 2023) It encompasses two separate five storey buildings, each with 300 studios for living purposes, and the layout is so well thought-out. The blocks are aligned in such a way that they enclose an inviting central courtyard which doubles as a meeting place as well as the entrance to every block. By locating shared spaces and vertical circulation at the centers of each building, BVN's design evokes a sense of community and interaction. Double-story volumes dominate major communal sections creating openness and linkages between spaces. These buildings have been separated into wings with each wing containing thirty studios per floor level. The studios themselves are small but functional, including kitchenette facilities, ensuite bathrooms and combined bedroom/living rooms

measuring 20sqm in area and having heights of 2.7meters above ground level *(Figure 27)*.

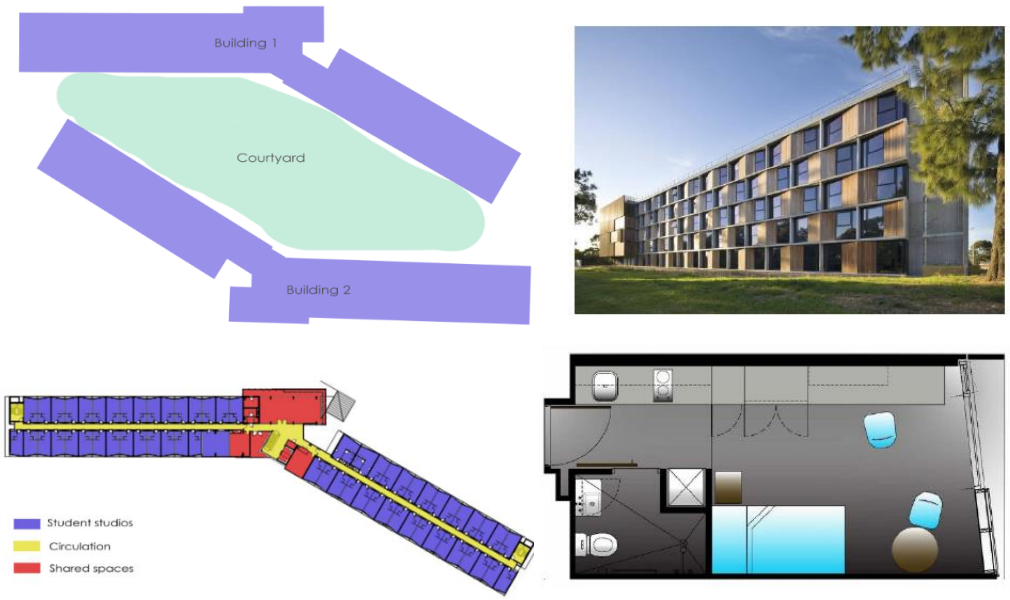


Figure 27. Courtyard analysis (top left), Functional analysis (bottom left) ***(By author,2024),*** Perspective view (top right), Room type (bottom right) ***(Ross, 2023)***

OurDomain Student Housing / OZ Architects

In the center of Amsterdam, Netherlands lies the OurDomain Student Housing by OZ Architects as a transformative agent for the city. (Caballero, 2022) It represents a shift from a dull office site to a city of vitality and multi-function. The project stretches 90,000 square meters and was completed in 2021. Located on a campus that occupies around 1,500 apartments alongside a variety of culprits, this site marks a departure from traditional living, instead, offering a livening lifestyle in the community. Three gigantic housing blocks—East House, North House, and West House—were carefully positioned by OZ Architects around a beautifully organized park, in order to achieve a unique residency type feel— in spite of the office dominated neighborhood setting. The public spaces that are located at the plinth function as the communal amenities that are used by the residents enabling the creation of a cohesive community in this modern urban campus.

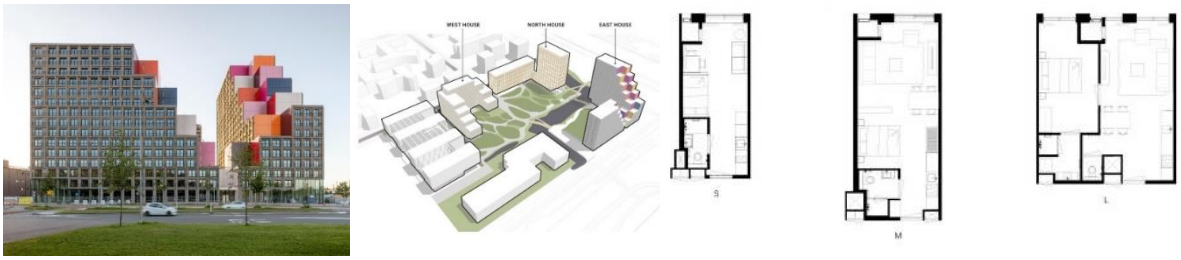


Figure 28. Perspective (left), Concept (center), Room types (right) ***(Caballero, 2022)***

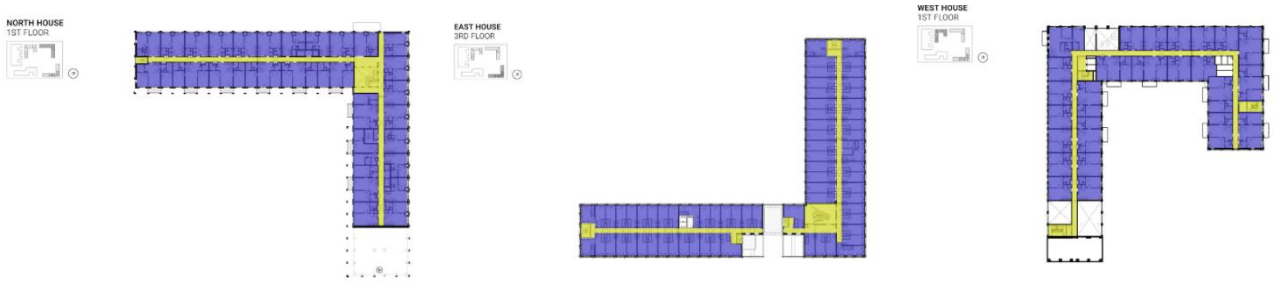


Figure 29. Functional analysis of the three buildings ***(By author,2024)***

2.3.4 Type D

Tietgen Dormitory / Lundgaard & Tranberg Architects

The Tietgen Dormitory in Copenhagen, Denmark, designed by Lundgaard & Tranberg Architects and standing at the completion of 2005 presents an ideal vision of' the dormitory of the future,' having a grossing area of 26515 m², housing about 400 students. (Sánchez, 2023) This is reflected in its unique circular shape and a symbol of equality and community, accentuated by combined individual, projecting volumes representing the private homes. In the upper levels, the arrangement is well thought to have the residences facing the outer perimeter with a panorama view of the surroundings and the communal functions carefully designed to be oriented toward the inner courtyard *(Figure 31*). Accessible through open passageways at ground level, the courtyard acts as the central point, providing access to the five building components. Each floor has 12 residences arranged around a common area and kitchen within each of the five blocks promoting a balance between living spaces and social spaces.

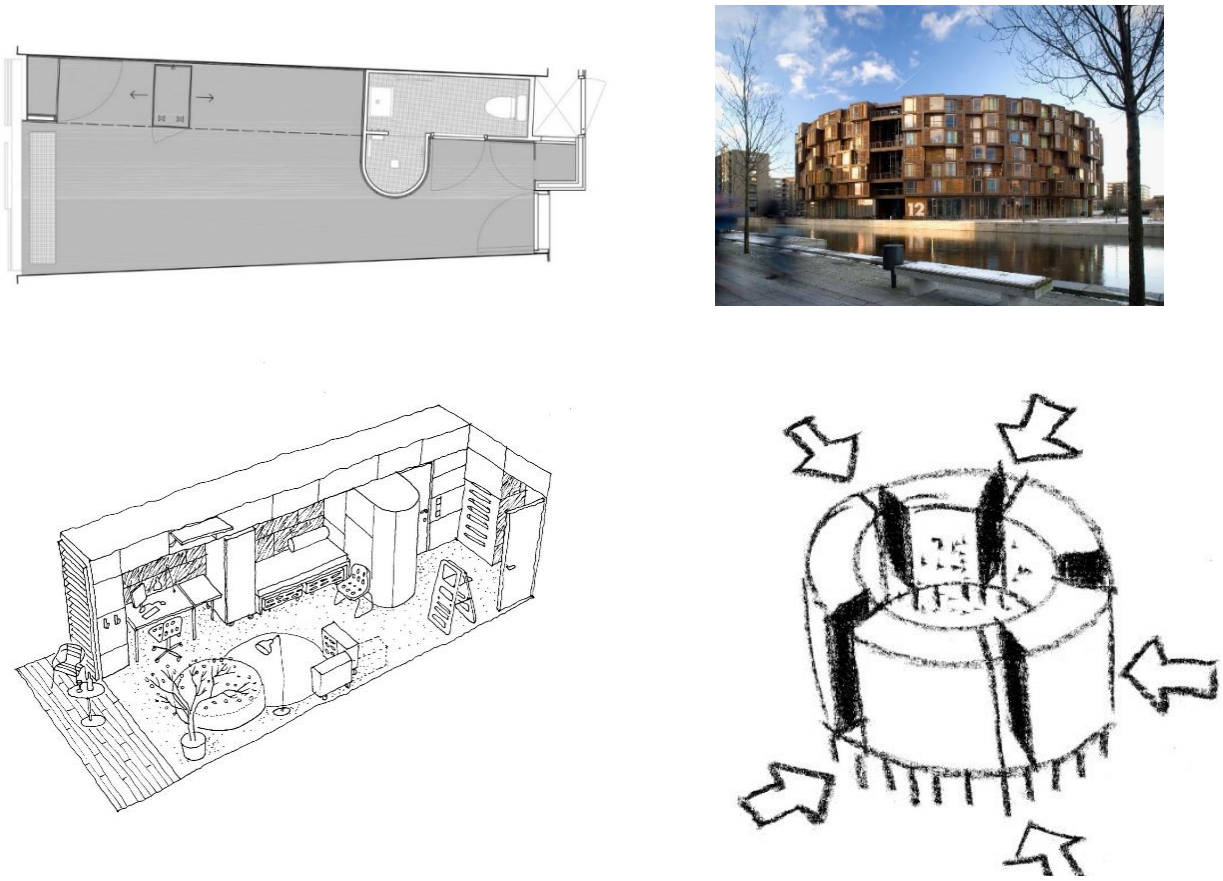


Figure 30. Room type (left), Perspective (top right), Concept (bottom right) ***(By author,2024)***

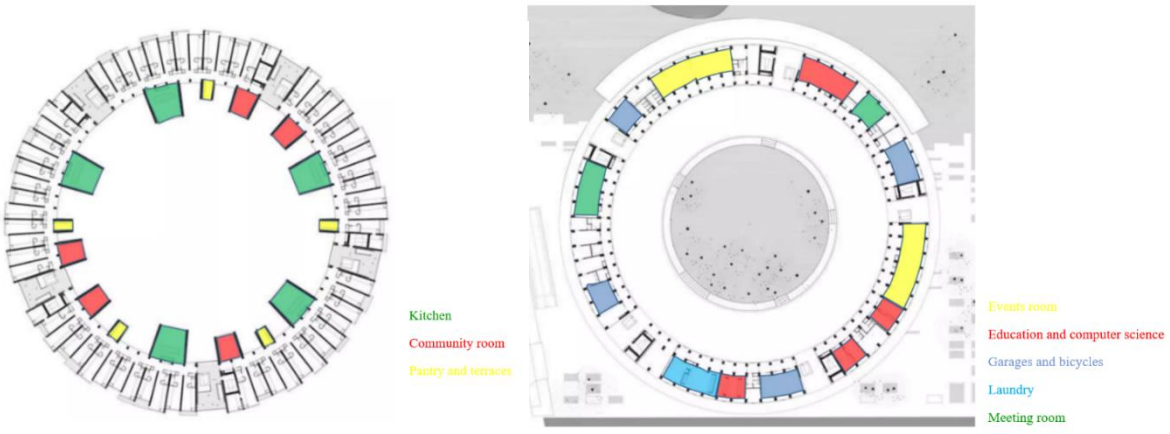


Figure 31. Functional analysis ***(By author,2024)***

2.3.5 Type E

AMN Student Housing / SHAU Indonesia

The AMN Student Housing located in Surabaya, Indonesia by SHAU Indonesia, completed in 2022 is the example of contemporary and eco-friendly student living. (ArchDaily, n.d.) It is a 9260 m² space consisting of four terraced volumes clad with green roofs, elevated on stilts to form an open ground floor. For weather issues, both the East and West facades offer the fewest openings to prevent overheating and the louvers provide the most efficient light filtering. The sustainability commitment also includes to automatic irrigation with rainwater collected. The brisance ingenuity is further demonstrated in the fact that each terraced volume has an open- void on every floor that allows natural light and air to pass through the building. The residential floors are thoughtfully divided into male and female sections with 180 rooms that can accommodate 3 students per room. Wheelchair-accessible on the ground floor keep the concept of universality; the mentor units occupy the upper floors, which is a representative of the comprehensive student housing model that merges functional, environmental, and social aspects without any evident boundaries (*Figure 32),(Figure 33).*

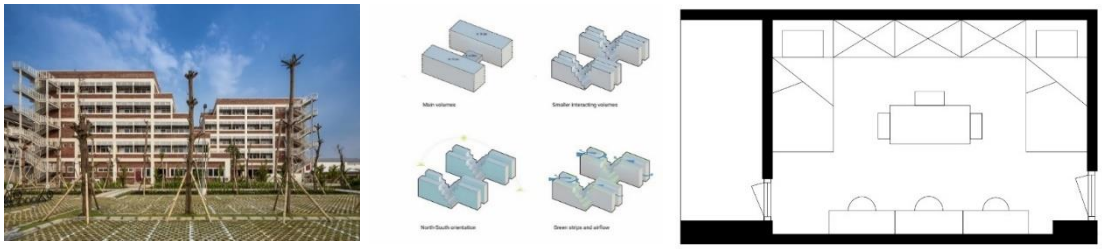


Figure 32. Perspective view (left), Concept (center) ***(ArchDaily, n.d.)***, Room type (right) ***(By author,2024)***

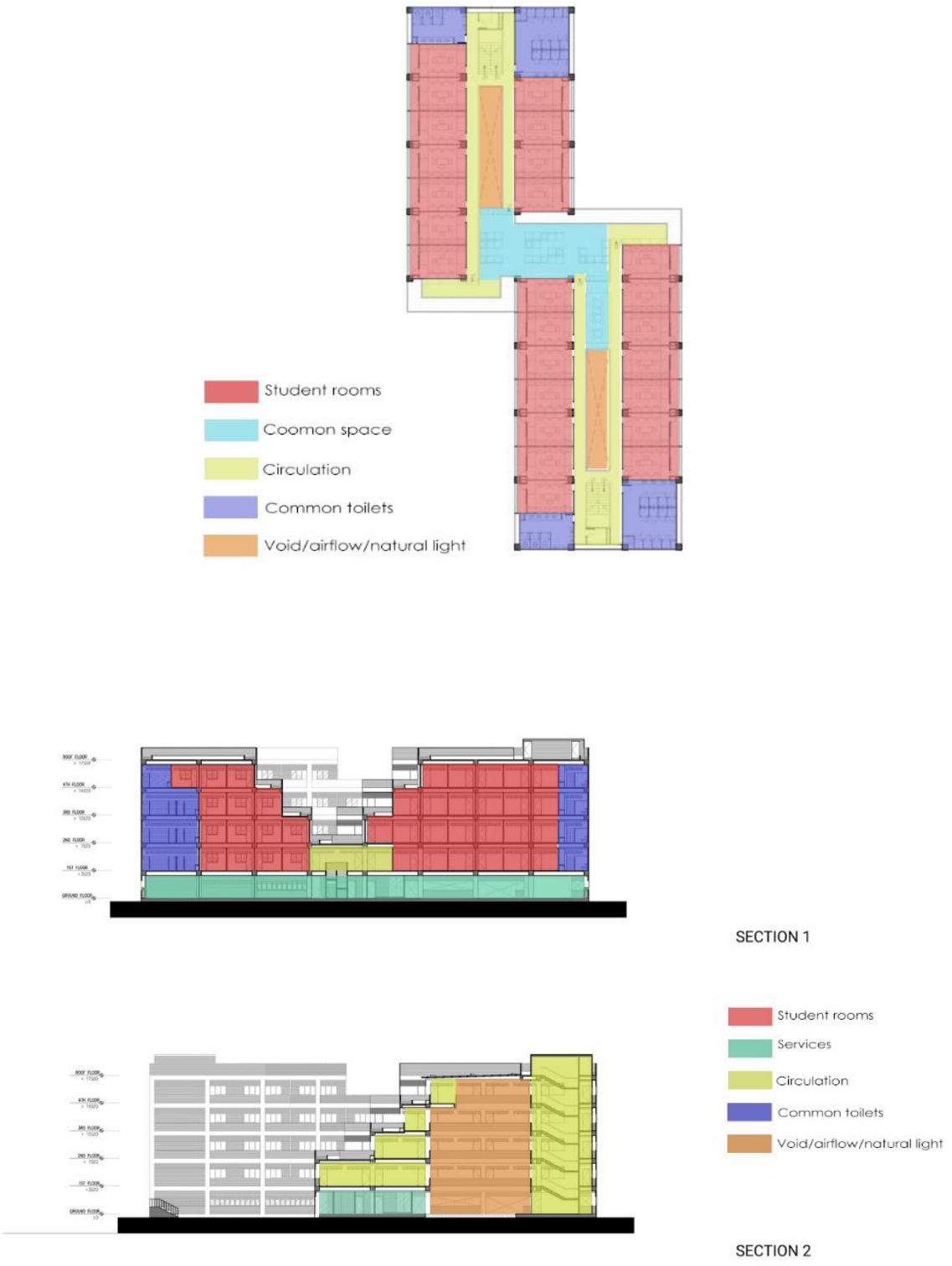


Figure 33. Functional analysis plan (above), sections (below) ***(By author,2024)***

2.4 Room types classification

The table below shows the classification of 7 room types based on the case studies stated above.

Shared bathroom and kitchen	AMN Student Housing / SHAU Indonesia
Bathroom included, shared kitchen	iHouse Dormitory / Studio SUMO
Bathroom and kitchen included	Siriphat Dormitory / IDIN Architects
	Student Dormitory / Nickl & Partner Architekten
	Monash University Student Housing / BVN
	OurDomain Student Housing / OZ Architects
	Tietgen Dormitory / Lundgaard & Tranberg Architects

Table 3. Room types classification

2.4.1 Shared bathroom and kitchen

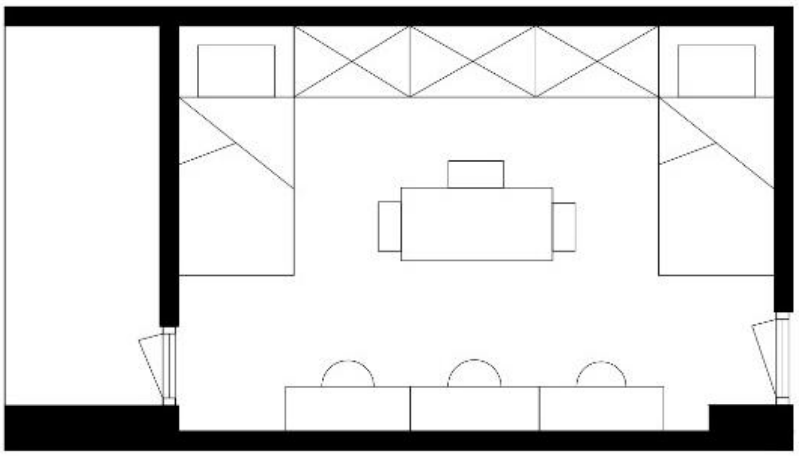


Figure 34. AMN Student Housing / SHAU Indonesia ***(By author,2024)***

2.4.2 Bathroom included, shared kitchen

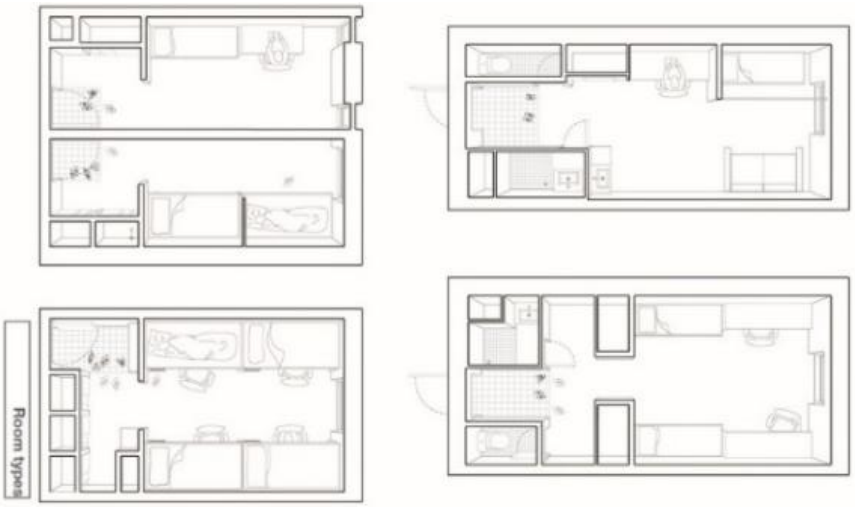
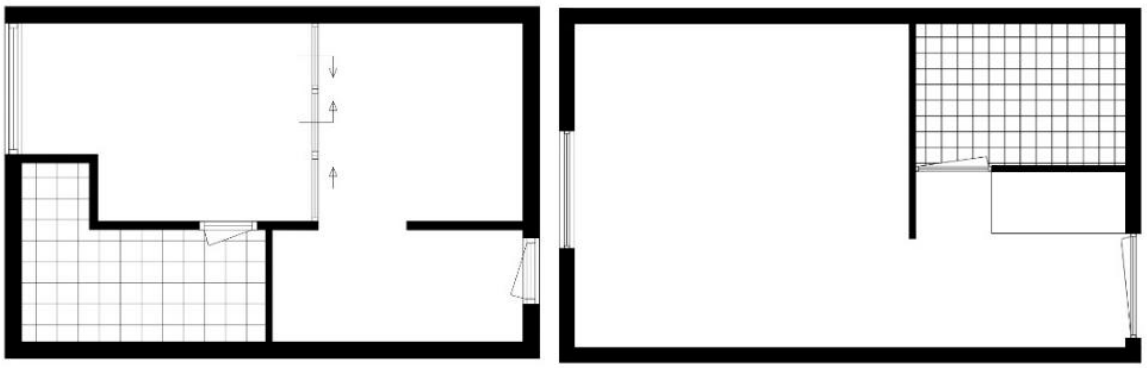


Figure 35. iHouse Dormitory / Studio SUMO ***(Rojas, 2022)***

2.4.3 Bathroom and kitchen included



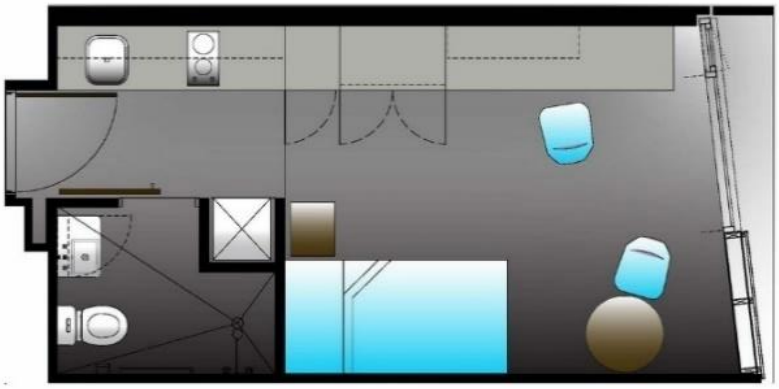


Figure 36. Siriphat Dormitory / IDIN Architects (top left), Student Dormitory / Nickl & Partner Architekten (top right) ***(By author,2024)***, Monash University Student Housing / BVN (bottom) ***(Ross, 2023)***

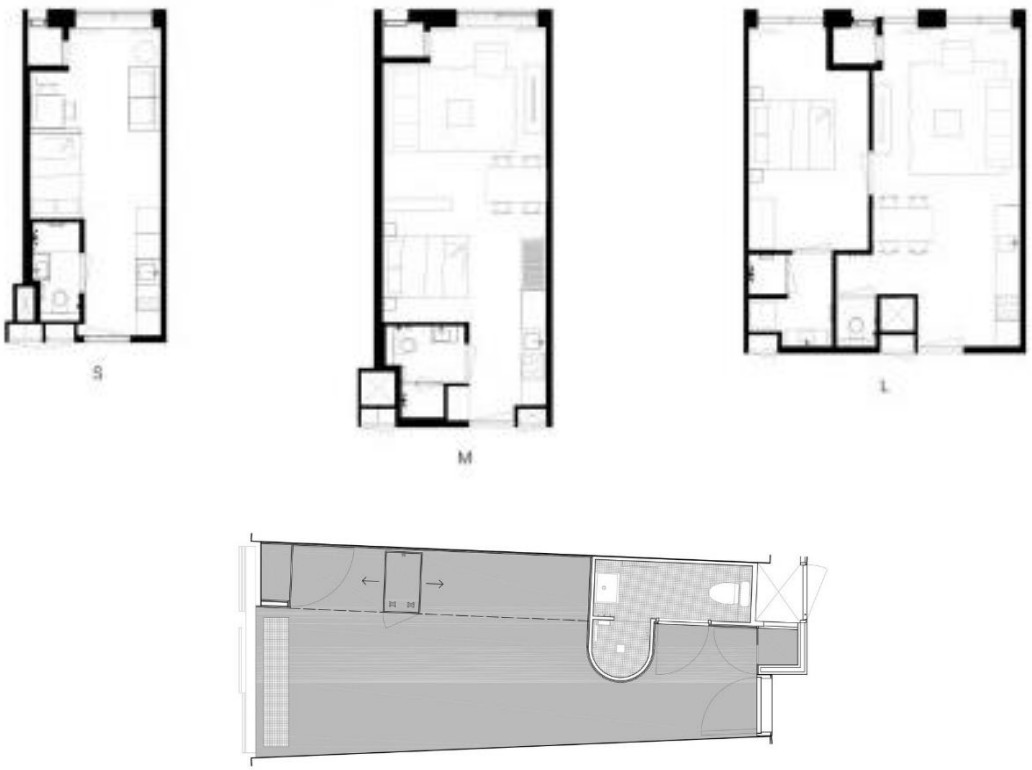


Figure 37. OurDomain Student Housing / OZ Architects (above) ***(Caballero, 2022)***, Tietgen Dormitory / Lundgaard & Tranberg Architects (below) ***(Sánchez, 2023)***

CHAPTER 3

3.1 Site analysis

The site is located in the "Former Aviation Field" within "Lady of Good Counsel" University campus, near "Zogu I Zi". It is a neighborhood that has undergone significant urban development. A former aviation field has been transformed into a diverse zone that includes residential/commercial areas, parks, cultural institutions, and more. The building heights in the neighborhood range from one to twelve stories. The most typical buildings are residential dwellings with 2-3 stories. The southern part of the site confronts an 8-story residential complex of buildings. The site is an empty, level space of around 21,000 m2, encircled by a concrete fence and a small sidewalk. It is bordered by St. Ana Komnena to the west, St. Grigor Gjirokastriti to the south, a parking lot and the university campus to the north, and 2-3 story residential buildings to the east. There are two accesses to the site from the two adjacent roads. The road Ana Komnena connects direcly to Dritan Hoxha Street. Ana Komnena is a two-way street, while Grigor Gjirokastriti is one-way. This site is advantageous in terms of transportation and its connections to the city's most important landmarks. Within 300 meters of the site location is the closest bus stop, which provides convenient student transportation options. Most buses stop at this station, making it simple for students to go to other areas of the city. The location is close to two educational institutions, "University of Good Counsel" and "Shkolla e magjistratures". Furthermore, the short distance to the city center and other services or activities qualifies this property for student housing.

During my visit to the campus, I was introduced to the new site plan that "Lady of Good Counsel" is planning to implement in the near future. Construction has already begun on this project. The new plan includes a street that will pass through the selected site, as well as two additional streets. One street will border the northern part of the site, while the other will run along the eastern part. This site analysis has been conducted based on the new regulatory plan to ensure all aspects are thoroughly evaluated and incorporated into the development process.

Figure 38. Site current situation ***(By author,2024)***

Figure 40. Site perspective views ***(By author,2024)***

Figure 39. St. Ana Komnena (left), Parking lot (right) ***(By author,2024)***

Figure 41. St. Grigor Gjirokastriti (left), Site entrance (right) ***(By author,2024)***

Figure 42. "Lady of Good Counsel" University Campus new plan ***(By author,2024)***

3.1.1 Site plan

Figure 43. Plan update (***By author,2024)***

3.1.2 Number of floors

Figure 44. Number of floors ***(By author,2024)***

3.1.3 Building functions

Figure 45. Building functions ***(By author,2024)***

3.1.4 Circulation

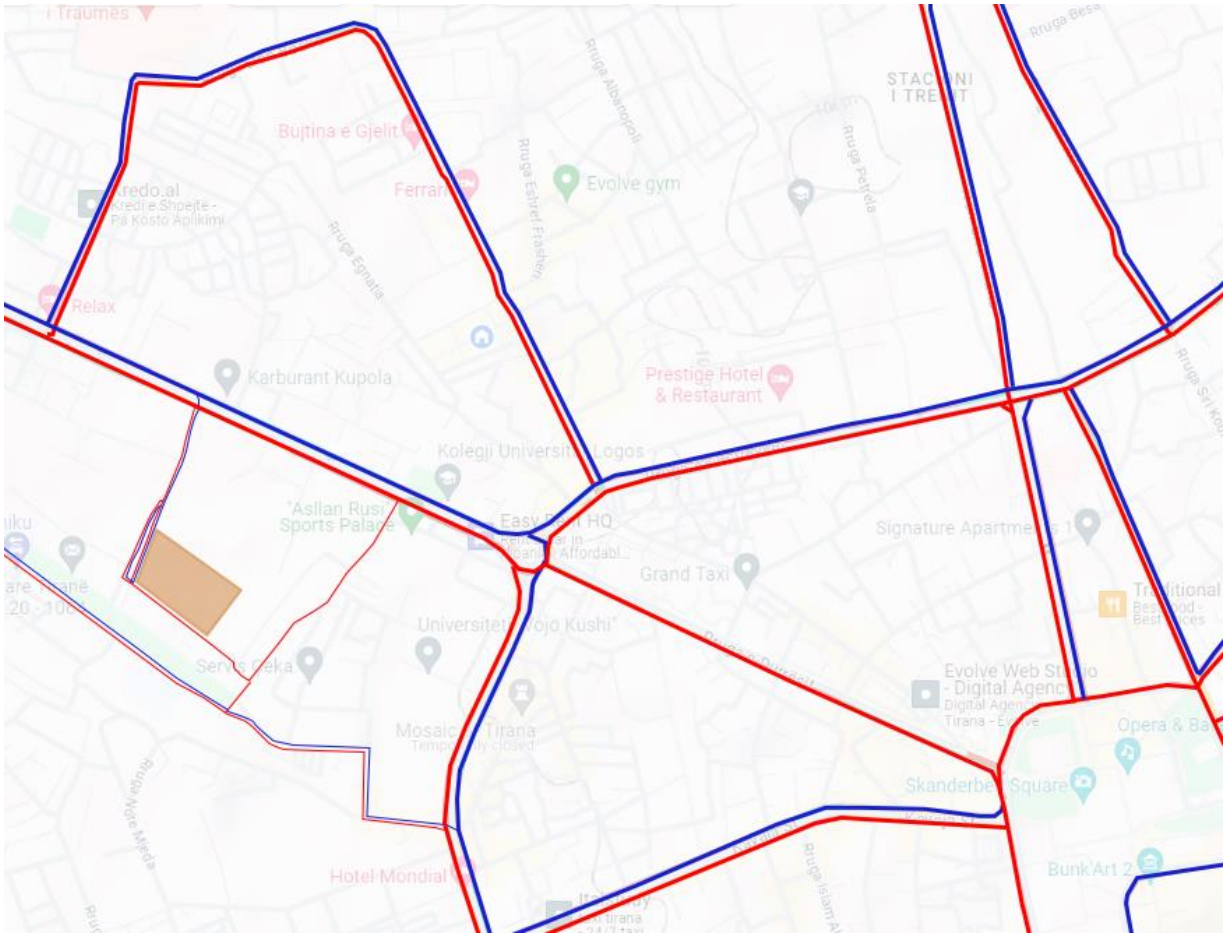


Figure 46. Connection of the site to the main streets ***(By author,2024)***

Figure 47. Circulation ***(By author,2024)***

3.1.5 Shadow Map

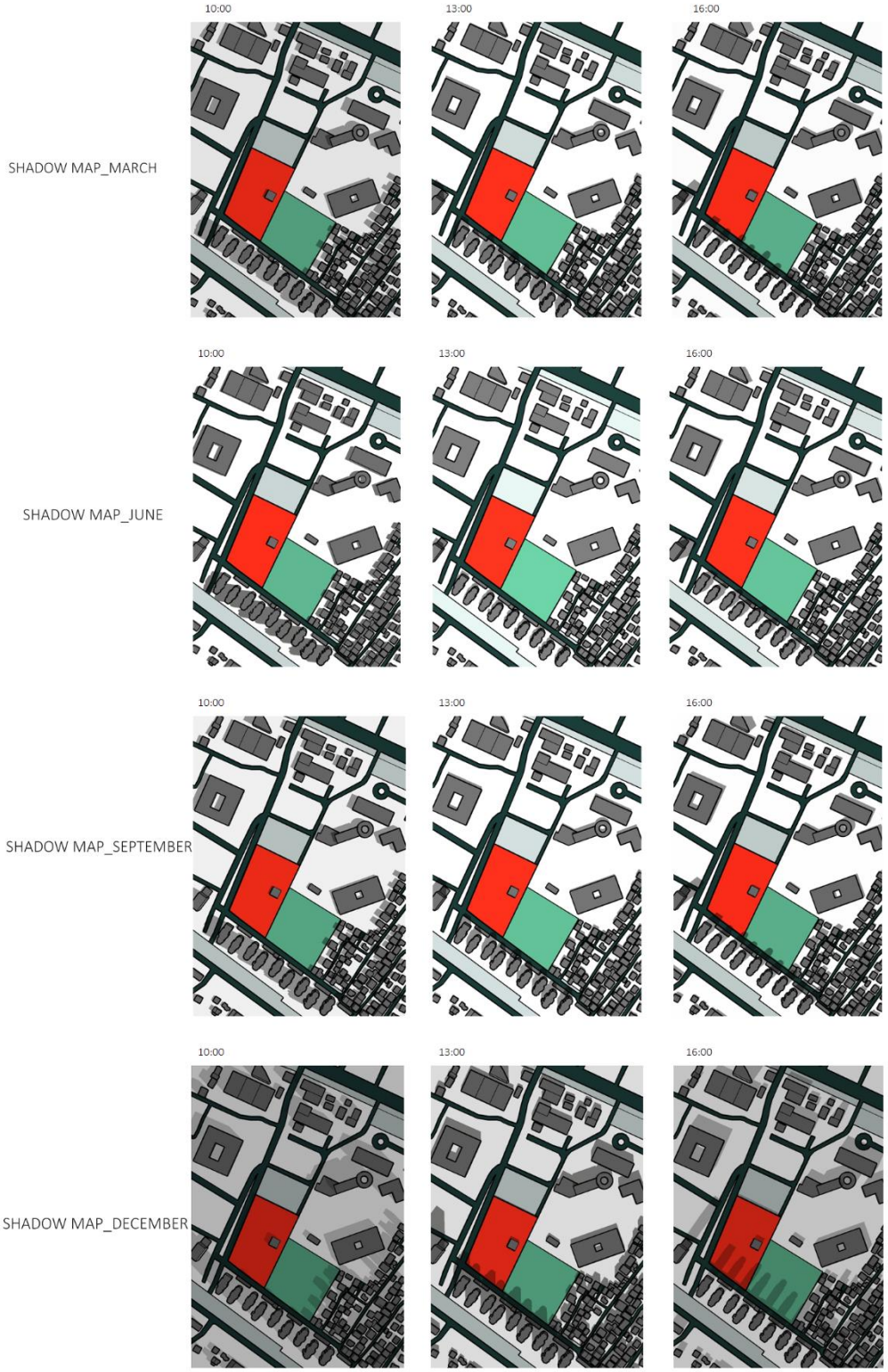


Figure 48. Shadow map ***(By author,2024)***

3.1.6 3D

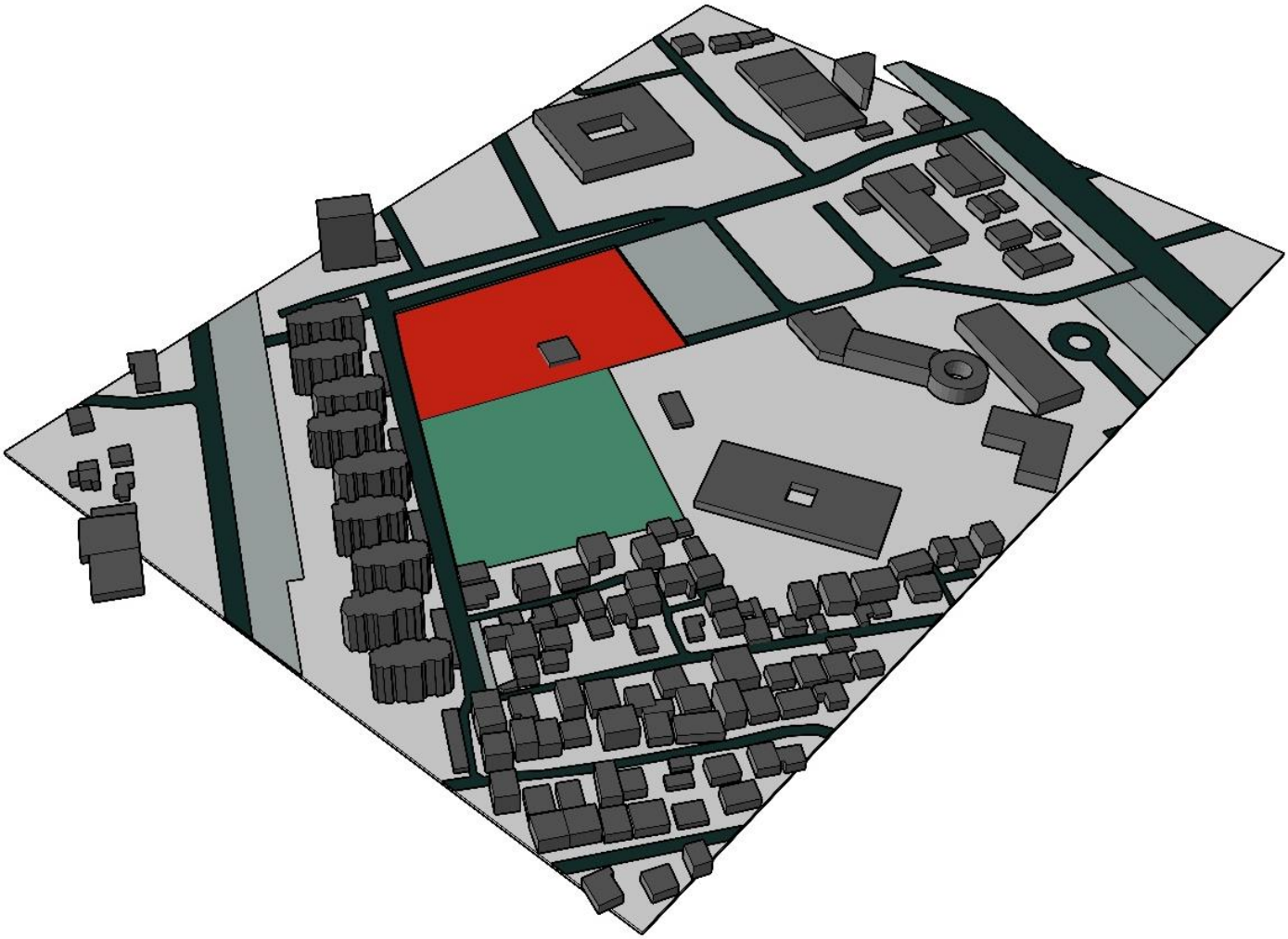


Figure 49. 3D view ***(By author,2024)***

3.2 Questionnaire

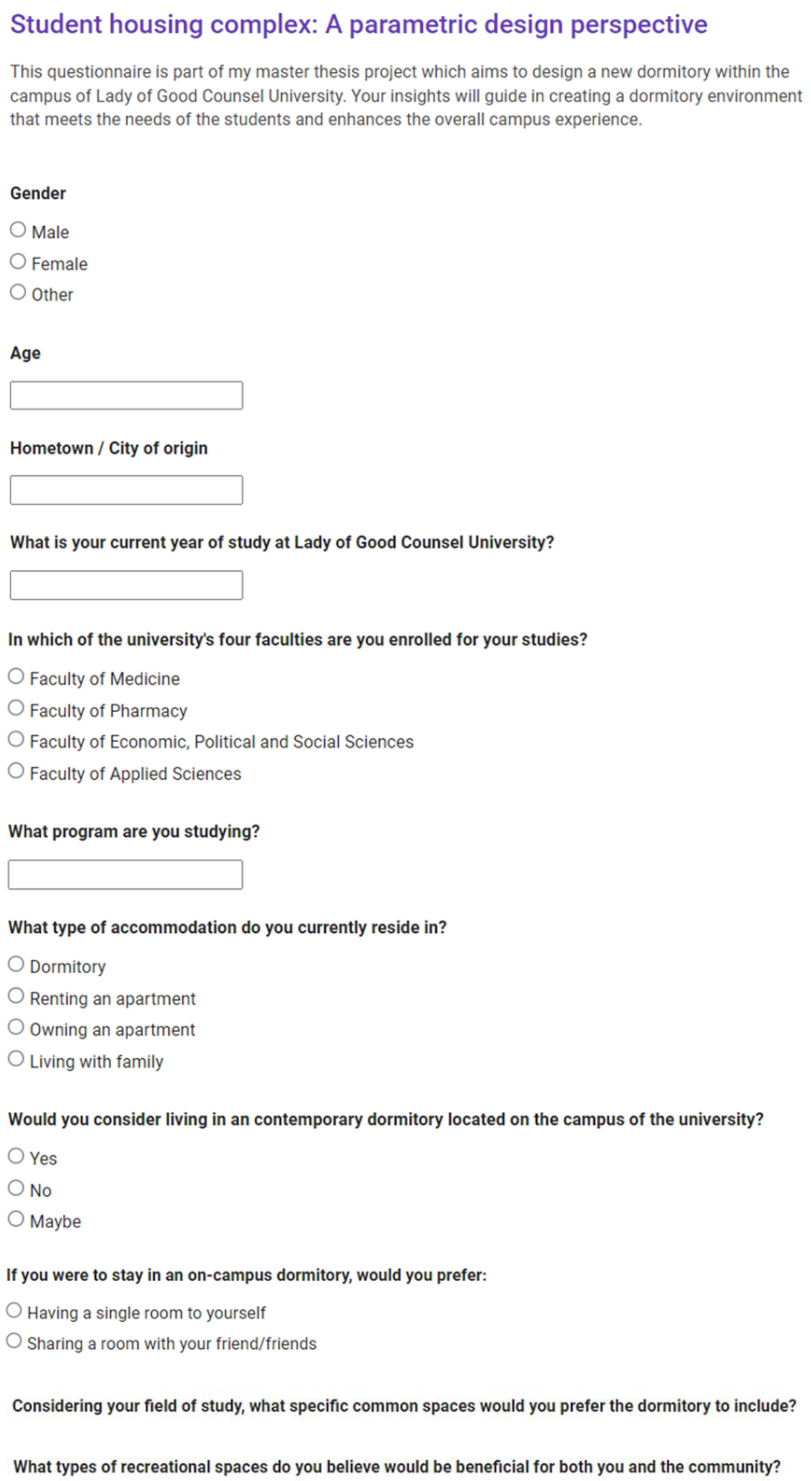
This questionnaire is shared online among students at “Lady of Good Counsel University” Campus, to enable its wide dissemination for convenience. The central objective of this survey is to gain a profound understanding of the student’s preferences towards accommodation but with regards to the dormitory type living. It starts with some demographic questions such as gender, age, town, year of study and faculty they belong to as well as their course program. These questions are important because they help us have a complete picture about each participant, so that we can analyze the accommodation preferences according to different demographic groups.

The questionnaire moves on through several targeted questions regarding students’ current residential arrangements. These questions attempt to bring into perspective where students live and whether they reside on-campus, off-campus, with family, or in private rentals Their knowledge about their current housing situations brings much light into their preferences and possible considerations for living in a dormitory.

The following questions focus on students’ thoughts and preferences about living in a dormitory. Students’ choices for room types like singles, doubles or shared rooms can be discovered by these questions. Apart from the individual rooms, the questionnaire seeks to understand students’ preference for common spaces. Understanding these preferences will help in designing dormitory spaces that foster a sense of community and offer services that meet the different needs of the students.

Additionally, the survey asks about recreational facilities and other activities offered within the student housing complex. Questions in this section seek to identify the types of recreational facilities students would like to have access to, such as gyms, game rooms, or outdoor spaces. It also explores their interest in organized social events and activities that promote community engagement and enhance the overall dormitory experience.

The responses gave us a full picture on students' needs and likes when it comes to housing. Valuable information guided decisions on dormitory design, amenities, and programming that lead to an improvement in the living conditions and satisfaction of the residential experience of students at "Lady of Good Counsel" University Campus.



Student housing complex: A parametric design perspective

This questionnaire is part of my master thesis project which aims to design a new dormitory within the campus of Lady of Good Counsel University. Your insights will guide in creating a dormitory environment that meets the needs of the students and enhances the overall campus experience.

Gender

- ○ Male
- ○ Female
- ○ Other

Age

Hometown / City of origin

What is your current year of study at Lady of Good Counsel University?

In which of the university's four faculties are you enrolled for your studies?

- ○ Faculty of Medicine
- ○ Faculty of Pharmacy
- ○ Faculty of Economic, Political and Social Sciences
- ○ Faculty of Applied Sciences

What program are you studying?

What type of accommodation do you currently reside in?

- ○ Dormitory
- ○ Renting an apartment
- ○ Owning an apartment
- ○ Living with family

Would you consider living in an contemporary dormitory located on the campus of the university?

- ○ Yes
- ○ No
- ○ Maybe

If you were to stay in an on-campus dormitory, would you prefer:

- ○ Having a single room to yourself
- ○ Sharing a room with your friend/friends

Considering your field of study, what specific common spaces would you prefer the dormitory to include?

What types of recreational spaces do you believe would be beneficial for both you and the community?

Figure 50. Questionnaire ***(By author,2024)***

3.2.1 Questionnaire responses interpretation

The total responses are 57, out of which there is a predominance of female students, accounting for almost 90%, as opposed to male students who form only about 10% of the total *(Figure 51).* This disparity I would mainly attribute to the fact that the female students were more willing to respond to such a questionnaire, rather than the actual gender ratio of the students at the university. During the visit to the campus, I observed a substantial number of male students, which would imply that the small number of male respondents does not reflect their actual proportion at the university.

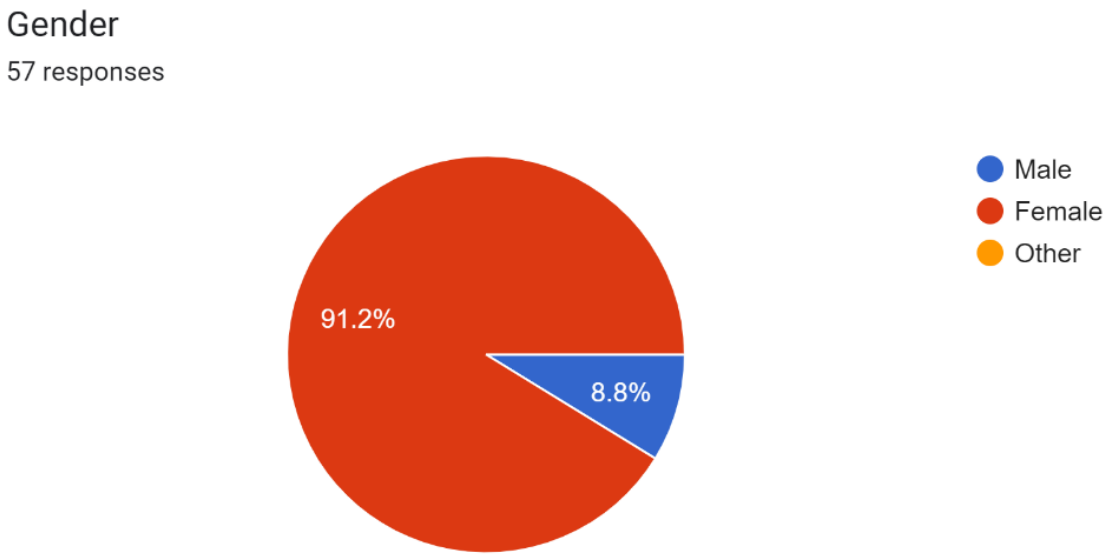


Figure 51. Gender distribution graph ***(By author, 2024)***

The hometown question is asked to identify if most students are from Tirana city, other Albanian cities, or from a foreign country. The findings were that about 32% of the students are from Tirana, while about 4% are from other countries. The other 64% of the students' hail from other cities in Albania. Such a trend would create high demand for accommodation in Tirana, as the highest percentage of students either stay in Tirana or are likely to look for housing in Tirana due to studies.

Based on the responses obtained, it results that the majority of the students are from the Faculty of Medicine, which represented approximately 88% of the respondents. The Faculty of Applied Sciences accounts for about 2% of the students, while about 10% are from the Faculty of Pharmacy. There were no respondents from the Faculty of Economic, Political, and Social Sciences *(Figure 52).* Although the specific number of students in each faculty was not provided by the University, the data from the responses in the survey, as presented in the graph below, gives a valuable indication.

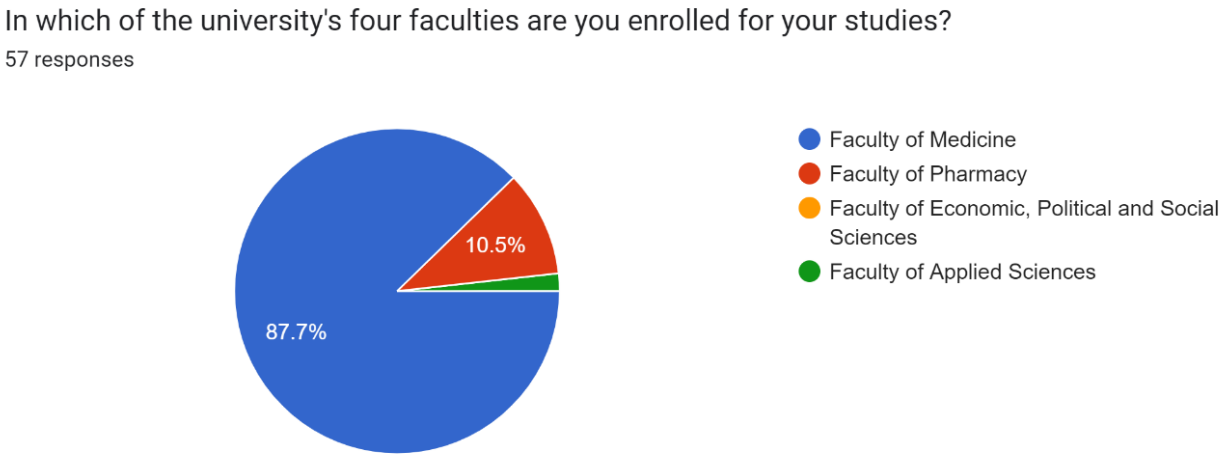


Figure 52. Student distribution across faculties ***(By author,2024)***

This information is crucial for optimizing the distribution of functions within common spaces. With the high concentration of students from the Faculty of Medicine, undoubtedly there will be high demand for more study rooms for intensive study schedules and needs for group work. On the other side, there would be fewer numbers of students from the Faculty of Applied Sciences, who may require special labs and technical workspaces. For instance, architecture students, usually benefit from open spaces that foster creativity and collaboration. It is, therefore, important to have the common spaces tailored according to the various needs of the students, which would mean that each group enjoys the facilities and spaces that best enable them to pursue their academic and other activities.

Less than half of the students, specifically 44%, live with their families. The remaining majority live independently, either in their own apartments (12%) or by renting an apartment (44%). This indicates that a significant number of students are renting accommodation rather than owning it. Furthermore, approximately 74% of these students have expressed a willingness to consider living in a dormitory. This data underscores the potential demand for dormitory accommodations, highlighting an opportunity to address the housing needs of a substantial portion of the student population. By providing affordable and convenient dormitory options, the university could better support students who currently face the challenges of renting in the competitive housing market.

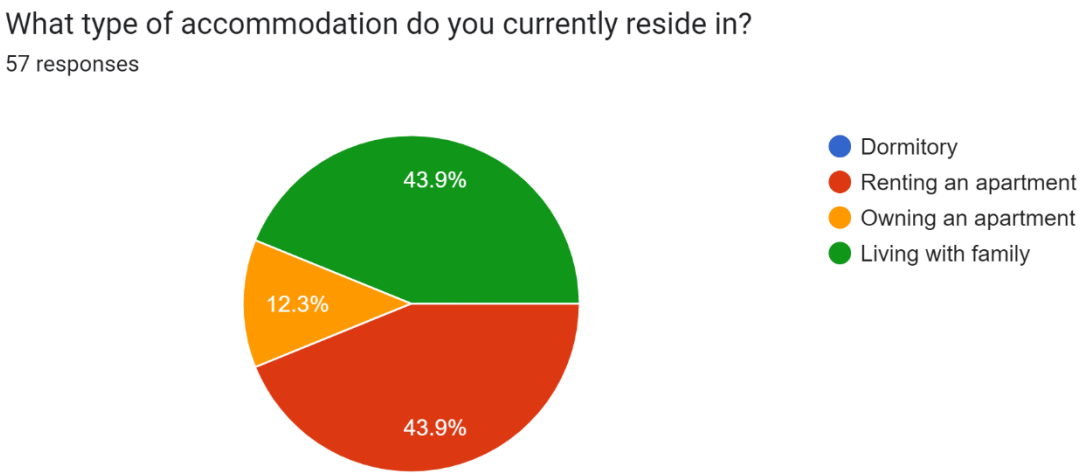


Figure 53. Students' current accommodation ***(By author,2024)***

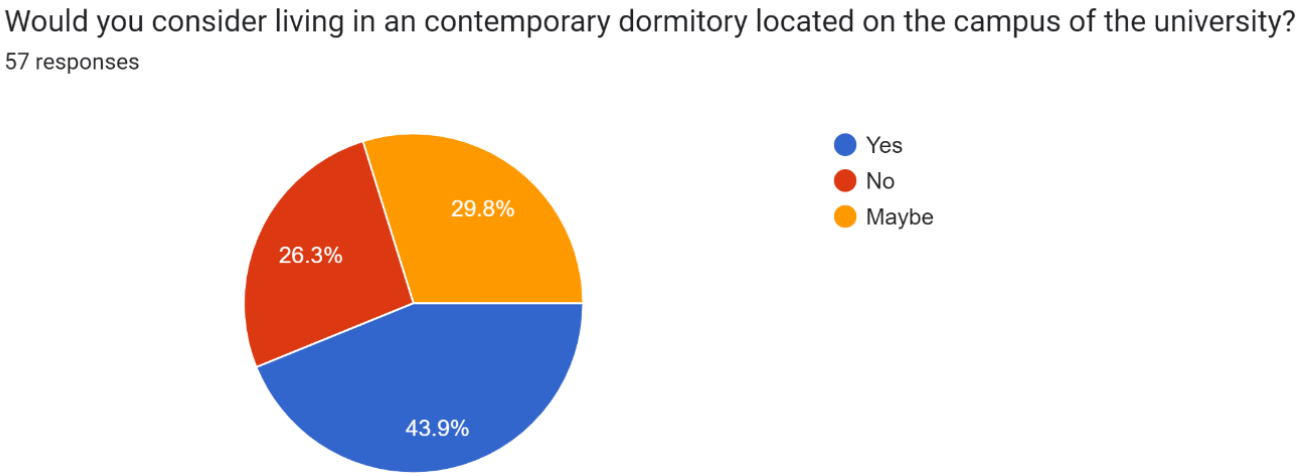


Figure 54. Consideration of living in a dormitory ***(By author,2024)***

When asked about preferences with regard to living units in a dormitory, most students expressed interest in living in a single room approximately 70% rather than sharing one with one or more friends 30%. This factor is very important to the privacy and personal space of the students. The most preferred common areas were study rooms and libraries, which indicates the need for quiet, dedicated areas for study. The most useful recreational spaces included a canteen, café, gymnasium, table games area, and cinema rooms. These responses mean that students value a well-rounded living environment that supports not only their academic but also recreational needs and promotes a balanced and fulfilling student life.

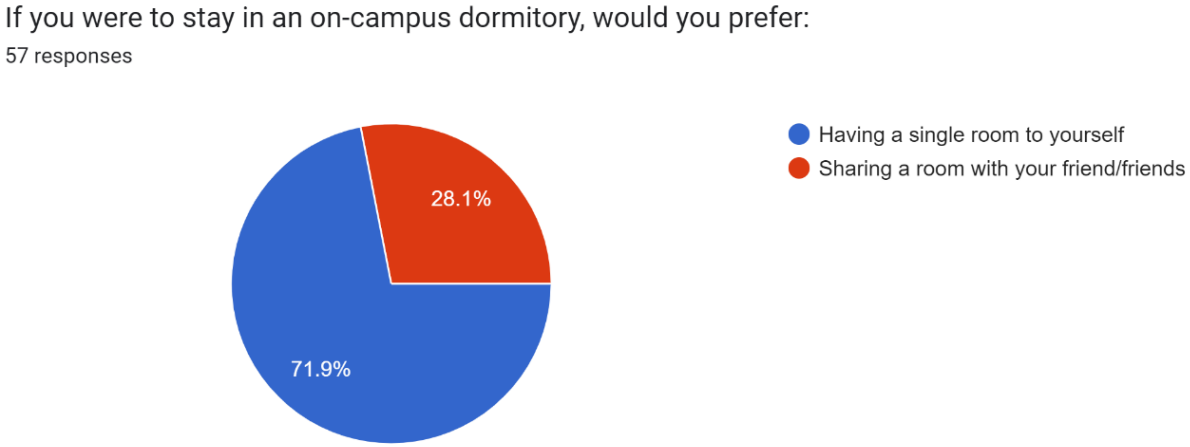


Figure 55. Dorm unit preferences ***(By author,2024)***

CHAPTER 4

DORMITORY DESIGN PROJECT

4.1 Project main concept

The new master plan for the "Lady of Good Counsel" University involves a wide street that intersects the chosen site, dividing it into two parts. This division inspired my architectural concept of creating two separate volumes, one on each side of the street—one designated for boys and the other for girls. A "bridge" connects them on the upper floors, thereby linking the two separate structures. This bridge represents not only a physical connection but also a symbolic one, offering interaction between the students from both buildings and enhancing community among them. The bridge itself is one long, separate volume containing common spaces, including the library, studios, and gathering areas such as spots for table games. This makes the bridge a lively hub where students can meet, study, and socialize.

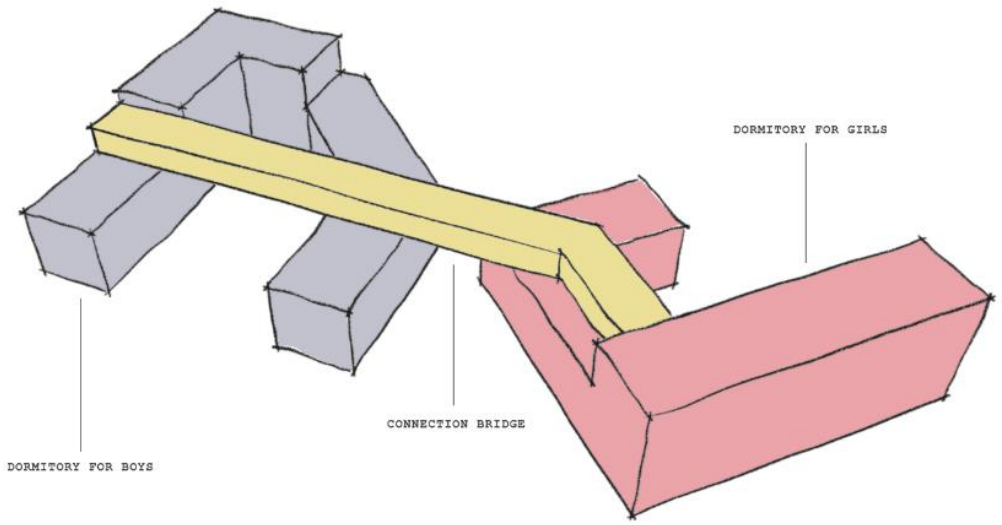


Figure 56. Main concept ***(By author,2024)***

Each building has several public entrances from where the bridge is accessed, as well as more private ones for the residential spaces. That way, the public spaces will be easy to access, while the living spaces stay safe and private. Within each building, there are common rooms accessible only by residents, such as study rooms. There are double accesses to the rooms from two corridors, offering great flexibility and access to the students. This setup emphasizes the importance of having dedicated spaces for academic work that are easily reachable from the living units.

Figure 57. Spatial organization ***(By author,2024)***

The volumes are oriented similarly to the existing university buildings, set at an approximate 45-degree angle towards the main street, Dritan Hoxha. Besides harmonizing with the campus, this alignment also subdivides the unbuilt area into public, semi-public, semi-private, and private courtyards. There is an intended function for each courtyard: the public and semi-public courtyards are open and inviting for visitors and the community, the semi-private courtyards give students and faculty a place to engage with each other informally, and the private courtyards offer a quiet retreat for the residents. There are multiple entrances allowing access from various points, and a sunken plaza aligns with the nearby university buildings. The southeast corner features designated parking. Along St. Ana Komnena, a wide sidewalk is available. The "inner courtyards" serve as spaces for sports activities and gatherings.

Figure 58. Volumes orientation ***(By author,2024)***

Generally, this design aims to create an integrated and interesting campus. The approach of this plan to public and private space, incorporating the buildings oriented to make maximum use of the space, facilitates community interaction and individual privacy. The plan does not only meet the practical needs for student housing but also enriches the social and academic experience and makes the university a vibrant place to live and learn.

4.2 Living units

The European standards in designing dormitory units dictate that a single dorm unit, with a bathroom but sharing a kitchen, should be between an area of 10.5 and 11 square meters. The Albanian dormitories, however, do not provide single rooms; instead, they offer double rooms and dorms for more than two occupants. These rooms feature a private bathroom, but the kitchen facilities are shared among residents. According to the Baukuh masterplan, the minimum area for a double room is 15 square meters, with the most common size being 20 square meters. During my visit to campus, the administration expressed their preference for the approach the Fole student residence applied in the design of its dormitory units. The dormitory units in Fole residence are way above the standard because it prioritizes space and comfort, making the students who live in it feel like they are staying in their homes. Inspired by this feedback and aiming to provide a similar experience, I have used the same approach in designing the dormitory units in my project.

Unlike Fole residence, I have proposed proportional units for each typology of my design. Not only does this add up to the practicality, but also implements the basic features of modular architecture. Although smaller in square meters, the functional organization of the apartments creates a comfortable living environment. With the use of standard units, the model turns out to be highly flexible and effective, hence fast and easy to construct. This kind of approach brings harmony to aesthetic and functional coherence over the whole dormitory.

The main unit represents the single room, 3 meters by 6 meters, with a total area of 18 square meters. This unit includes a private bathroom, a private kitchen, a standard bed, a wardrobe, and a desk. *(Figure 59)*

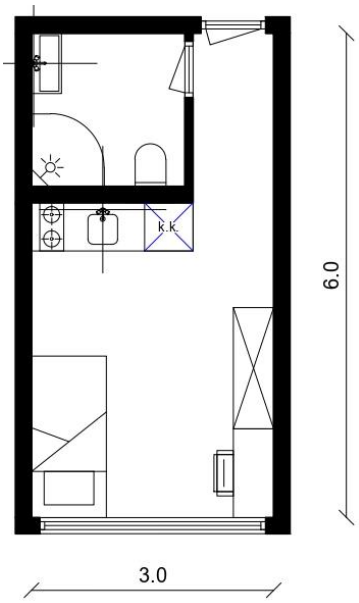


Figure 59. Single studio ***(By author,2024)***

The second unit is double the size of the single unit, measuring 6.3 meters by 6 meters, with a total area of 37,8 square meters. This unit is as a one-bedroom apartment and includes a private bathroom, a private kitchen, a living room, and a bedroom with two single beds, two wardrobes, and two study desks. *(Figure 61)*

The same unit, with identical dimensions and area, can also be configured as a large studio apartment to meet the different preferences. In this configuration, the unit consists of a main space known as the "big studio room," which can accommodate two or three beds, two or three wardrobes, two or three study desks, along with a private kitchen and a private bathroom.

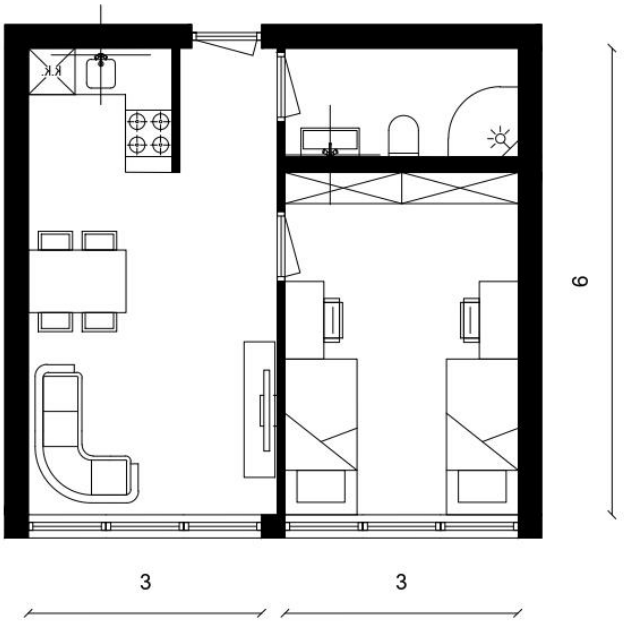


Figure 61. One-bedroom apartment ***(By author,2024)***

The last unit is a two-bedroom apartment, 9.6 meters by 6 meters, with a total area of 57,6 square meters, equivalent to three single units. This "triple unit" provides two bedrooms, each with one or two beds, wardrobes, and study desks. It also has a living room, a private kitchen, and a private bathroom. *(Figure 60)*

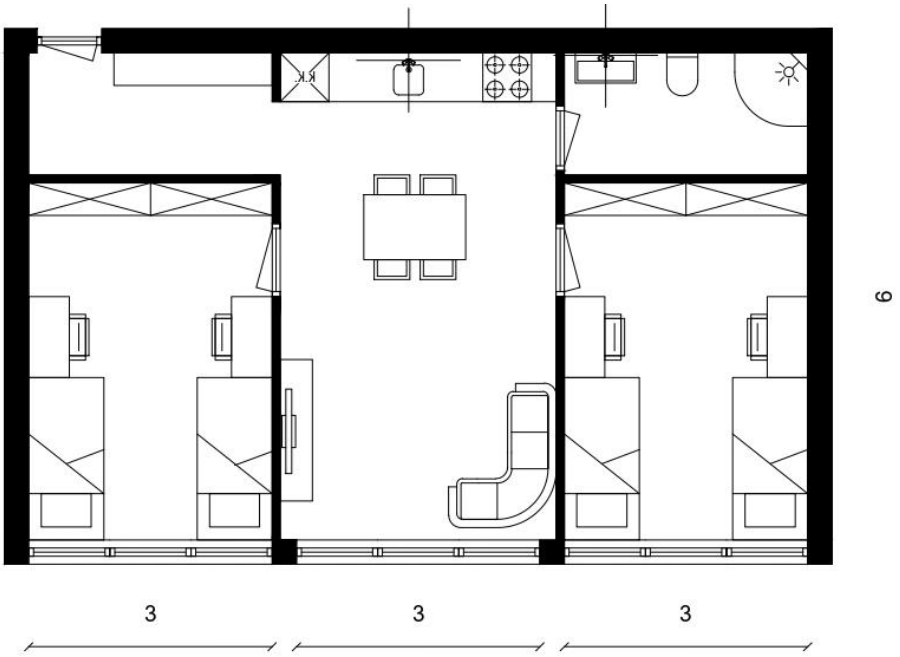


Figure 60. Two-bedroom apartment ***(By author,2024)***

4.3 Parametric façade

There are countless ways to design a parametric facade. In this project, the parametric facade is specifically intended to emphasize the "cell" of the overall volume. The cell, representing the main unit, becomes more readable by randomly extruding its frame from the facade. The extruded part can be used as a balcony or as shading element. As people pass by the dormitory, they can easily understand the size and shape of each individual unit. The aim is to allow the building to communicate its internal structure through its exterior appearance.

To design this kind of facade, we need three main software programs: Revit, Dynamo, and Python. First, we start by constructing the volumes in Revit. After building all the walls, slabs, and ceilings, we select a storefront architectural wall to create the window openings. Before proceeding with the window placement, we need to create a new family using the Metric Curtain Wall Panel template. After customizing the panel to meet our specific needs, we load it into the project. We then place the storefront windows using our custom panel.

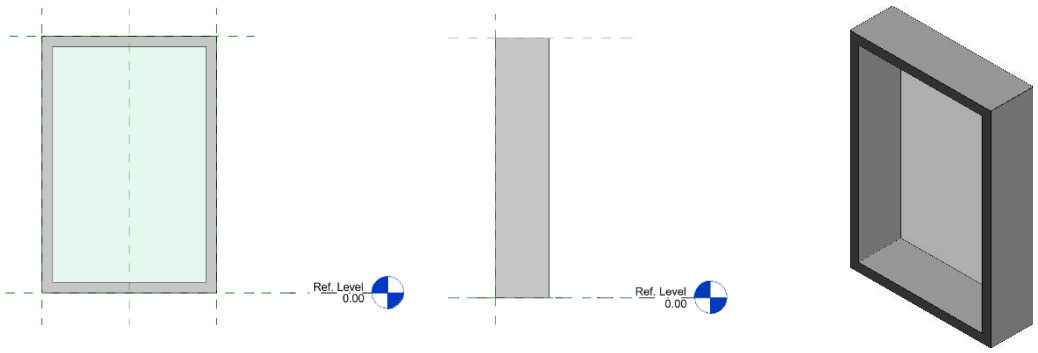


Figure 62. Panel front view (left), side view (center), 3D (right) ***(By author,2024)***

Once this process is complete, it’s time to move on to Dynamo. Dynamo allows us to script and automate tasks in Revit, enabling more complex and dynamic designs for our facade. With Dynamo, we can manipulate the panels further, adding parametric variations and ensuring that the facade achieves the desired visual and functional impact.

The initial step involves creating a "family type" slider and selecting the desired family type.

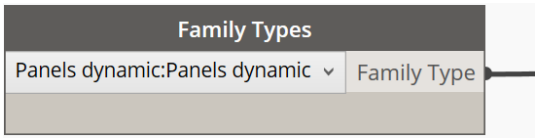


Figure 63. Family type

This slider is then linked to a "family by family type" slider.

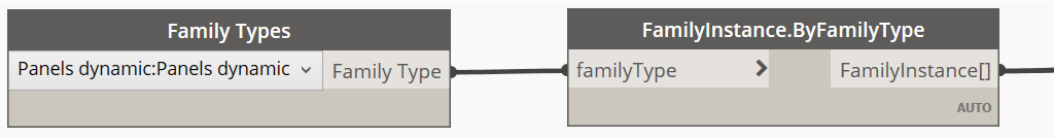


Figure 64. Family by Family type

Once Dynamo identifies the number of panels, the next requirement is to obtain the parameters of these panels. This is achieved using the "Get parameters by name" slider, where the parameter, named H in this case, is specified.

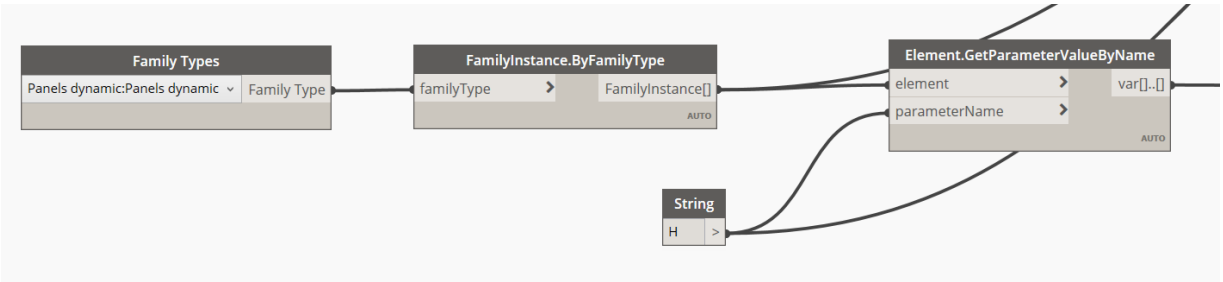


Figure 65. Get parameters by name

After obtaining the parameters for each panel, the next step is to randomize them. Before initiating the randomization process, another "Get parameters by name" slider is utilized to change the name of the element. These two "Get parameters by name"

sliders are connected through a Python script and a shuffle list, facilitating the randomization process effectively.

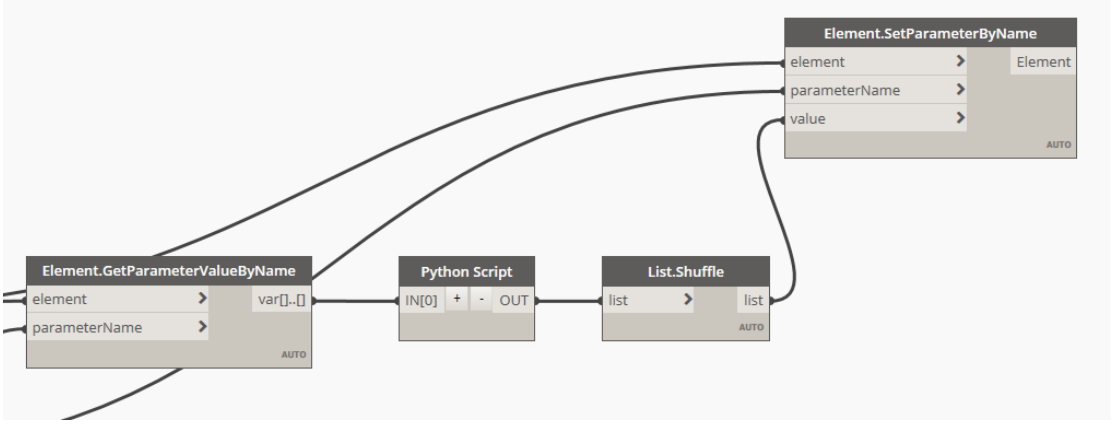


Figure 66. Connection to python script

The Python code controls, the average value of the distribution and the standard deviation parameter.

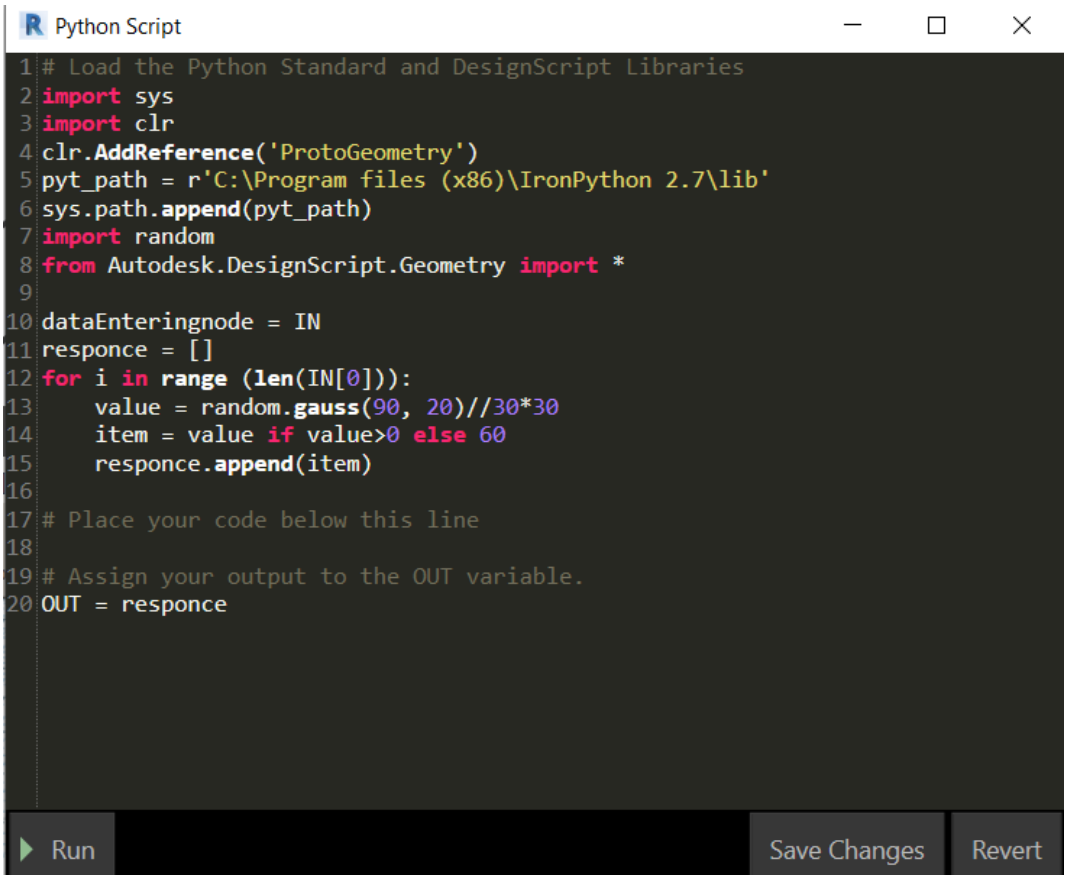


Figure 67. Python script

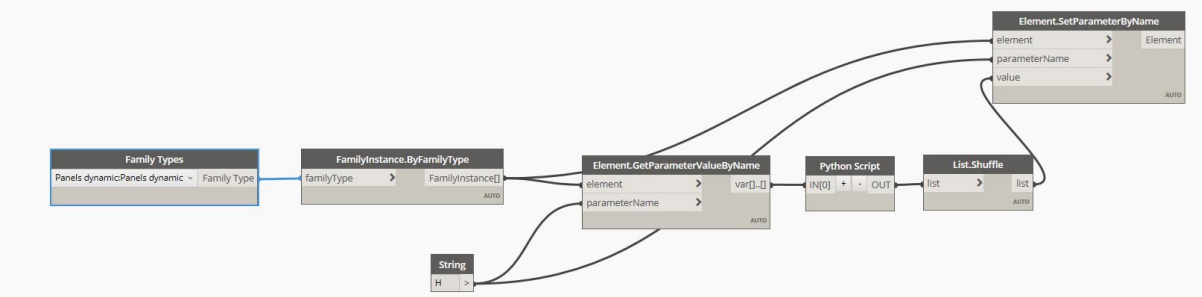


Figure 68. Dynamo script

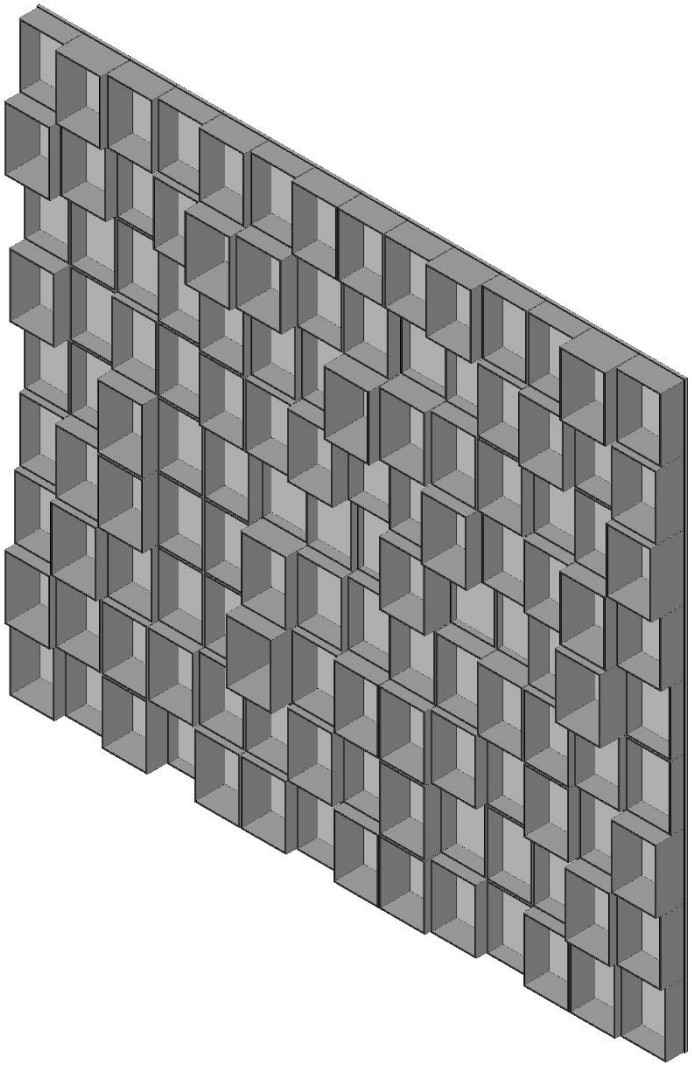


Figure 69. Result

4.4 Drawings

4.4.1 Site plan

The 6-storey student residence covers a footprint area of 4850m² with a capacity of housing approximately 450 students. Its placement and landscape were designed with reference to the surrounding buildings and streets. Multiple entrances provide access from different points, with a sunken plaza created in alignment with nearby university buildings. The southeast corner is designated for parking. A wide sidewalk is provided along St. Ana Komnena. The “inner courtyards” are used for sport activities and as gathering spaces.

Figure 70. Site plan

4.4.2 Ground floor

On the ground floor, there are two types of entrances: those leading to the residential areas and others, more public, providing direct access to the bridge. The B building (Boys) on the ground floor houses a canteen, café, a small gym for residents, a coworking space, laundry facilities, two lobbies, and offices. On the ground floor of the G building (Girls), there is a large public gym, a multifunctional hall, a computer lab, a lobby, a health center, and laundry facilities.

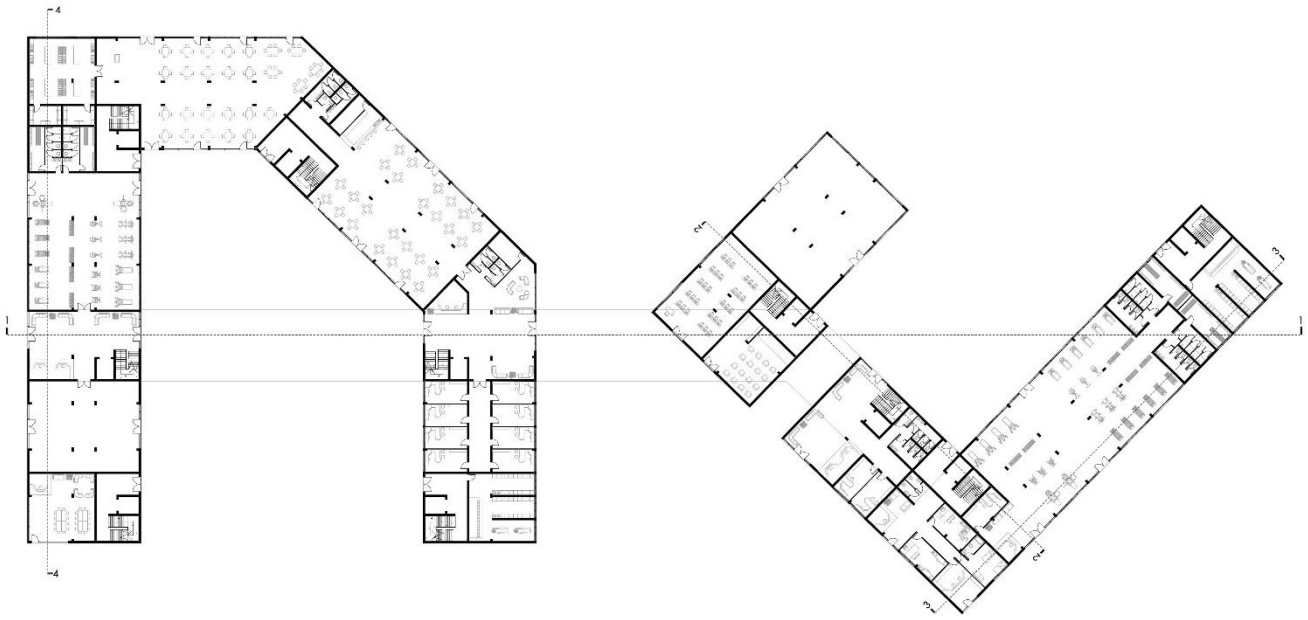


Figure 71. Ground floor

4.4.3 1st , 2nd , 3rd floors

The B building features 34 single rooms, 9 one-bedroom apartments, and 3 two-bedroom apartments, while the G building has 21 single rooms, 8 one-bedroom apartments, and 4 two-bedroom apartments. The study rooms, accessible from both sides of the corridor directly from the residential units, serve as meeting points for students in each residence.

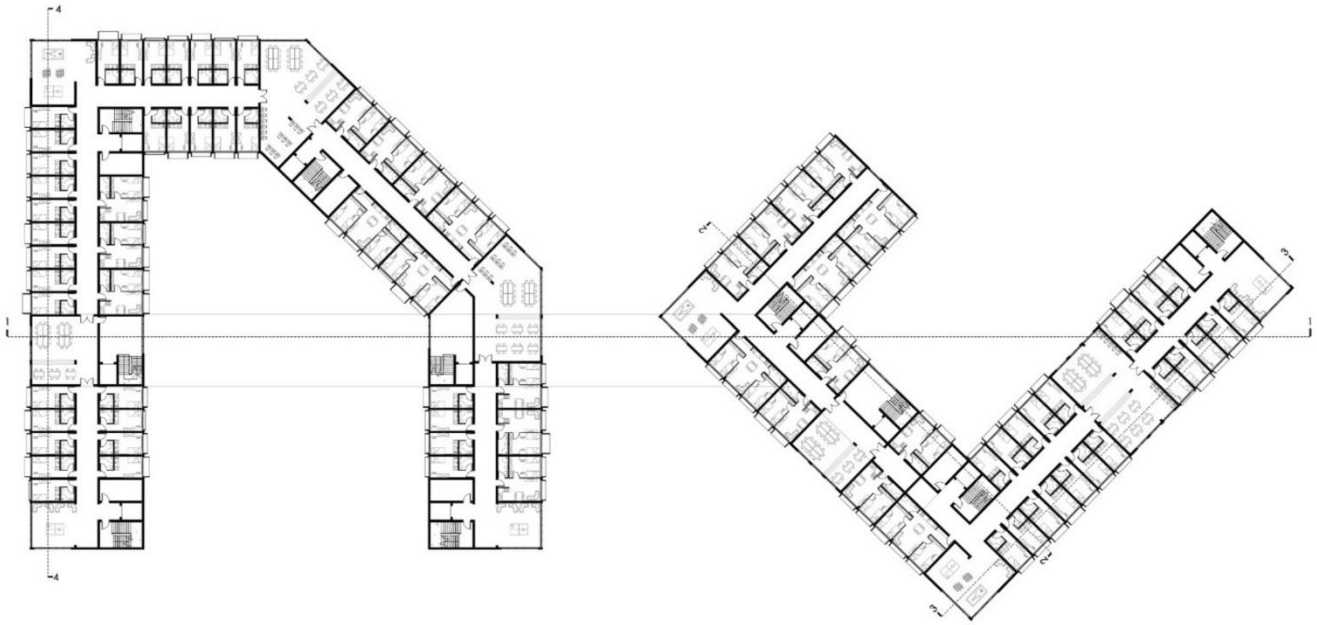


Figure 72. First, Second, Third floor

4.4.4 4th floor

On the floor where the two buildings are connected, there is an open-to-public library divided into three sections: one for reading or studying, another with computers, and a studio for architects and others. From the studio, there is access to a hall with table games. Offices are located in the western corner.

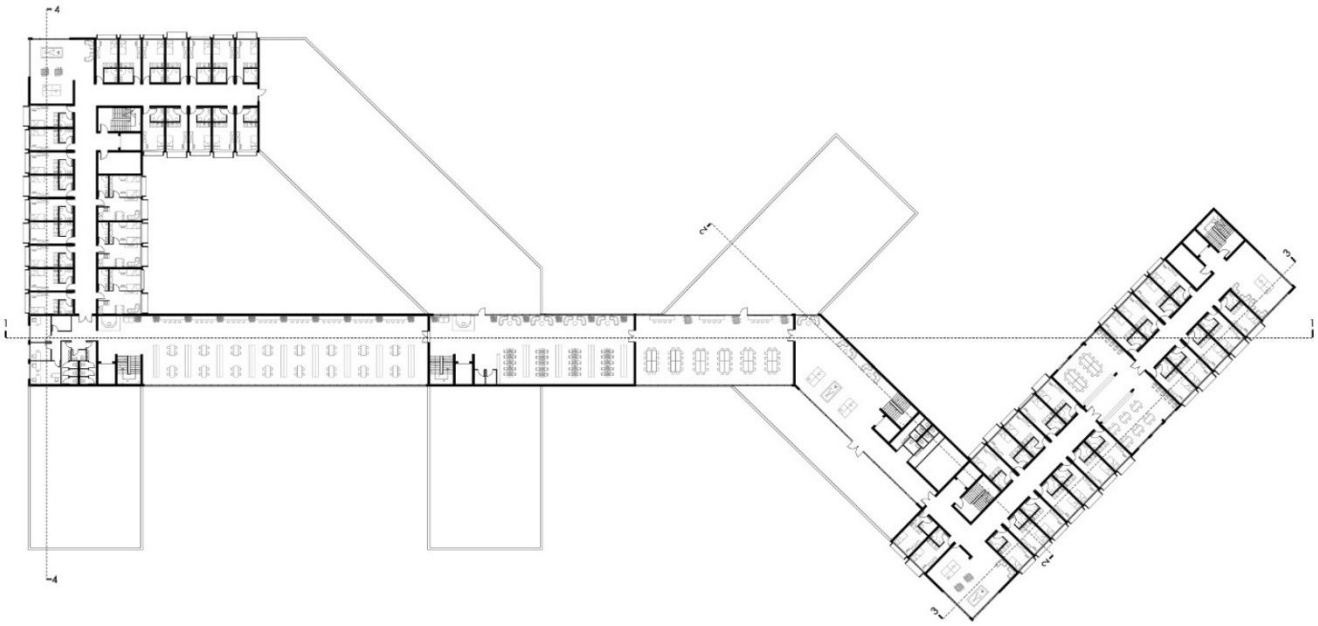


Figure 73. Fourth floor

4.4.5 5th floor

Continuing parts of the volumes on the fifth floor creates dynamism in the overall composition.

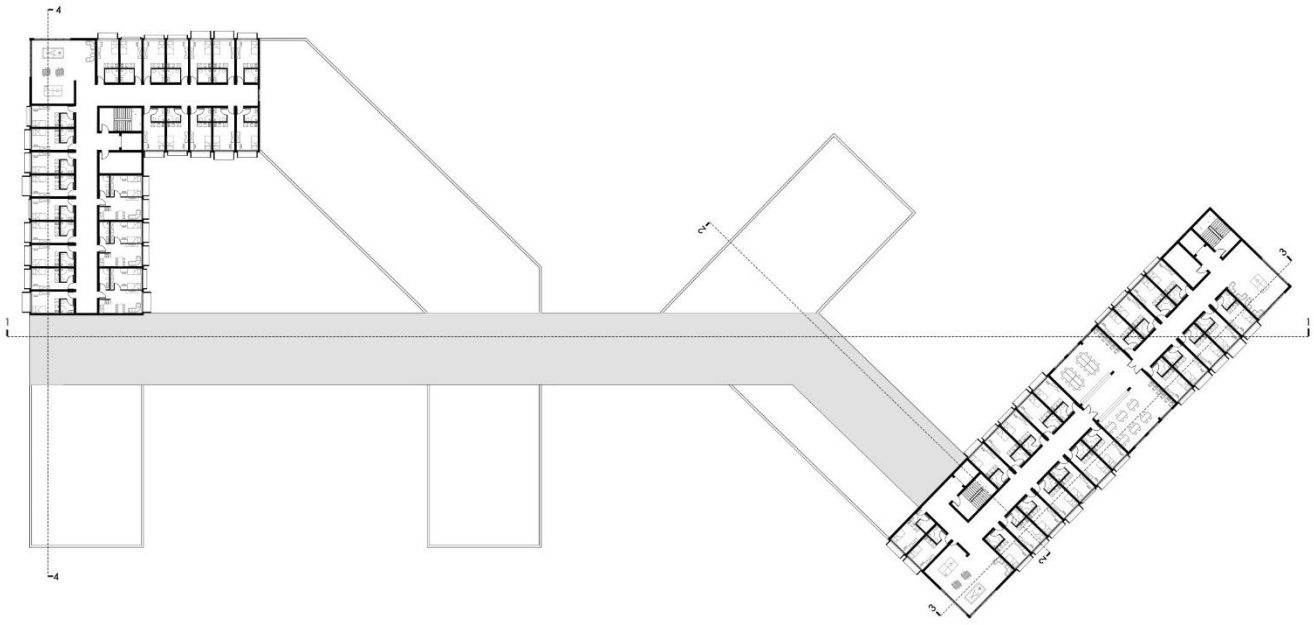


Figure 74. Fifth floor

4.4.6 Sections

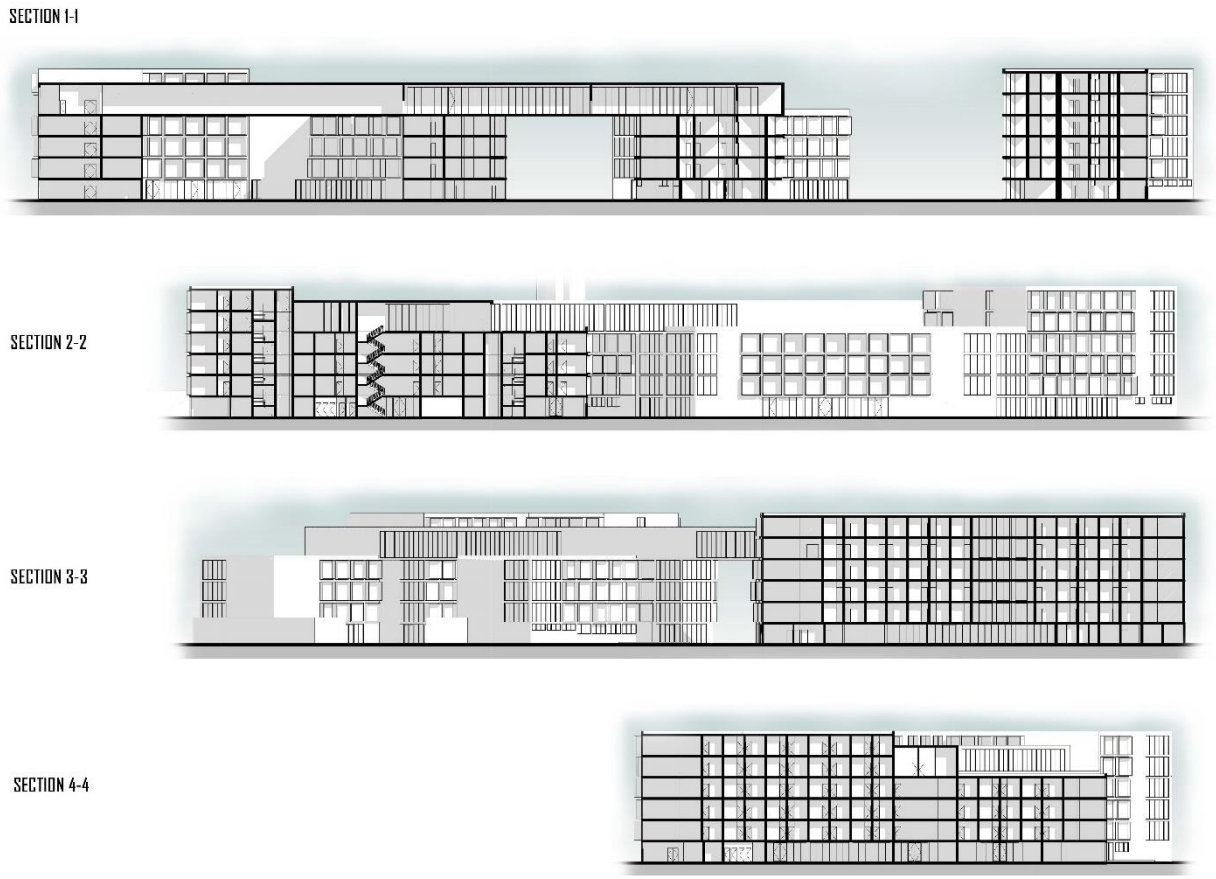


Figure 75. Sections

4.4.7 Elevations

In the elevation, the parametric facade features green window frames that randomly protrude, creating dynamism, defining the living units, and casting shadows. The public entrances that lead to the bridge and the bridge itself are highlighted with different color.

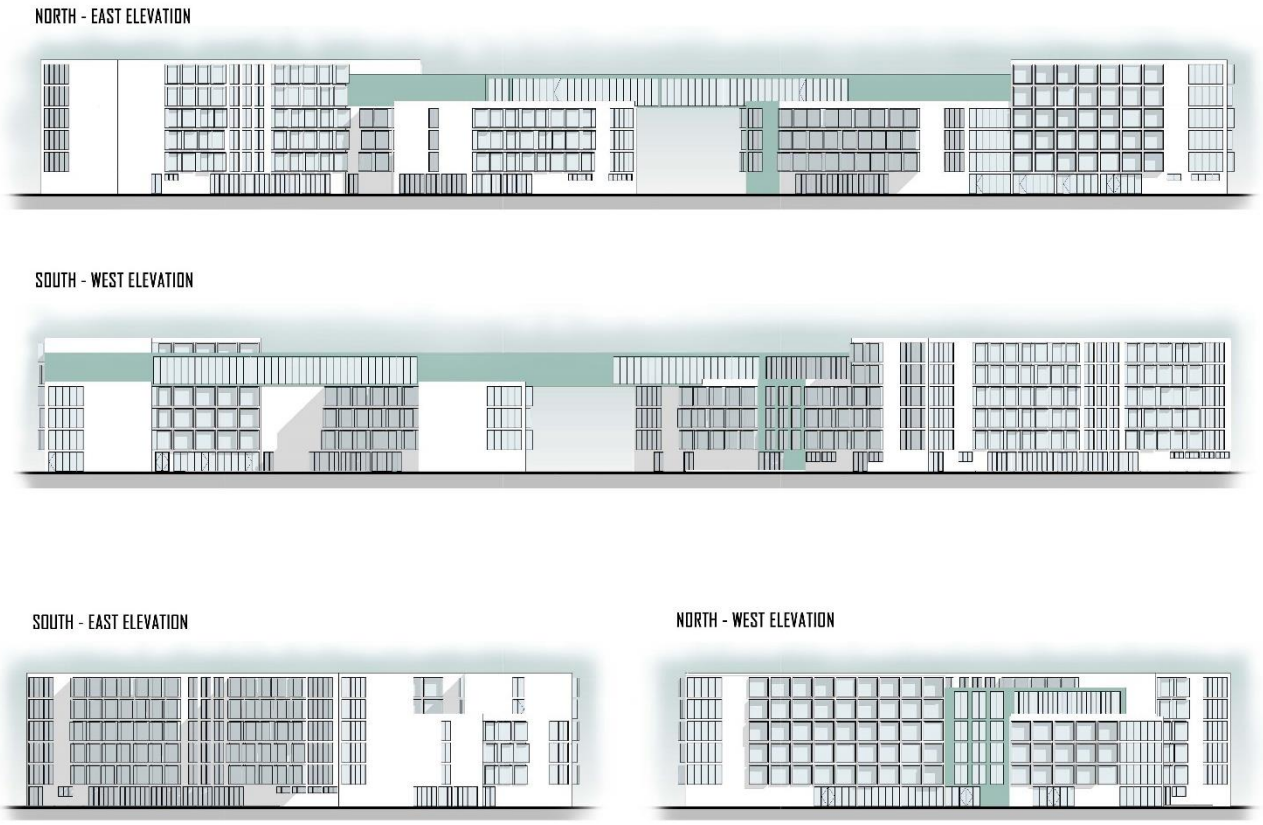


Figure 76. Elevations

4.4.8 Renders

Figure 77. Top view

Figure 78. Render 1

Figure 79. Render 2

Figure 80. Render 3

Figure 81. Render 4

Figure 82. Render 5

Figure 83. Render 6

Figure 84. Render 7

Figure 86. Render 8

Figure 87. Render 9

Figure 88. Render 10

Figure 89. Render 11

Figure 90. Render 12

CONCLUSIONS

This thesis addresses the significant challenges of student accommodation in Tirana by providing a suitable housing solution. By combining proportional living units with innovative parametric design elements, the proposed student residence effectively addresses the high demand for affordable, high-quality student housing. This approach not only meets the immediate needs of a considerable number of students but also enhances their overall living experience, contributing positively to the urban landscape of Tirana.

The research identified a significant gap in the quality and quantity of student housing available in Tirana. The existing facilities are largely inadequate, failing to meet basic living standards or the expectations of today's student body. A thorough analysis of several dormitories case studies and living unit typologies is conducted. The design process has been meticulously informed by extensive data collection, site analysis, and direct input from the student community through a comprehensive questionnaire. In response, this thesis proposed a design, targeted at the "Lady of Good Counsel University" campus which emphasized community spaces, accessibility, and integration with the urban fabric of Tirana, reflecting a deep understanding of the role architecture plays in shaping student experiences.

Key features of the project include the strategic location within the "Lady of Good Counsel University" providing easy access to transportation, educational institutions, and city landmarks. The design incorporates separate volumes for male and female students, connected by a common bridge, fostering a sense of community and interaction. The inclusive landscape design and shared ground-floor spaces further enhance community engagement and create a vibrant living environment.

The project's approach to student housing, with its combination of proportional living units and parametric design elements, addresses the accommodation challenges faced by students in Tirana. By providing a high-quality, affordable, and well-located housing option, this project not only meets the immediate needs of the student

population but also contributes to the long-term urban development of the area.

In conclusion, the proposed student residence stands as a model for future developments, showcasing how architecture can enhance student life and support academic success.

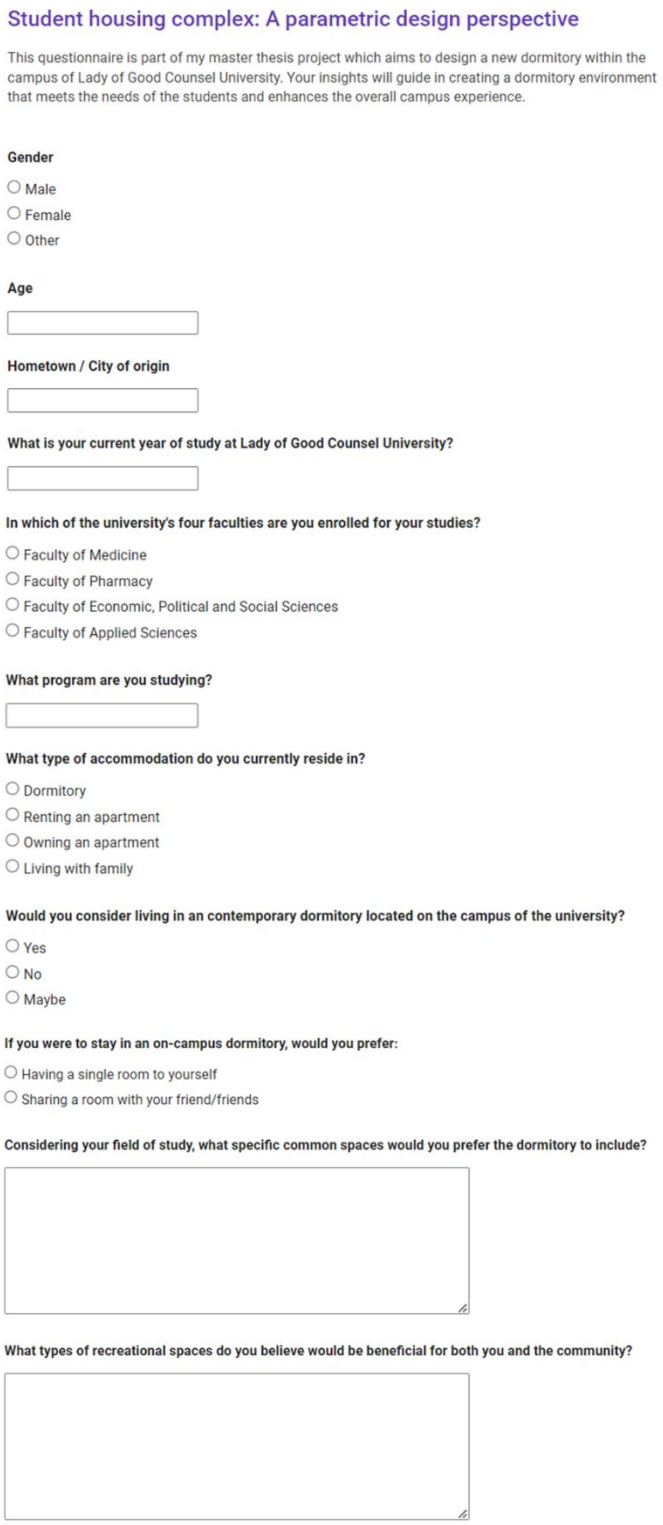
REFERENCES

1. Ahmad Eltaweel, Y. S. (2017). Parametric Design and Daylighting: A Literature Review. 33.
2. AKPT. (2015). *https://www.planifikimi.gov.al/*.
3. Amole, D. (2016.). TYPOLOGICAL ANALYSIS OF STUDENTS' RESIDENCES.
4. *ArchDaily*. (n.d.). Retrieved from https://www.archdaily.com/990888/amn-student-housing-shau-indonesia
5. Caballero. (2019). *ArchDaily*. Retrieved from https://www.archdaily.com/892451/siriphat-dormitory-idin-architects
6. Caballero. (2022). Retrieved from https://www.archdaily.com/951607/ourdomain-student-housing-oz-architects
7. Chansomsak, S. (2016.). *SUSTAINABLE ARCHITECTURE: ARCHITECTURE AS SUSTAINABILITY.* New Zealand.
8. Chichester, U. o. (2016). *Student Residential Accommodation.* West Sussex.
9. *Folè Residence*. (2022). Retrieved from https://fole.com.al/
10. *Guida studentore*. (2021). Retrieved from Rezidencat studentore: https://guidastudentore.com/rezidenca-studentore/
11. Heylighen, A. (2000). *In case of architectural design: Critique and praise of Case-Based Design in architecture.*
12. OED. (2002). *Oxford english dictionary.*
13. Rojas. (2022). *ArchDaily*. Retrieved from iHouse Dormitory / Studio SUMO: https://www.archdaily.com/800834/ihouse-dormitory-studio-sumo
14. Rosenberg. (2023). *ArchDaily*. Retrieved from https://www.archdaily.com/110467/student-dormitory-nickl-partner-architekten
15. Ross. (2023). *ArchDaily*. Retrieved from https://www.archdaily.com/228371/monash-university-student-housing-bvm-architects
16. Saeid Habibi, O. P. (2022). *Sustainability performance by ten representative intelligent Façade.*
17. Sánchez. (2023). *ArchDaily*. Retrieved from https://www.archdaily.com/474237/tietgen-dormitory-lundgaard-and-tranberg-

architects

18. Schnabel, M. A. (2007). *Parametric Designing in Architecture.* Sydney.
19. Tender. (2019). *Raport teknik: Rehabilitimi i godinave ne RSU No.1 (Qyteti studenti).*

APPENDIX



Student housing complex: A parametric design perspective

This questionnaire is part of my master thesis project which aims to design a new dormitory within the campus of Lady of Good Counsel University. Your insights will guide in creating a dormitory environment that meets the needs of the students and enhances the overall campus experience.

Gender

- ○ Male
- ○ Female
- ○ Other

Age

Hometown / City of origin

What is your current year of study at Lady of Good Counsel University?

In which of the university's four faculties are you enrolled for your studies?

- ○ Faculty of Medicine
- ○ Faculty of Pharmacy
- ○ Faculty of Economic, Political and Social Sciences
- ○ Faculty of Applied Sciences

What program are you studying?

What type of accommodation do you currently reside in?

- ○ Dormitory
- ○ Renting an apartment
- ○ Owning an apartment
- ○ Living with family

Would you consider living in an contemporary dormitory located on the campus of the university?

- ○ Yes
- ○ No
- ○ Maybe

If you were to stay in an on-campus dormitory, would you prefer:

- ○ Having a single room to yourself
- ○ Sharing a room with your friend/friends

Considering your field of study, what specific common spaces would you prefer the dormitory to include?

What types of recreational spaces do you believe would be beneficial for both you and the community?

Figure 91. Questionnaire script ***(By author,2024)***