

# THE POWER OF OPEN SPACE



**An Emerging Campus for the University of Sarajevo  
Bosnia and Herzegovina**

*PROJECT DOCUMENTATION*

# The Power of Open Space An Emerging Campus for the University of Sarajevo

*Project Documentation*

IMLA - Main Project II / 2nd Semester 2018

University of Sarajevo – Faculty of Forestry  
International Burch University – Department of Architecture  
IMLA - International Master of Landscape Architecture  
Nürtingen-Geislingen University, Nürtingen  
Weihenstephan-Triesdorf University of Applied Sciences, Freising

with support of:  
ALA BiH - Association of Landscape Architects in Bosnia and Herzegovina  
Reactivate Sarajevo - Urban-Think Tank ETH Zürich  
and Green Council BiH

[www.imla-campus.eu](http://www.imla-campus.eu)



View over Sarajevo  
Photo by: Anna Ilyuchshenko

# WELCOME NOTE

## THE POWER OF OPEN SPACE



Dr.-Ing. Ellen Fetzer  
Nürtingen-Geislingen University  
European Council of Landscape  
Architecture Schools

Our perambulations in the urban landscape of Sarajevo started in 2014 with the LE:NOTRE Landscape Forum. We met on Trebević Mountain. There could not have been any better place to start our friendship. We looked through the landscape of today into the past in order to envision a common future. A future that would bring Trebević back to its identity as a place where all citizen, visitors and friends of Sarajevo can meet with nature. We have come back with students and staff three times so far: 2015, again, to Trebević Mountain. In 2016 we visited Sarajevo Polje, the last remaining land resource in Sarajevo's East, which is, again, a treasure under threat. Our 'Alternative Futures for Sarajevo Polje' have tried to impose a landscape approach on an area which is suffering from fragmentation, competing interests and lack of holistic governance. This is not a specifically Bosnian problem though: any peripheral landscape in the world is fighting with the same issues. But it is important to look at it now and to raise awareness for the loss of the common good, which is,

the landscape. We are not talking about any luxurious issues here. There is a 'right to landscape', as expressed by the European Landscape Convention. Every citizen should have inclusive access to landscape resources and be involved in the formulation of landscape development goals in a democratic way. The European Landscape Convention is there to give us guidance and orientation.

Even if a landscape approach is always place-specific I would like to remind that our agenda is defined by the sustainable development goals of the United Nations. Especially goal number 11 is decisive here: Make cities inclusive, safe, resilient and sustainable. Our global target for 2030 is, amongst others, to provide universal access to safe, inclusive and accessible, green and public spaces. For everyone involved in the planning, design and management of cities this comes together in the New Urban Agenda. The New Urban Agenda envisions, inter alia, cities that are "participatory, promote civic engagement, engender a sense of belonging and ownership among all their

inhabitants, prioritize safe, inclusive, accessible, green and quality public spaces that are friendly for families, enhance social and intergenerational interactions, cultural expressions and political participation, as appropriate, and foster social cohesion, inclusion and safety in peaceful and pluralistic societies, where the needs of all inhabitants are met..." (New Urban Agenda, UN-Habitat 2016, p.5)

We came back to Sarajevo in October 2017 with support of our fantastic friends at the Universities of Sarajevo and Burch. I want to stress that this is a partnership at eye level. We come from outside but we learn much more from this landscape and its people than we are able to give back. We want to give an exemplar of what true partnership can mean and hope that more dialogue of this kind will follow. New dialogue is the core of the New Urban Agenda. A sustainable, productive and creative future for the University Campus of Sarajevo needs to be grounded in social innovation. People need to get together to envision a collective new meaning for this place. We will then move naturally from meaning to skills. Let's envision Sarajevo's emerging university campus as a place for people to co-create knowledge for collective action. Our students have tried to visualize what this could mean. Please pay attention to the ideas of a future generation of planners and designers who regard themselves in the first place as a global citizens.



Assist. Prof. Dr. Sanela Klarić  
Vice Rector for External Relations and  
Scientific Cooperation  
International Burch University, Sarajevo  
Department of Architecture,  
Faculty of Engineering  
and Information Technologies

Education is one of the most important driving forces shaping the future of any society. An educated young person is the most valuable capital for healthy, sustainable and responsible socio-economic development.

Universities of today have to ensure optimal environment for innovation, research, entrepreneurship, experiments, networking, interdisciplinarity, sustainability, culture, heritage and much more. This kind of environment is required as a guarantee for our future.

The existing spatial plan of the University Sarajevo Campus has to be reconsidered with regard to all those sustainable and responsible standards that have to be applied in the future to ensure the best possible development of our new campus. Located in the centre of the city, multifunctional, surrounded by many buildings and open spaces meant to serve the students to enhance their life and needs: Sarajevo University Campus has a number of challenges to face and potentials to explore.

A realistic, sustainable and responsible approach has to be applied now with a focus on open spaces and their potential. Topics like: water protection and collection; air pollution, ventilation and recuperation; soil protection, urban agriculture and green gardens; green public transport, bicycles, electric cars; sustainable accommodation, local food production, entrepreneurship, flexible functions in the building with strategic timetable, renewable energy sources; open space for temporary exhibitions, public events linked to the city and regions; cooperation and competitions of all public and private universities' students – all of this must be included in the future strategic development documents and urban development plans.

A realistic time frame for the investment has to include:  
Models for cooperation with external investors, cooperative models, start ups and other models, which will support balanced, realistic and sustainable development of all campus units and the rest of the University bodies.

The University Campus space has to be open for all citizens of Sarajevo as a sharing laboratory space with recognized sustainable elements providing the best environment to all users and stakeholders. University Sarajevo Campus, as well as the City of Sarajevo, deserves to be envisaged as a meeting place with the best future environment for studying.

# A CITY THAT INSPIRES



Vesna Hercegovac Pašić  
ALA BiH Association of Landscape  
Architects in Bosnia and Herzegovina,  
Sarajevo

## Transformability of urban space - The force of a city that inspires

Can we believe that Sarajevo is an inspiring city? If it is not, or if it has lost this force, can it 'reach it again'? To put it differently: is it possible to REANIMATE it, in WHICH WAY and to WHICH LEVEL? Processes of transformation with the objective of forming a new identity – new urbanity, facilitates the possibility of positioning Sarajevo along with other 'world metropolises' with the characteristics of 'global society', which means that new urbanity is the directive and the expected result. Results of changes are applied- 'written down' inside the town structure and this new urbanity. In the case of Sarajevo, they are to be reflected inevitably inside the complex series of steps. This activity inside the urban space, as an extremely complex process, inside the frame of this complex spatial structure, the city, will move inside the range of minimal, cautious 'touches' of the existing tissue marked by heritage and detail, until the radicalization of the process, shown by the method and scale

of intervention. This will be reflected especially in the new parts of the city, zones of clear urban discontinuity, spatial inconsequence and lack of elements, formed as the consequence of the activities of generations of architects and urbanists, educated on the functionalist bases, but also the rigidity of the socialist model of 'controlling space'. In the new parts of the urban tissue new qualities of modern style will be recognized, representing the principle of the so-called 'reading of the historical layers', where these European urban formulas reflect traditional values, above all, in the formulas of the modern ways of living, because the culture of the inhabitants of the New Town is, in the first place, urban, with an affirmative attitude towards their living environment. For this reason, the projection of the urbanity of Sarajevo as a modern European city, with new typological and functional directives, developed infrastructure, inside Sarajevo the

metropolitan space has to express the meaning /sense/ inside these very parts of the urban context of the New Town. This, above all, means that the optics, by which these parts of the city are viewed, will change. Here, there is no space for the post-modern taboo, when there is an issue of transforming whole parts of the city, because the consciousness of the unique chance of passing from the destruction to the new constitution prevails. So, abandoning of the utopist ideas of forming of the city based on the principles of CIAM, introduces us to the process of multilayered changes, new programmatic frames and redefinitions of the bases of the plans at higher level, in one word: new urbanism is born.

### FORMULA:

New development elements and hypothesis > New standards > Redefinition of long term directive development etc. = New Urbanity > New Ambiences > New enriched consistent frame > New Communicative and infrastructure layers /as a result of the greater density of the program and restructuring of the space: recognizing the potential of the available spaces.

### DETECTION OF THE PROBLEM:

1. PROCESS OF DISSOLUTION OF URBAN TISSUE /reasons and consequences/ - bad condition of the physical structure /diapason of time/, war destruction, demographic transformation, socioeconomical ambience.

2. 'INCOMPLETE' URBAN STRUCTURE - mistakes in planning, inconsistency of strategic decisions, no planning at all.

3. SPATIAL AND FUNCTIONAL DIS-BALANCE - urban discontinuity, spatial potentials, controlled consumption of space /sustainable development principle/.

### LOOKING FOR SOLUTIONS:

1. RE-DEFINITION OF DEVELOPMENT STRATEGIES = ROAD TO TOMORROW - sustainable development, joining the globalization process.

2. PERSERVATION OF IDENTITY - establishing of the system of value on the relation GLOBAL – LOCAL.

3. NEW BEGINING BASED ON THE UNDERSTANDING OF THE PAST - returning to history, reading of the context with the objective of creating new.

### ADVICES AND DIRECTIVES:

1. FILTRATING through three basic segments of economical, social and ecological reality.
2. REDEFINITION of the attitude towards heritage.
3. CREATION of different scenarios for the development of the parts of the City.
4. ARTICULATION OF NEW URBAN RULES, different scales and qualities which will create conditions for NEW CONCEPTS, with characteristics of FLEXIBILITY and DINAMICITY, as tools of THE NEW URBANIST PRACTICE.

EXPECTED RESULTS will differ according to stage and quantity of changes, which is in close connection with the spatial position of the 'sonde', as a cut-out of the contents of the city tissue, in which the depth of the 'sondage' is less important than the contents of the 'sample' taken and it's meaning as the element that is a part of the whole, which is – THE CITY.

The project already in its title - The Power of Open Space - speaks in favor of the fact that the city is a living organism that needs to be developed, renewed, and 'treated', and that it develops its consciousness and mechanisms in spite of the various pits on that road. Therefore, in the selected problem area - the Sarajevo University Campus, with its position and function, where the urban landscape reflects the complexity of the City's dynamics on one side and its 'neuralgic parts', on the other hand, it is only acceptable to take action - applying small scale actions to achieve significant goals, and the very results of this Workshop, as one in a series of steps in the development of the project, have an outstanding significance and should have an impact on the final solutions.

# REACTIVATE SARAJEVO



Haris Piplas  
Project Director  
Reactivate Sarajevo City Action LAB  
Urban-Think Tank Chair of Architecture  
and Urban Design  
NSL-Network City and Landscape  
ETH Zürich

## A new model for urban, social and economic regeneration: Reactivating Sarajevo's human and spatial capital through an interplay of education, culture and creative potentials

Throughout its dynamic history, Sarajevo has been a fertile ground for cross-cultural development - distinctively legible from its linearly layered urban fabric, ranging from introvert Ottoman mahalas, to Austrian neoclassical bourgeois villas and Olympic socialist landscape urbanism.

This mélange of habitation, recreation and commerce varieties shared one destiny in the 1990s: being objected to the urban crime of the crimes: «urbicide».

Despite being a city that is able to cater innovative ideas, impregnated with energy of Sarajevo's people to rebuild their city and together with the support of intellectuals and governments that resonated across the world expressing solidarity with the city, Sarajevo missed the opportunity to utilize the post-war reconstruction energy as an instrument

for long-term sustainable development. The new realities rather aggressively and invasively materialized in the urban image in form of shopping centers and mostly low-end residential buildings. The density rose to the disadvantage of the public spaces of many former mono-functional socialist housing estates that have been sealed or replaced.

Today, the cultural, economic, environmental and social life is still suffering the consequences of the war and the unbalanced and fragmented post-socialist development, resulting in heavy unemployment rates and 'brain drain'. Sarajevo today, next to its legendary brand as "Europe's Jerusalem" carries more infamous titles: the most polluted European capital of a country that is globally leading the rankings of youth unemployment.

Now, more than 20 years after the war, Sarajevo is facing a key moment in its trajectory of urban growth and is in urgent need for innovative, integrated and sustainable approaches to urban development, as the current short-term over-dimensioned and investor-driven approaches are highly damaging to the urban image and are hindering a healthy development of the city.

The cities in the current global competition are the most important powerhouses of human, social and relational capital. The city of Sarajevo, as a multi-cultural and charismatic capital must use its existing potentials and accelerate the re-structuration from planned centralized industrial production to a more knowledge-based economy. This natural interplay between modern education, creative industries, culture, and with its deep vernacular roots and



Interactive 3D map of Sarajevo's central zone potentials and challenges  
Source: Reactivate Sarajevo City Action Lab, Urban-Think Tank, ETH Zurich

strong connections to local communities, represents a model that can serve as an important driver of urban growth - encouraging social cohesion, promote cultural diversity and understanding, stem the brain drain of educated young professionals, and act as a driver of education-culture-creativity led urban regeneration.

Sarajevo also possesses planetary relevance and can serve as lesson-learned, as a city important to global history, as a city where World War I started, an Olympic city but also a city of a global campaign for supporting the Sarajevo people's cultural resistance against destructive powers.

I understand Sarajevo as a unique urban laboratory, where multiple-stakeholder-driven approaches and multi-disciplinary methodologies prove to work in synergy.

The existing human and spatial qualities form the basis, from which the existing rich and adaptable architectural, urban and landscape potentials can be reactivated.

Sarajevo's wider Central Urban Zone where the Campus of the Sarajevo University is embedded, is located in an immensely diverse and potent area that also includes the new Creative and Museum District, independent spaces that intend to revitalize the decayed industrial facilities of Vaso Miskin Crni, the business and government quarters in the core of Marijin Dvor, as well as the city's mobility hub including the main train and bus stations.

This poly-functional mix represents a major momentum to harness the power of education, bottom-up knowledge-based entrepreneurial energy, creative industries

and culture, and turning this area into a generator of social and economic development, cultural revival, positive local identity and rebranding of the city's image. This action can catalyze a more inclusive, integrated and sustainable model of urban revitalization and eventually be up-scaled and replicated throughout the country and region.

# CONTEXT

## Sarajevo City



### View over Sarajevo City

Sarajevo is the capital of Bosnia and Herzegovina. It represents the cultural, educational, industrial, and sports centre of the country. The population of the city is around 275.524 people. From the standpoint of the history of architectural development of the city can be traced back to ancient times, through the Ottoman period, the Austro-Hungarian period and to the present times. The urban and architectural development of the city started 550 years ago under the leadership of Isa-bay Ishaković. For the first time he built a bridge, mosque, palace, and began construction activities that have marked the emergence of Sarajevo. In the Ottoman period Sarajevo has received a number of private and public buildings. The city was divided into two functional parts; bazaar where trades were held and housing areas - Mahallas where people lived. Also, many religious buildings, educational facilities, commercial buildings and other building were

built in Ottoman period such as Gazi Husrev-Bey's Mosque, Sephardic Synagogue, Old Orthodox Church at Baščaršija, Kuršumlija madrassa, Brusa bazaar, Morića han, Svrzo house and others. In the Austro-Hungarian period the city got the qualities of western European architecture. The transition from Ottoman period to Austro-Hungarian period was marked by the transition from the organic urbanism to the urbanism of strict regulations and the straight street. In the Austro-Hungarian period there were built religious, cultural and public facilities, as well as residential and commercial palaces such as the Cathedral of the Sacred Heart of Jesus, City Hall, National Museum, Central Post Office, Theatre building, Marienhof, Villa Mandić and many others. The modern movement has not bypassed Bosnia and Herzegovina, not its capital. From the period of socialism are some of the best examples of museum architecture and residential architecture

facilities such as the History Museum of Bosnia and Herzegovina and the residential area Crni Vrh. After the last war construction activities of reconstruction of destroyed buildings started in the city, but also building a new structures which shape and size is the subject of controversy and often do not reflect the urban and architectural values of Sarajevo that were inherited from the past centuries.

Information from: BHCICOP – BRAU,  
INTERNATIONAL STUDENT COMPETITION  
BROCHURE

# HISTORY

After the last war construction activities of reconstruction of destroyed buildings started in the city, but also building a new structures which shape and size is the subject of controversy and often do not reflect the urban and architectural values of Sarajevo that were inherited from the past centuries.



Figure 1. Historical photo of Sarajevo between the Ottoman and Austro-Hungarian period

Novo Sarajevo is the commercial and business centre of the city of Sarajevo from the 20th century. This area was built mostly during the 20th century with Filipovića lager from 1897–1918. Main structures are business and commercial centres, infrastructural objects with main bus and rail stations, educational institutions and residential buildings. An urban tissue of Campus UNSA is surrounded with streets connected with main bus and train stations on north, business area on south, US embassy on east, and residential/commercial area on west.



Figure 2: Division map of the Balkan Peninsula at the Congress of Berlin in 1878

The campus as we see it today was built in the 19th century. The name Filipovića lager was used for 21 years, from 1897–1918. After 1918–1941 the Filipovića lager was renamed in to King Alexander's Barrack and from 1945 until 1992 the name was MaršalaTita Barrack.



Figure 3: General Josip Filipović, Commander of the armed forces that won the territory of Bosnia and Herzegovina in 1878



Figure 4: Map of Sarajevo shows Filipović barracks in relation to the old town of Sarajevo, 1882



Figure 5: One of the earliest forms of Filipović barracks shown on a postcard



Figure 6: Panorama of Novo Sarajevo at the end of Reign of A-U Monarchy and the beginning of the Reign of the Kingdom of SHS, early 20th century



Figure 7: The South-East corner of the barracks shown on a postcard, in the period between the two world wars



Figure 8: Aero recording of Sarajevo in 1954



Figure 9: The situation after war (1992-1995)

Today the barrack is used as Campus UNSA. The front two buildings are Faculty of Traffic Engineering, Institute of Oriental Studies and the third one is in a deteriorating condition.

In the current situation of Campus UNSA there are three front buildings and on the west side partially destroyed buildings of barrack. The entire west part of the complex has been neglected. All other structures of the campus were built from 1995 – today. The vegetation is partially in bad condition but valuable as well for future development.

Information and images from: BHCICOP – BRAU,  
INTERNATIONAL STUDENT COMPETITION  
BROCHURE

# PROJECT LOCATION



Sarajevo and its surroundings with location of the project area

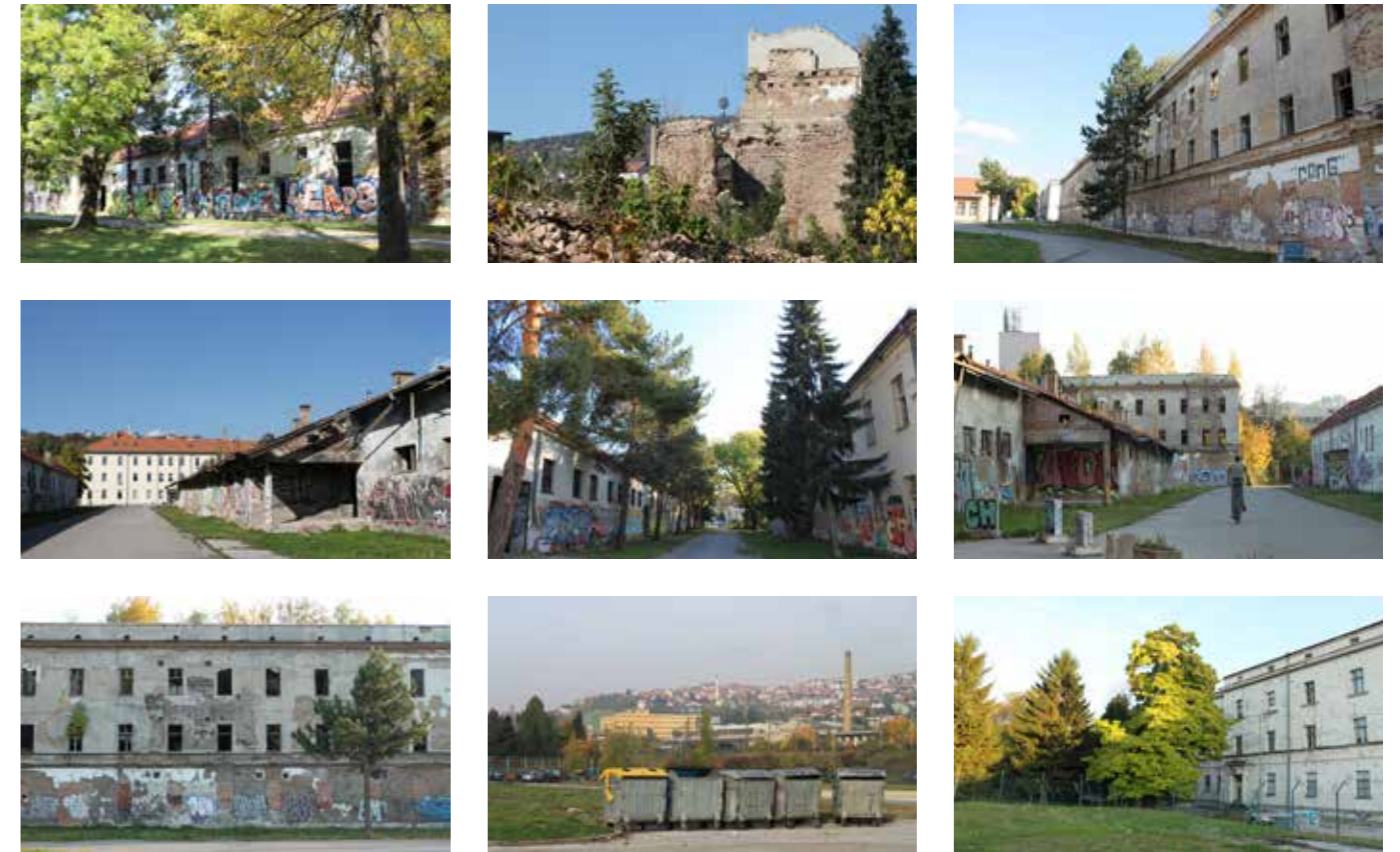


Sarajevo city centre with location of the project area

# CAMPUS AREA



Campus overview with the hills in background and the main train station on the right (photo: Anna Ilyuchshenko)



Pictures above - the current situation in the University of Sarajevo Campus (photos: Anna Ilyuchshenko and Stefanie Gruber)

# PROJECT BRIEF

The new campus of the University of Sarajevo is in the process of being installed in the former army barracks which were used subsequently since 1878 by the Austro-Hungarian, Yugoslavian, SFOR and Bosnian armies. Its military use finished in 2006 when the territory was returned to civic use. The city of Sarajevo has been invited by the federal government to use this public territory as a university campus. With that objective in mind, the city planning department has issued a local redevelopment plan in the same year which considers various new faculty buildings to be constructed on the former barrack area. However, implementation did not follow straightaway, partly because of the 2008 monetary crisis. Within this period of uncertainty, the US embassy has overtaken the eastern part of the territory and moved its headquarters there a few years ago which had a negative impact on the overall accessibility.

The campus has a very crucial location in relation to the overall city pattern of Sarajevo. It belongs administratively to Novo Sarajevo but sits close to the Sarajevo Centar municipality. It is surrounded by the main bus and train station to the North, the main urban artery with the east-west tram connection to the South and the administrative, cultural and commercial center Marindvor to the East. Various residential areas are located to the West and further south. The location of the campus has thus an excellent potential for triggering an urban revitalization process which is so urgently needed.

The urban redevelopment process did not advance as fast as initially projected. Some faculties have moved into the old buildings but no major construction activities have started yet. It can be expected that the area will remain for some further years in this transitional status. It is therefore very relevant to reconsider not only the overall development plan and the stakeholder collaboration.

This project involved international staff and students with backgrounds in architecture, landscape architecture and urban planning. The objective was to develop a comprehensive and multilayered understanding of the urban context with a specific focus on the character and potential of the open spaces. Open space is understood here as any unbuilt area and includes for example not only streetscapes, squares and gardens but also wastelands, parking lots and the river embankment. This knowledge has been developed and shared by means of a mixed methods approach.

On that basis, students have come up with two types of outputs:

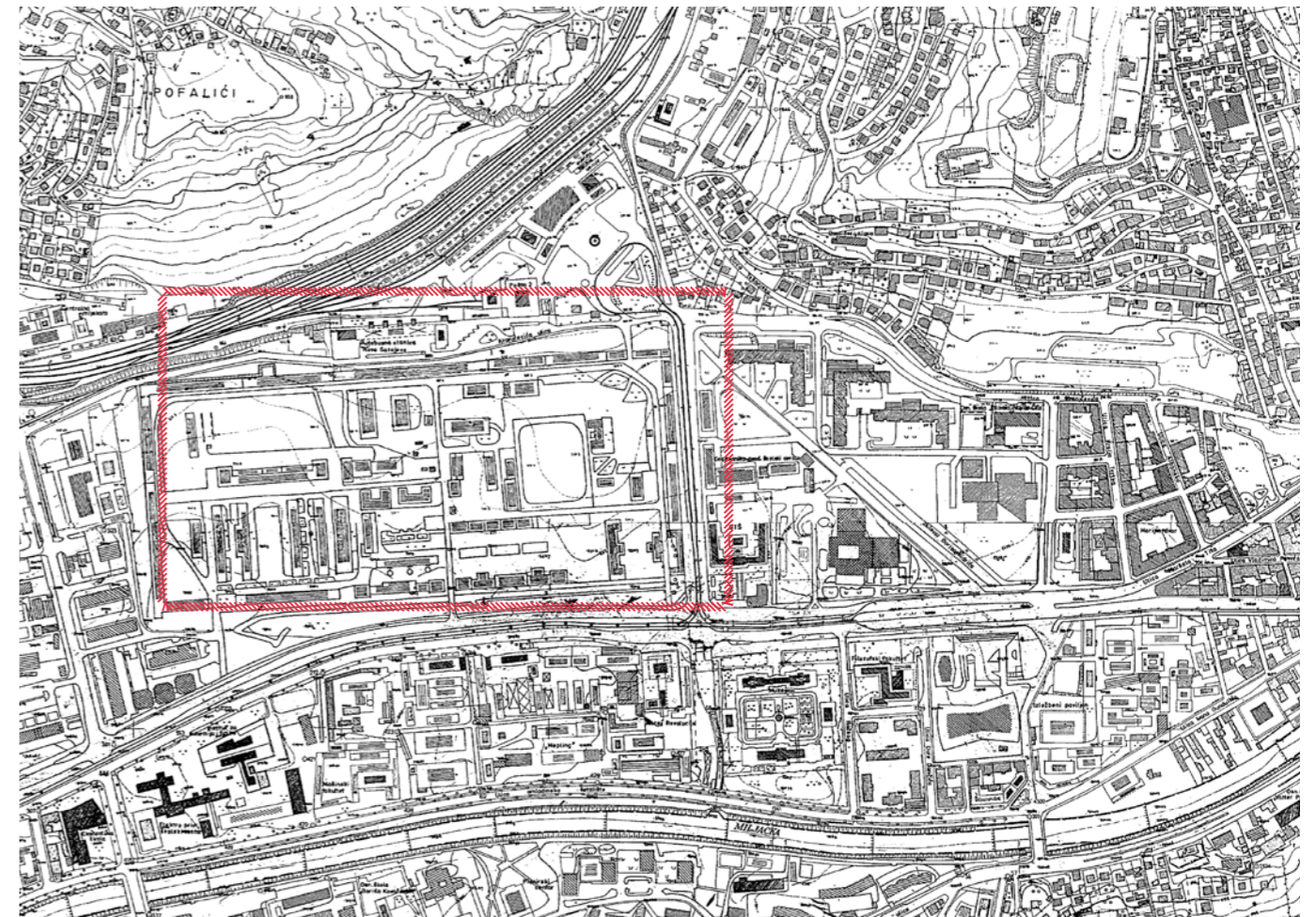
1. Ideas for an open space transformation that takes the temporary character and the current use patterns of the area into account. What could be the first step towards a transformation?
2. A vision for an ideal campus that would reinforce the identity of the space, enhancing community life and innovation with well-functioning open spaces.

All projects were further asked to envision the development of an open space system linking the area to the wider context of Sarajevo's urban landscapes and green infrastructure. Such structure should provide flexible guidance for an urban development that is currently characterized by uncertainty.



The map on the top depicts the first barracks installed by the Austro-Hungarian Army to the north of the still natural riverbed of Miljacka. This map has been produced by the Austro-Hungarian Government in 1882 after taking over the leadership of the formerly Ottoman province of Bosnia in 1878.

The map at the bottom shows the project area on the official cadastral map of the early 1999's.





# PROJECT TEAM



# LAYOUT GUIDE

PROJECT TITLE  
PROJECT TEAM  
WE ARE FROM ...

## NEXUS SARAJEVO CAMPUS



The Nexus campus project, a decentralized campus of the University of Sarajevo in Sarajevo, was created to address the need for a modern, rotating campus that would embrace the city and its culture. It began with the opportunity to travel to Sarajevo, Bosnia and Herzegovina in October of 2017 and collaborate with various professionals as well as the faculty and students of the University of Sarajevo and the International Burch University. After ten days in Sarajevo, a well-rounded and specialized understanding of the campus site, the surrounding communities, the city and its culture was collected, and a shared motivation to create an inspiring site for the people of Sarajevo was born. Goals and objectives were defined in order to create the most optimal site for all parties involved, including citizens, students, faculty, investors, the city of Sarajevo, and the environment. Goals included the optimization of built space and open space; optimization of viewpoints; optimization of connectivity within the site, to the surrounding neighborhoods and the nearby university campus to the south, and between the various, diverse users of the site. The objectives were defined as connection between, respectively, the public and the academics through meeting points and activities; the environment and university through awareness initiatives and implementation of biodiversity and water management areas; and the city of Sarajevo and the university campus through improved landscape and architecture, revenue opportunities and an improved identity to the municipality. The design process then began, first by developing an open space to built space concept. The different layers of the existing site were taken into consideration – specifically the Austrian-Hungarian buildings to the south, the proposed library and the memory of the military barracks. The need for wind flow and an extensive green system to deter air pollutions were taken into account. The modern, rotating buildings connected by the network of paths, plazas and greenspaces were placed in a way to maximize spaces, viewpoints and airflow, as well as create a new identity to the university campus and surrounding communities while complementing the existing era buildings. A vegetated border was developed in a way to surround and embrace the campus for visual and noise control. The idea arose in order to block the view towards the US Embassy to the east and the noise pollution from the major vehicular arteries to the north and south, while creating interesting views into and out of the site. With the vegetated border and the relationship between the existing formal buildings and new “dancing” buildings, a unique space was created in the center of the campus, in such a way that promotes growth, interest, environment, community and education. The spaces within the campus were designed in a manner to service the university, the community and businesses. Faculties were developed to contribute to the various university departments on site, while a dormitory, cafeteria and intimate study areas were designed around the needs of the students. The public is encouraged to use the campus, as well. A community center, public lawn, public plazas, urban garden, sport fields, café and night club are included in the Nexus design, all in order to draw the people of Sarajevo into the site to use as a community hub. Furthermore, improved connections through the site from highly-used destinations, such as the train station, river walk, public transportation stops, and the nearby retail zones were taken into consideration. Lastly, local economic growth was considered, with the development of a business incubator for aspiring entrepreneurs, pay-for-parking facilities, or stall spaces.



GUIDING COLOR

PROJECT DESCRIPTION

POSTER PAGE



Each project starts with one title page that introduces the project team and gives a short overview about the conceptual idea. On the following pages the original posters are presented. In order to guide you through the brochure each project has its own colour that is shown at the bottom of each page .

# LOSE IT OR USE IT



Daniela Burghardt (HWU, Germany)  
 Giya Elizabeth George (IMLA, India)  
 Florian Matthies (IMLA, Germany)  
 Niels De Couvreur (IMLA, Belgium)  
 Monika Winczek (IMLA, Poland)  
 Lara Heinisch (HWU, Germany)  
 Fardokht Hadji Salimi (IMLA, Iran)  
 Lamija Arslanagić (UNSA, Bosnia Herzegovina - not on the photo)  
 Dražena Zarić (UNSA, Bosnia Herzegovina - not on the photo)

A key element of the concept is to point out the hidden qualities of the place. Due to the rich historical background this place has a strong identity. This identity shall be preserved and also developed further to meet the requirements of a contemporary university campus. For that, existing building structures are integrated into the concept as much as possible. New buildings are added to restore the former block frame of the barracks. Redefined pathways and more entrances improve accessibility and connectivity.

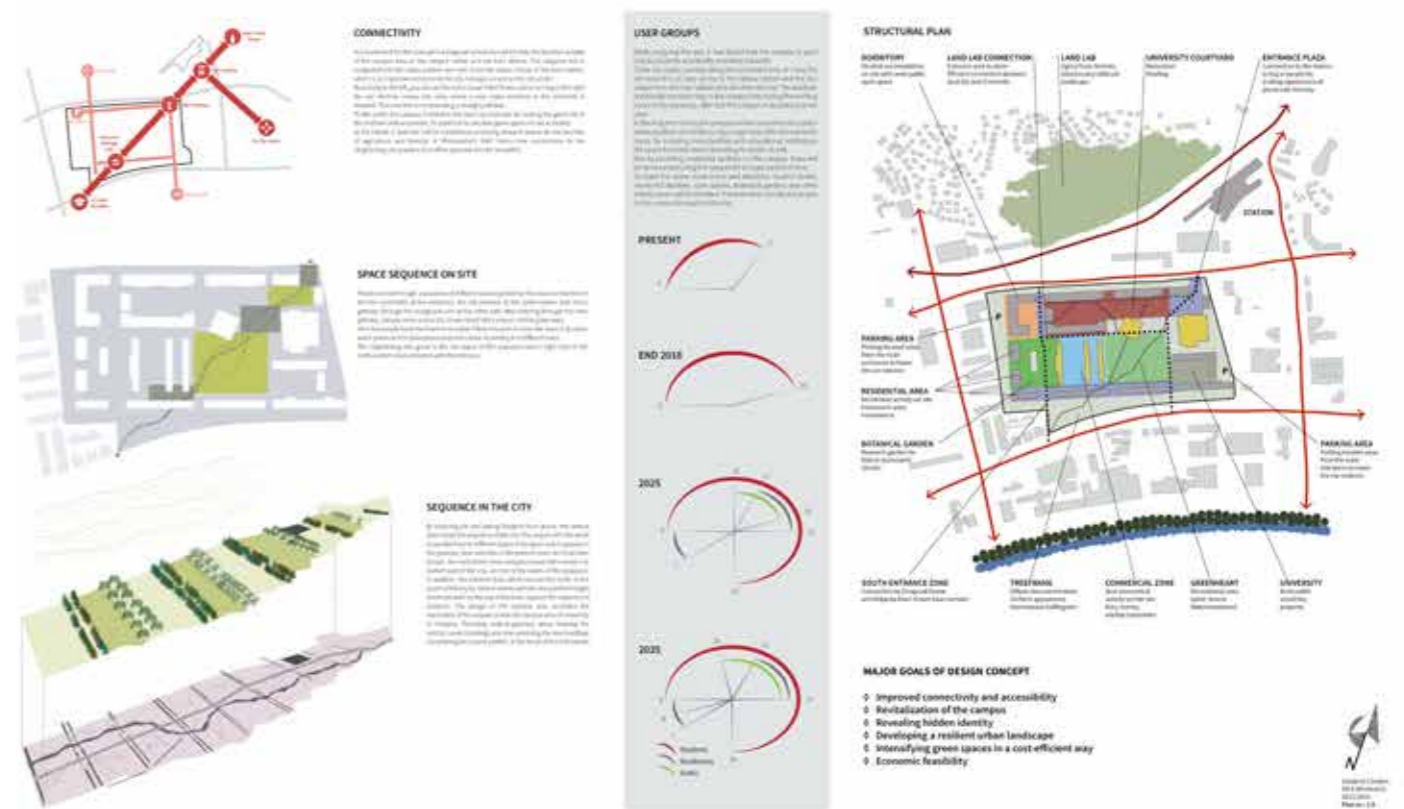
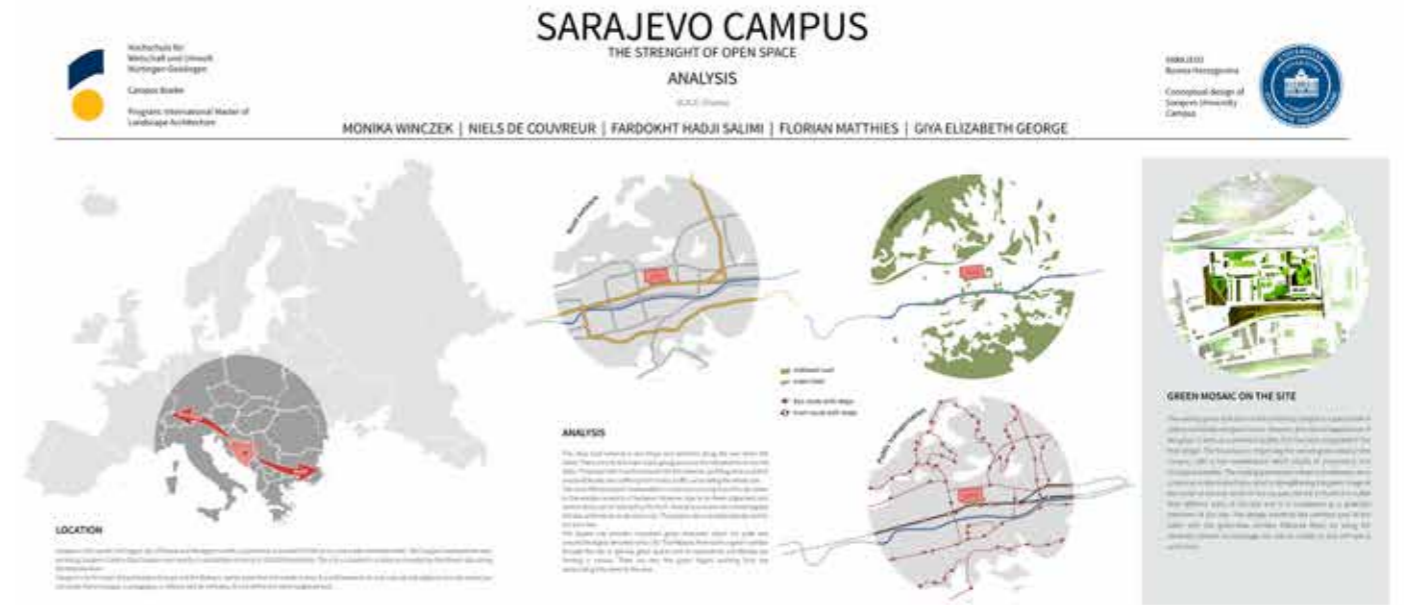
A strong concept for initial temporary uses will activate the abandoned space on the campus area. This will be the first step in the redevelopment process. Small interventions, like a cafe run by students or an ice sliding area in winter are providing functions which will attract people and help forming a strong identity. During the process new buildings are added to the site. There wont be university buildings only, also other uses, like a residential quarter will be developed to achieve a rich diversity. A new library and canteen are forming the center of the campus.

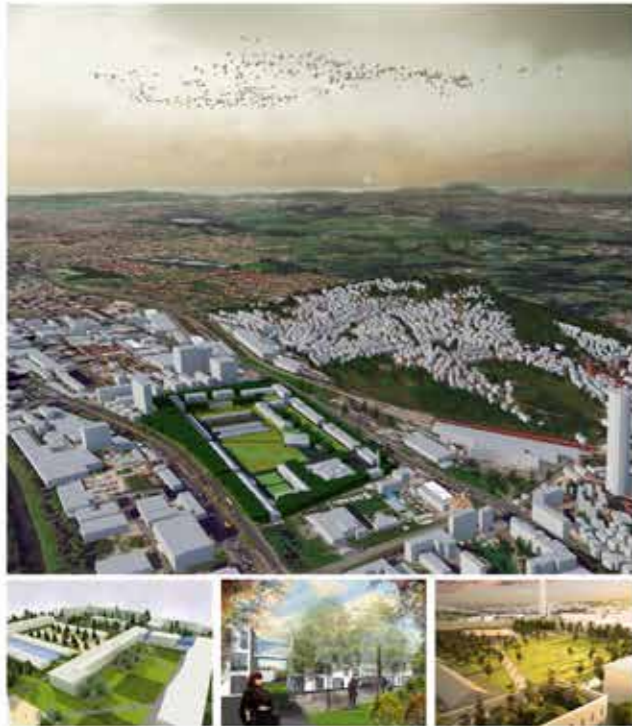
New entrances and links are pulling more people into the area. The linear layout of the campus is interrupted by a diagonal axis which will form a new important connection from the faculties outside of the area to the center of the campus and further to the train station. This connection is not defined by a straight pathway. The people are led through a sequence of different spaces guided by landmarks at the entrances which are always visible. This ensures a highly diversified open space experience while passing this area. To the south, the campus is linked to the river's promenade. By making the green hill at the northern side accessible, its potential as valuable green space can be activated. At the hillside a 'land lab' will be established, providing research spaces for the faculties of

agriculture and forestry. A 'Philosopher's Path' forms new connections to the neighboring city quarters and offers opportunities for recreation. The whole campus is a car free zone. There is one big car park next to the dormitory in the north-western corner. Small residential roads in the western part are giving access to the residential buildings. Different kinds of plazas are a key element of the open space. Open and paved squares are used for entrance areas and can host events. Courtyards partially consists of permeable surfaces and are shaded by trees. These places function as meeting places and for relaxing.

Green areas are basically differentiated by intensive (lawn) and extensive areas (meadow). Big trees are forming boulevards along the major north-south connections. The entrance area at the old chimney is defined by a cherry tree grove creating an welcoming atmosphere. At the courtyards already existing pine trees are supplemented. At the 'green heart', the campus' central green space, trees are densifying towards the corners, thereby highlighting the diagonal connection.

Considering Sarajevo's problem of scarcity of water a sustainable water management concept is implemented. Roof top water is collected and stored in underground cisterns ready for reuse, like for toilet flushes. Cistern overflow water and run-off water from sealed surfaces are channeled into storm water corridors. These open runnels are leading the storm water into retention areas. Thereby the water is kept on site and is not stressing the city's sewer system. A permanent water feature at the central plaza is supplied by one of the cisterns and can improve the microclimate of this place in summer. time. rrent use of the plaza the dimension of the water body can be individually regulated.





### GREEN STRUCTURE

The urban fabric of Sarajevo is characterized by a dense, organic pattern of buildings and green spaces. The proposed campus design aims to integrate with this existing fabric, creating a new green structure that enhances the urban environment.

### WATERMANAGEMENT

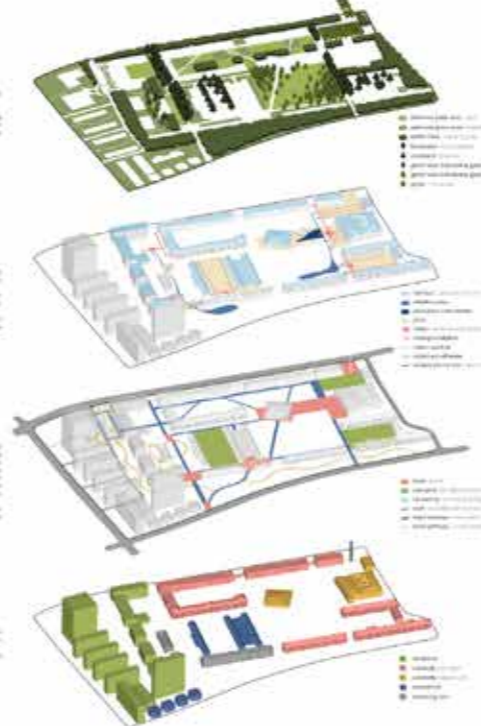
The campus design incorporates a comprehensive water management strategy, including rainwater harvesting, permeable surfaces, and green infrastructure to manage stormwater and improve water quality.

### HARDSCAPE

The hardscape design focuses on creating a functional and aesthetically pleasing outdoor environment, featuring paved walkways, seating areas, and landscaping elements that complement the green structure.

### BUILDINGS

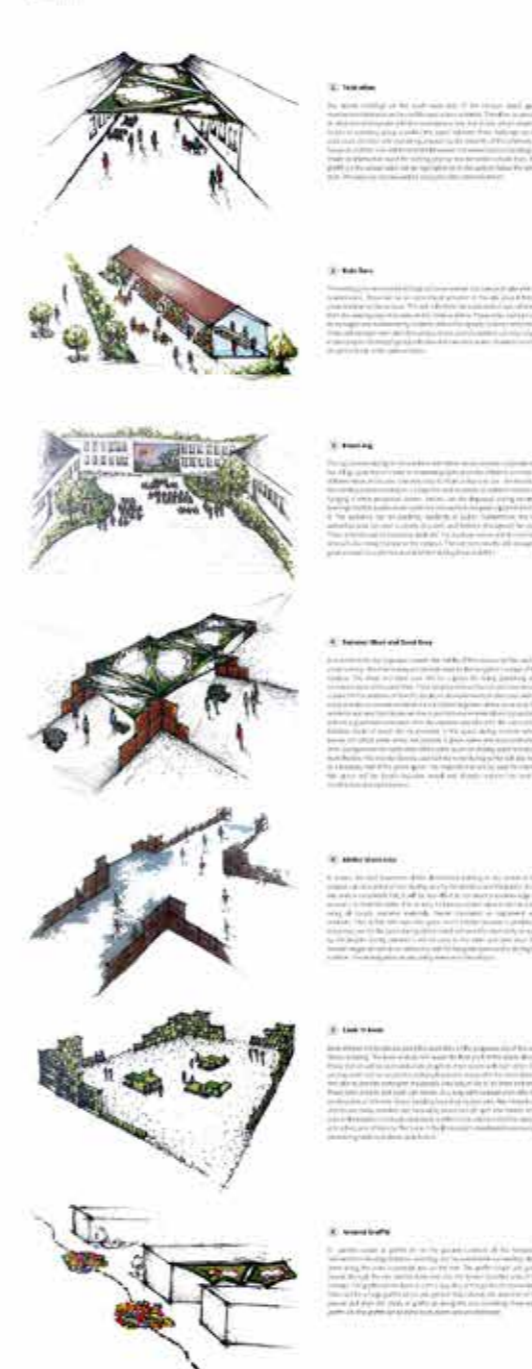
The building design emphasizes sustainable and context-sensitive architecture, featuring modern materials, natural ventilation, and a design that respects the local architectural heritage.



### SPACIAL CONCEPT



### ISOMETRICS



#### 1. Terrace

The terrace is designed as a multi-level outdoor space that provides a view of the city and a place for social interaction. It features a mix of paved areas, greenery, and seating.

#### 2. Rain Deck

The rain deck is a covered outdoor space that provides a place for social interaction and a view of the city. It features a mix of paved areas, greenery, and seating.

#### 3. Piazza

The piazza is a large, open outdoor space that provides a place for social interaction and a view of the city. It features a mix of paved areas, greenery, and seating.

#### 4. Terrace with roof deck

The terrace with roof deck is a multi-level outdoor space that provides a view of the city and a place for social interaction. It features a mix of paved areas, greenery, and seating.

#### 5. Green Terrace

The green terrace is a multi-level outdoor space that provides a view of the city and a place for social interaction. It features a mix of paved areas, greenery, and seating.

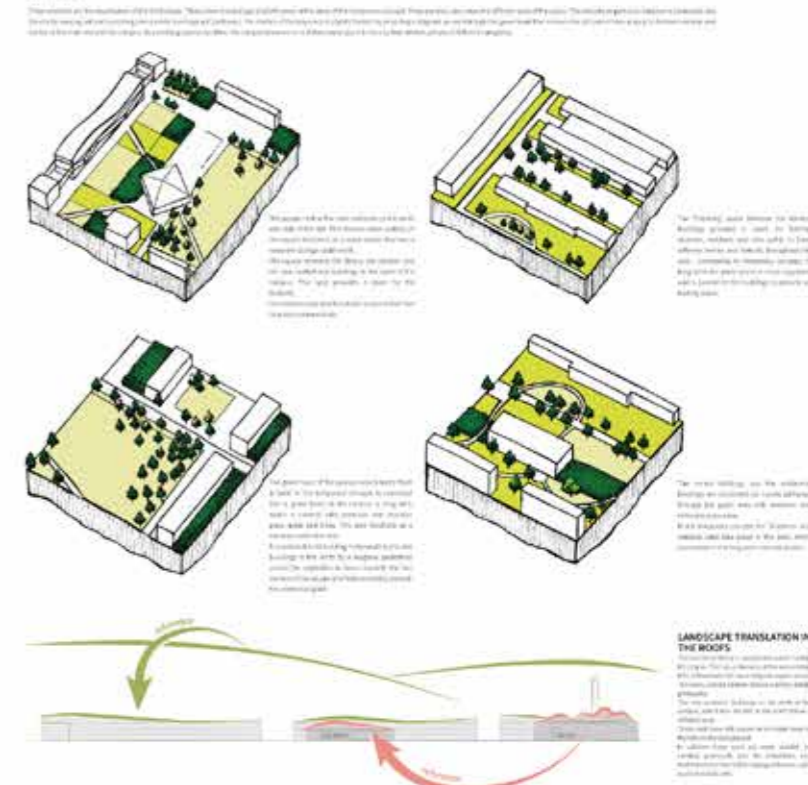
#### 6. Lawn Plaza

The lawn plaza is a large, open outdoor space that provides a place for social interaction and a view of the city. It features a mix of paved areas, greenery, and seating.

#### 7. Green Plaza

The green plaza is a large, open outdoor space that provides a place for social interaction and a view of the city. It features a mix of paved areas, greenery, and seating.

### ISOMETRICS



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The terrace is designed as a multi-level outdoor space that provides a view of the city and a place for social interaction. It features a mix of paved areas, greenery, and seating.

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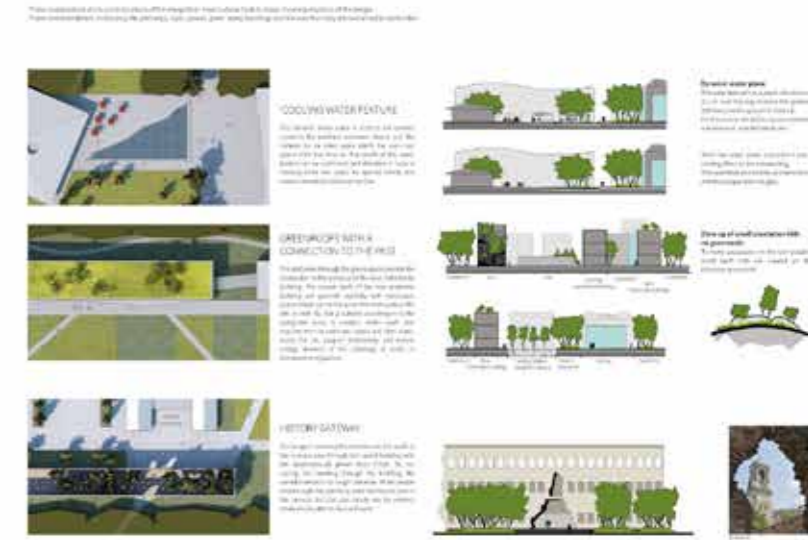
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The green plaza is a large, open outdoor space that provides a place for social interaction and a view of the city. It features a mix of paved areas, greenery, and seating.

### DETAILS



#### 1. Terrace

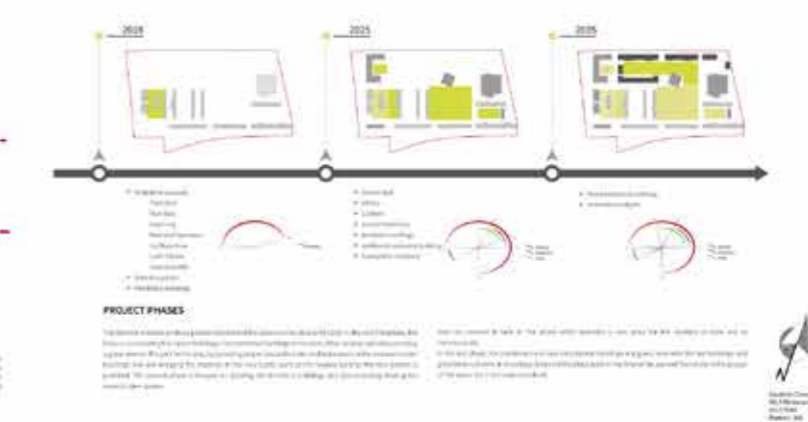
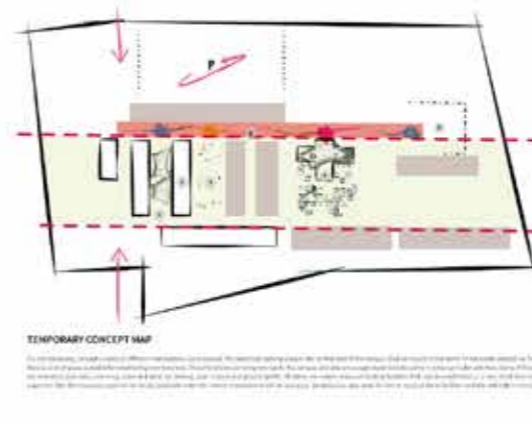
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The piazza is a large, open outdoor space that provides a place for social interaction and a view of the city. It features a mix of paved areas, greenery, and seating.



# NEXUS SARAJEVO CAMPUS



The Nexus campus project, a decentralized campus of the University of Sarajevo in Sarajevo, was created by a diverse collection of international students with a shared vision of an enhanced Sarajevo. It began with the opportunity to travel to Sarajevo, Bosnia and Herzegovina in October of 2017 and collaborate with various professionals as well as the faculty and students of the University of Sarajevo and the International Burch University. After ten days in Sarajevo, a well-rounded and specialized understanding of the campus site, the surrounding communities, the city and its culture was collected, and a shared motivation to create an inspiring site for the people of Sarajevo was born. Goals and objectives were defined in order to create the most optimal site for all parties involved, including citizens, students, faculty, investors, the city of Sarajevo and its future development prospects, the University of Sarajevo, and the environment. Goals included the optimization of built space and open space; optimization of viewpoints; optimization of connectivity within the site, to the surrounding neighborhoods and the nearby university campus to the south, and between the various, diverse users of the site. The objectives were defined as connection between, respectively, the public and the academics through meeting points and activities; the environment and university through awareness initiatives and implementation of biodiversity and water management areas; and the city of Sarajevo and the university campus through improved landscape and architecture, revenue opportunities and an improved identity to the municipality. The design process then began, first by developing an open space to built space concept. The different layers of the existing site were taken into consideration – specifically the Austrian-Hungarian buildings to the south, the proposed library and the memory of the military

barracks. The need for wind flow and an extensive green system to deter air pollutions were taken into account. The modern, rotating buildings connected by the network of paths, plazas and greenspaces were placed in a way to maximize spaces, viewpoints and airflow, as well as create a new identity to the university campus and surrounding communities while complimenting the existing era buildings. A vegetated border was developed in a way to surround and embrace the campus for visual and noise control. The idea arose in order to block the view towards the US Embassy to the east and the noise pollution from the major vehicular arteries to the north and south, while creating interesting views into and out of the site. With the vegetated border and the relationship between the existing formal buildings and new “dancing” buildings, a unique space was created in the center of the campus, in such a way that promotes growth, interest, environment, community and education. The spaces within the campus were designed in a manner to service the university, the community and businesses. Faculties were developed to contribute to the various university departments on site, while a dormitory, cafeteria and intimate study areas were designed around the needs of the students. The public is encouraged to use the campus, as well. A community center, public lawn, public plazas, urban garden, sport fields, café and night club are included in the Nexus design, all in order to draw the people of Sarajevo into the site to use as a community hub. Furthermore, improved connections through the site from highly-used destinations, such as the train station, river walk, public transportation stops, and the nearby retail zones were taken into consideration. Lastly, local economic growth was considered, with the development of a business incubator for aspiring entrepreneurs, pay-for-parking facilities, or stall spaces .

# NEXUS Sarajevo Campus



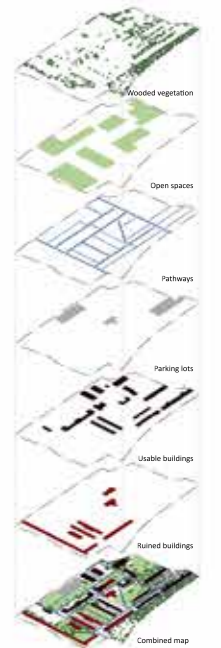
Green Infrastructure



Connectivity

The Nexus campus project, a decentralized campus of the University of Sarajevo in Sarajevo, was created by a diverse collection of international students with a shared vision of an enhanced Sarajevo. It began with the opportunity to travel to Sarajevo, Bosnia and Herzegovina in October of 2017 and collaborate with various professionals as well as the faculty and students of the University of Sarajevo and the International Burch University. After ten days in Sarajevo, a well-rounded and specialized understanding of the campus site, the surrounding communities, the city and its culture was collected, and a shared motivation to create an inspiring site for the people of Sarajevo was born.

Goals and objectives were defined in order to create the most optimal site for all parties involved, including citizens, students, faculty, investors, the city of Sarajevo and its future development prospects, the University of Sarajevo, and the environment. Goals included the optimization of built space and open space; optimization of viewpoints; optimization of connectivity within the site, to the surrounding neighborhoods and the nearby university campus to the south, and between the various, diverse users of the site. The objectives were defined as connection between, respectively, the public and the academics through meeting points and activities; the environment and university through awareness initiatives and implementation of biodiversity and water management areas; and the city of Sarajevo and the university campus through improved landscape and architecture, revenue opportunities and an improved identity to the municipality.



Locator



Inspirations



Inspirations



Analysis Conclusions

Main Project II IMLA Wintersemester 2017/18, Prof. Dipl.-Ing. Ingrid Schegg, Prof. Christoph Jensen, Dr.-Ing. Ellen Fetzter, Prof. Dipl.-Ing. Uta Stock-Gruber, Dipl.-Ing. Stefanie Gruber, Prof. Dipl.-Ing. Rainer Sachse

# NEXUS

## Sarajevo Campus

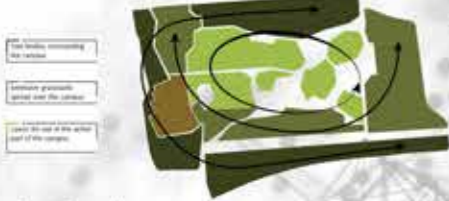
Design Concept 1 2 3



Masterplan scale 1:1000



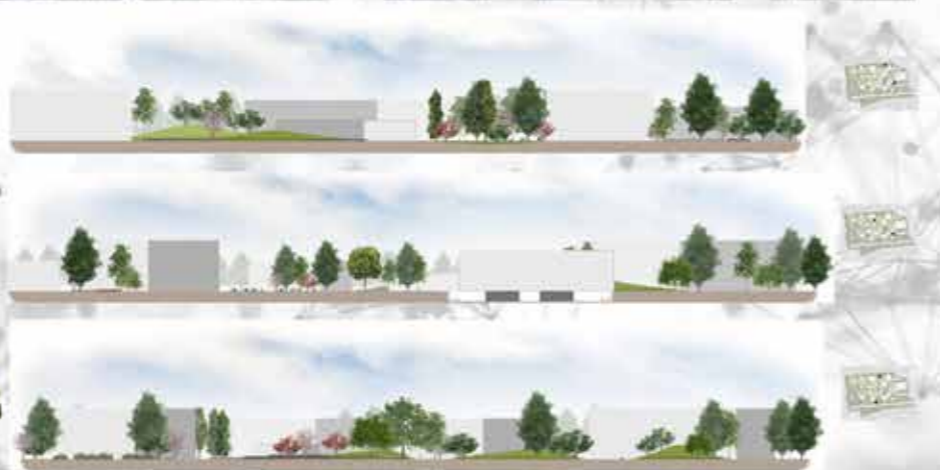
### Building Functions



### Green Connection



Visualisations



Sections



Reem Emad Hamdan, Beata Król, Sander Van de Putte, Vedran Vuković, Maggie Weber  
Main Project © IMA Weissmanster 2017/18, Prof. Dipl.-Ing. Ingrid Schegg, Prof. Christoph Jansen, Dr.-Ing. Ellen Fetscher, Prof. Dipl.-Ing. Uta Stock-Gruben, Dipl.-Ing. Stefanie Gruben, Prof. Dipl.-Ing. Rainer Sachse

# NEXUS

## Sarajevo Campus

Focused areas 1 2 3

The design process then began, first by developing an open space to built space concept. The different layers of the existing site were taken into consideration – specifically the Austrian-Hungarian buildings to the south, the proposed library and the memory of the military barracks. The need for wind flow and an extensive green system to deter air pollutions were taken into account. The modern, rotating buildings connected by the network of paths, plazas and greenspaces were placed in a way to maximize spaces, viewpoints and airflow, as well as create a new identity to the university campus and surrounding communities while complimenting the existing era buildings. A vegetated border was developed in a way to surround and embrace the campus for visual and noise control.

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FOCUS AREA 1 - Community Gardens with Community Center



FOCUS AREA 2 - Sportsfields and Sportshall



FOCUS AREA 3 - Underground Parking



Phasing



FOCUS AREA 4 - Library Main Square



FOCUS AREA 5 - Cafe Square with Multi-Purpose Stage

Reem Emad Hamdan, Beata Król, Sander Van de Putte, Vedran Vuković, Maggie Weber  
Main Project © IMA Weissmanster 2017/18, Prof. Dipl.-Ing. Ingrid Schegg, Prof. Christoph Jansen, Dr.-Ing. Ellen Fetscher, Prof. Dipl.-Ing. Uta Stock-Gruben, Dipl.-Ing. Stefanie Gruben, Prof. Dipl.-Ing. Rainer Sachse

# VALLEY REDISCOVERY



Stefanie Dittich (HfWU, Germany)  
 Evelyn Dufner (HfWU, Germany)  
 Maythe Garcia Velarde (IMLA, Mexico)  
 Yahya Atwa (IUS, Bosnia Herzegovina)  
 Loredana Florentina Cirdei (IMLA, Romania)  
 Stephen Flack (IMLA, Australia)  
 Anna Ilyuchshenko (IMLA, Kazakhstan)  
 Laila Mušić (IBU, Bosnia Herzegovina)  
 Eric Vitrier (IMLA, Belgium)  
 Jasmina Bašić (IBU, Bosnia Herzegovina - not on the photo)  
 Semir Bujak (IBU, Bosnia Herzegovina - not on the photo)  
 Nadir Spahić (IBU, Bosnia Herzegovina - not on the photo)

'Valley Rediscovery' is the theme of our concept for the University of Sarajevo. This site occupies a location between the old city and newer suburbs, and represents the last chance to create a large park within the city on the valley floor. For many decades closed off to the public and currently underutilised, regeneration is a way to rediscover past and present identity.

The concept sees the historic linear barracks of the Austro-Hungarian period retained and then mirrored on the northern boundary. Most new buildings maintain these proportions, respecting the historic context of the site as military barracks. They also echo the string of mountains enclosing Sarajevo to the north and south. A large park between these lines of buildings recalls the river valley as it once was before intensive development, incorporating a watercourse and offering many views to surrounding slopes. These three hectares of parkland in the campus centre are bookended by two prominent campus facilities – the library in the east and diner/ceremonial hall in the west. This forms a strong visual axis and solidifies the site's campus identity. Embedded in the open space are features of interest, including a lake, amphitheater and expansive wooden deck sheltered by trees.

Additionally, the parkland serves as green infrastructure connecting the hillside to the north with the river corridor to the south. Rainwater is harvested from rooftops to be filtered through the watercourse before entering the River Miljacka. Narrow passageways and small courtyards between the faculty buildings

create a starkly contrasting atmosphere alongside the expanse of the park. At the eastern end of the campus, the existing north-south pedestrian route is enhanced with cafes, startups, and short term accommodation. The interface with the imposing US Embassy is downplayed, used for library car parking and a convenient off road bicycle path connecting train and bus stations to the river. At its western end, near existing residential towers, student dormitories are placed. Here, along with sports fields and a gymnasium, a cultural centre provides recreational opportunities for students and local residents alike.

While most buildings are to be removed to achieve the final site design, temporary use of some structures and spaces are opportunities for income generation. These include various events such as open air concerts and art installations. A café, urban produce garden, bicycle path and summer design schools are options to implement immediately. The second phase involves construction of the main built elements that will structure the site – library, diner/ceremonial hall, student dormitories and other buildings on the northern boundary. Main elements of the park are constructed now too. More long term income generating activities can commence, such as renting out office space for startup businesses, and establishing a hostel, gym and art gallery. The third stage establishes the park with tree planting, adds sports grounds, studios, labs and additional faculty buildings are built. In the fourth and final stage, design details and furniture for the large park and smaller open areas between buildings can be completed.



## SUN PATH AND WIND DIRECTION



## BUILDING USAGE



## MOBILITY



## CURRENT USERS



## SOUND ANALYSIS



## KEVIN LYNCH ANALYSIS



## OPEN SPACE USAGE



## ANALYSIS RESULTS

- Provide new income generation opportunities over development stages
- Link green corridors to north and south
- Create alternative pedestrian and bicycle 'gateway' to Old City from bus and train stations
- Protect northern boundary from noise
- Create large green space in the valley for students and the public
- Connect campus to surrounding residential and educational zones
- Decrease exposure to US embassy

## GREEN INFRASTRUCTURE IMPLEMENTATION



## SARAJEVO PLANNING ISSUES

**SARAJEVO**  
 4 sq.m green space/  
 inhabitant

**WORLD HEALTH ORGANISATION RECOMMENDATION**  
 9 sq.m green space/  
 inhabitant

45% increase in car usage from 2003 - 2015

High or Very High air pollution  
 94 days/year

Untreated waste water entering River Miljacka

## CONCEPT DEVELOPMENT

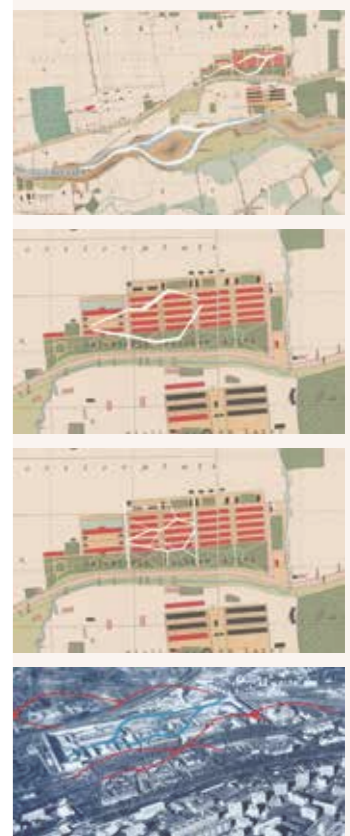


FIGURE PLAN, M 1 : 10.000



CONCEPT DESCRIPTION

'Valley Rediscovery' is the theme of our concept for the University of Sarajevo. This site occupies a location between the old city and newer suburbs, representing the last chance to create a large park within the city on the valley floor. For many decades closed off to the public and currently underutilised, regeneration is a way to rediscover past and present identity. The concept sees the historic linear barracks of the Austro-Hungarian period retained and then mirrored on the northern boundary. Most new buildings maintain these proportions, respecting the historic context of the site as military barracks. They also echo the string of mountains enclosing Sarajevo to the north and south. A large park between these lines of buildings recalls the river valley as it once was before intensive development, incorporating a watercourse and offering many views to surrounding forested slopes.

DEVELOPMENT PHASES

While most buildings are to be removed to achieve the final site design, temporary use of some structures and spaces are opportunities for income generation. These include various events such as open-air concerts and art installations. A café, urban produce garden, bicycle path and summer design schools are options to implement immediately. The second phase involves construction of the main built elements that will structure the site – library, mensa/ ceremonial hall, student dormitories and other buildings on the northern boundary. Main elements of the park are constructed now too. More long-term income generating activities can commence, such as renting out office space for startup businesses, and establishing a hostel, gym and art gallery. The third stage establishes the park with tree planting, adds sports grounds studios, labs and additional faculty buildings are built. In the fourth and final stage, design details and furniture for the large park and smaller open areas between buildings can be completed.

MASTER PLAN, M 1 : 1.000



SECTION A-A WEST-EAST, FACING NORTH



DINER WOODEN PLATFORM POND MAW ALLEY LIBRARY

DETAILED PLAN, M 1 : 500



MASTER PLAN DESCRIPTION

Three hectares of parkland are bookended by two prominent campus facilities – a library in the east and diner/ceremonial hall in the west. Interspersed are a lake, amphitheater and expansive wooden deck. Additionally, this area serves as green infrastructure connecting the hillside to the north with the river corridor to the south. Rainwater is harvested from rooftops to be filtered through the watercourse. Narrow passageways between the faculty buildings create a starkly contrasting atmosphere alongside the expanse of the park. At the eastern end of the campus, the existing north-south pedestrian route is enhanced with small businesses. The interface with the imposing US Embassy is downplayed. At its western end, near existing residential towers, student dormitories are placed. Here, along with sports fields and a gymnasium, a cultural centre provides recreational opportunities for residents and students alike.

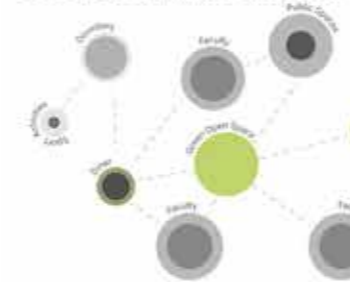
SECTION B-B NORTH-SOUTH, FACING EAST



DETAIL VISUALIZATION



BUBBLE DIAGRAM "INTERACTIONS"



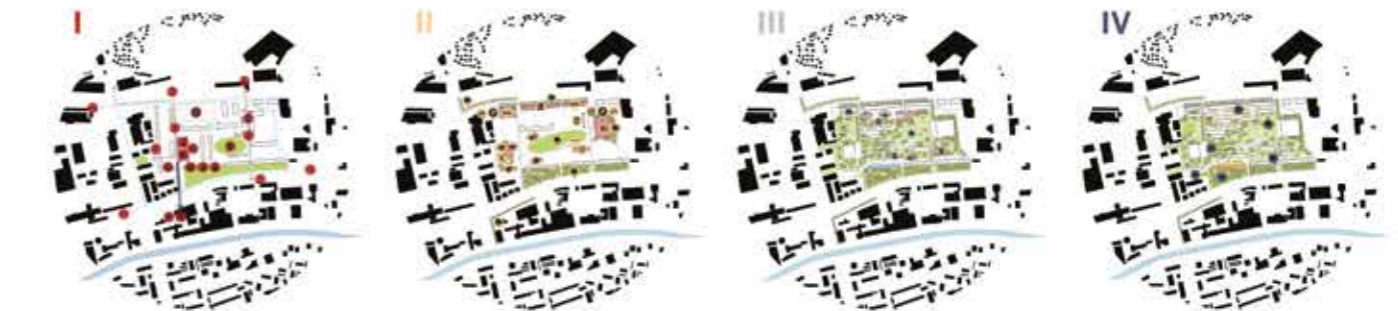
USERS AND ACTIVITIES



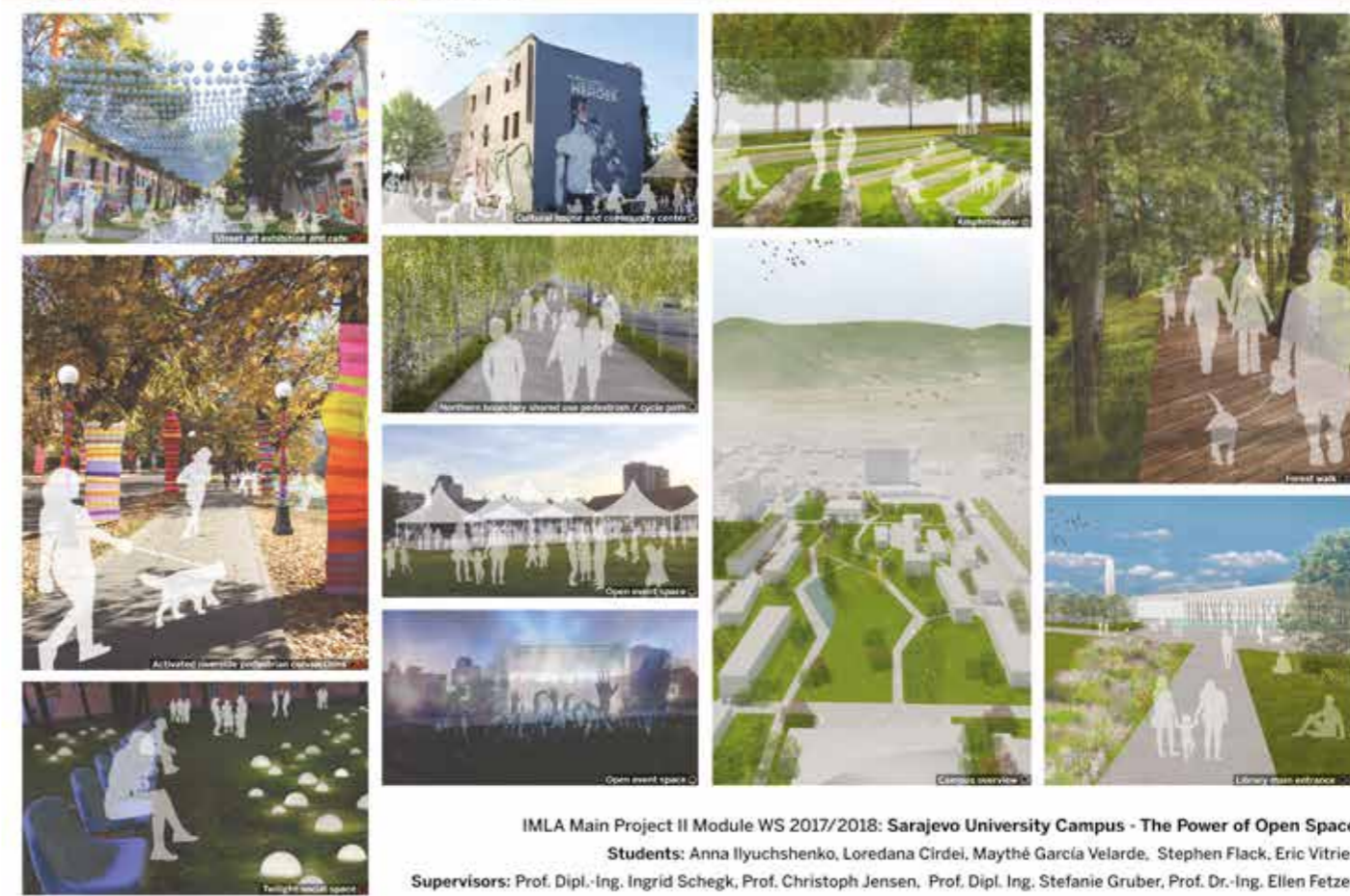
STORMWATER TREATMENT



PROJECT DEVELOPMENT PHASES



- main alleys
- green corridors to N and S, enhanced path to the river
- bicycle line
- organized parking space
- clearing and renovation
- open space for events
- small startups / kiosks, lockers / bicycle resting
- summer school / workshop / experimental space
- late - open air gallery
- urban garden
- organic produce shop
- library
- diner, gym, ceremonial hall
- dormitory, hostel
- green infrastructure, water elements
- faculty
- parking lots, bicycle parking lots
- lockers
- administration building
- auditorium
- small startups / kiosks
- gallery, cultural house
- startups / co-working spaces
- green area development
- sports ground
- amphitheater
- studio
- labs
- faculty
- auditorium
- realised design of the green area
- design details and outdoor furniture



IMLA Main Project II Module WS 2017/2018: Sarajevo University Campus - The Power of Open Space  
 Students: Anna Ilyuchshenko, Loredana Cirdei, Maythé García Velarde, Stephen Flack, Eric Vitrier  
 Supervisors: Prof. Dipl.-Ing. Ingrid Schegg, Prof. Christoph Jensen, Prof. Dipl. Ing. Stefanie Gruber, Prof. Dr.-Ing. Ellen Fetzer

# REVITALIZING SARAJEVO UNIVERSITY CAMPUS

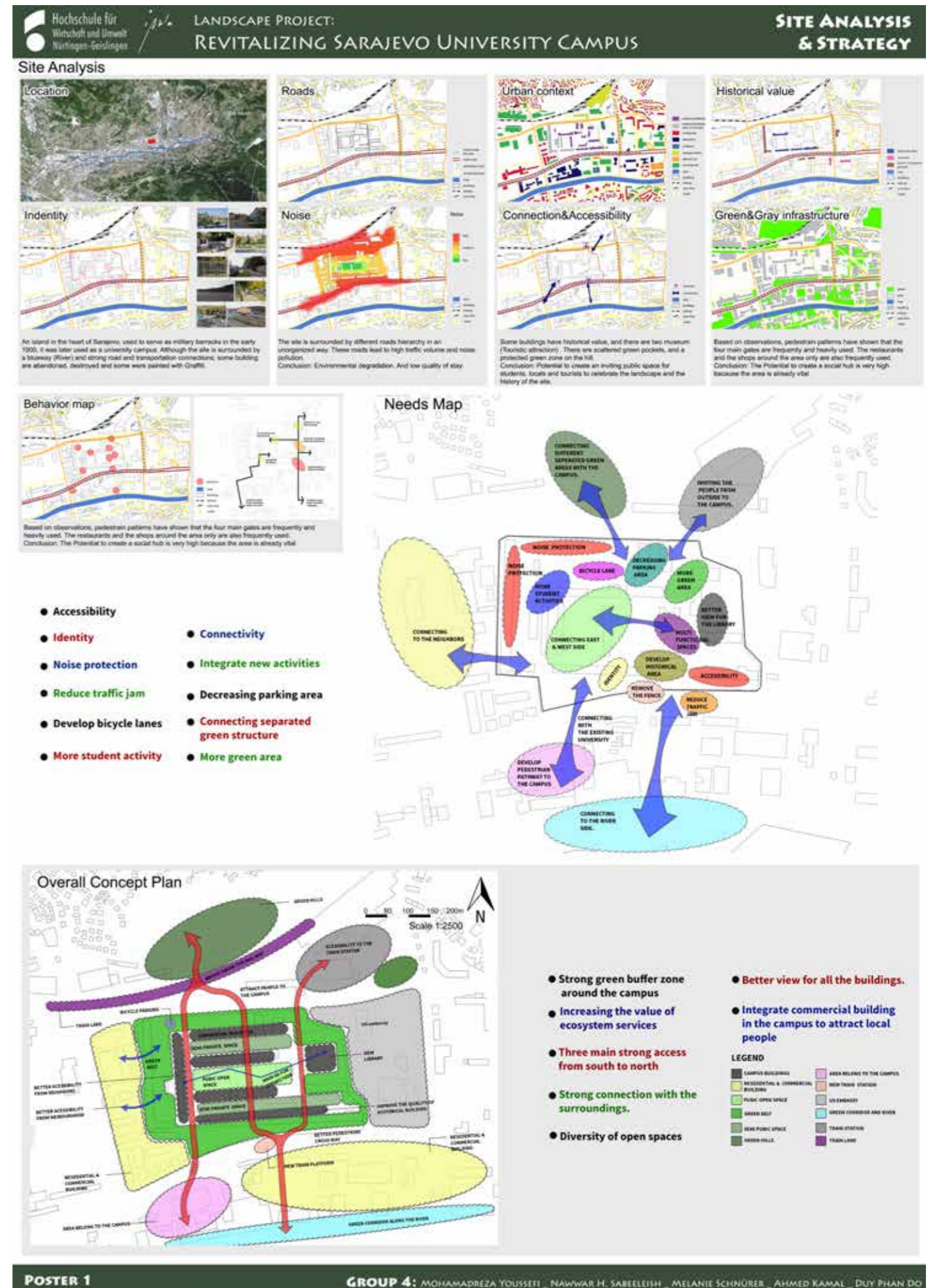


Nawar Sabe Eleish (IMLA, Jordan)  
 Melanie Schnürer (IMLA, Germany)  
 Duy Phan Do (IMLA, Vietnam)  
 Ahmed Kamal (IMLA, Egypt)  
 Kenan Canović (IBU, Bosnia Herzegovina)  
 Mirsad Mašović (IBU, Bosnia Herzegovina)  
 Mohamadreza Youssefi Matak (IMLA, Iran)  
 Yousef Zaarrir (IBU, Bosnia Herzegovina)

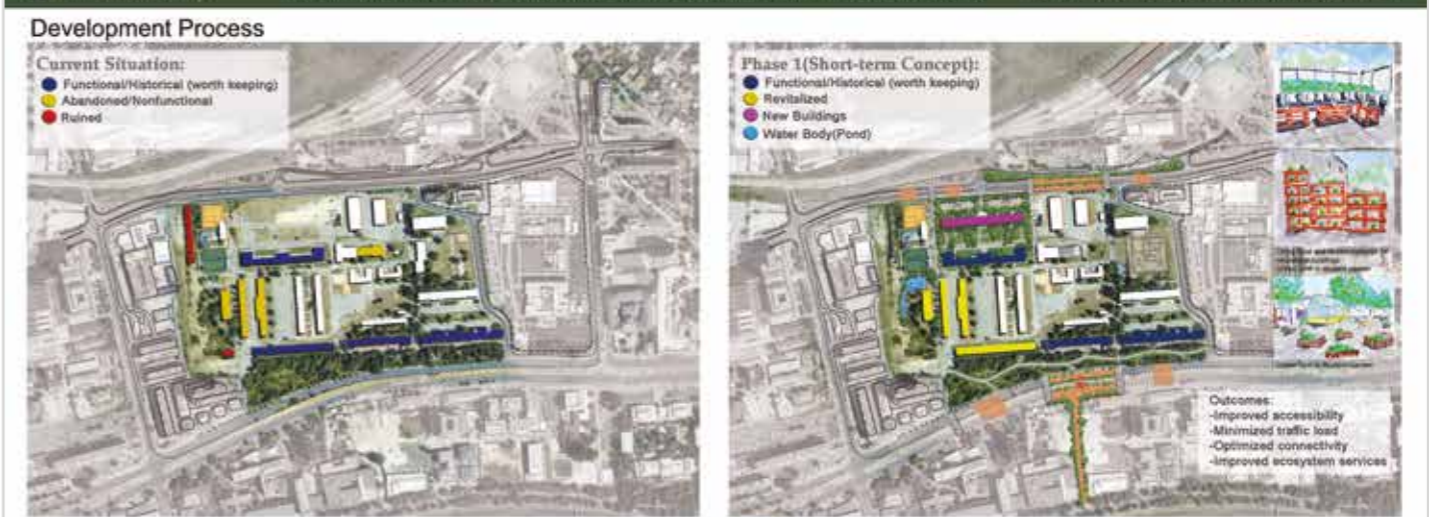
Sarajevo University Campus is located in a very strategic area which is surrounded by different land uses from residential, commercial to administrative. Looking at the urban pattern of the area specifically the neighbouring blocks imply a high potential of development for the campus. It looks like an unsolved piece of puzzle at the moment. By doing this multi-disciplinary project with the emphasis on the role of open space, we tried to come up with ideas which could serve both the campus and the urban context in a bigger scale. Findings from analysis in various categories show that the campus is suffering from the lack of some essential attributes like connectivity, accessibility, readability, identity and inviting public spaces. A wider look to the surrounding revealed that this site can be the missing ring of a connection chain from the hilltop landscape in the north to the riverside in the south.

Furthermore, for convenient access to the campus a suitable design of cross walks and street surfaces should be applied. Behavior mapping confirmed the confusing inner path network and the unfair distribution of facilities which made socializing spots limited. Generally, people avoid entering the paths which are not easy to read and follow. From the field observation, it was clearly perceived that there is no motivation to invite the public to enter the campus than having a shortcut to the train and bus stations. All in all, this campus is a good proof of a fact that changing the function solely cannot guarantee making a new identity. This explains the dominated military atmosphere in campus. It cannot be denied that financing the development of the campus has been the main

challenge since its establishment. For this reason, we propose three sequential phases of development based on motivating local and international investors by offering long term rent of lands with high commercial value. The first phase which can be interpreted as a short term concept starts by revitalizing some buildings in the south accompanied by an improved green area in west. Also in the north, the same approach would work if the construction of commercial and educational buildings with the front parking area was carried out by a local investor. Being in the main view and its close distance to the inner city road and public transportation stations can be tempting. The remained low cost improvements like the student garden, south side green buffer zone, cross walks, street texture, and connectivity to the surroundings could be financed by the municipality and initial budget of the university. In this phase, the new library will be constructed by the international investor as it is already agreed. In the last two phases, the rest of the developments can be accomplished by the profits gained from the local and international investments. Our design concept is based on fulfilling the needs of the campus resulted from the analysis. Conceptually, we took into account the existing spatial pattern of open spaces and built structures in the campus (rectangular frames) because applying a different pattern could end the concept to be less functional as an inevitable consequence. In other words, we proposed to have sequential rectangular frames with different sizes and levels of privacy suitable for both public and students. These spaces are connected by proper readable paths which provide choices for users.

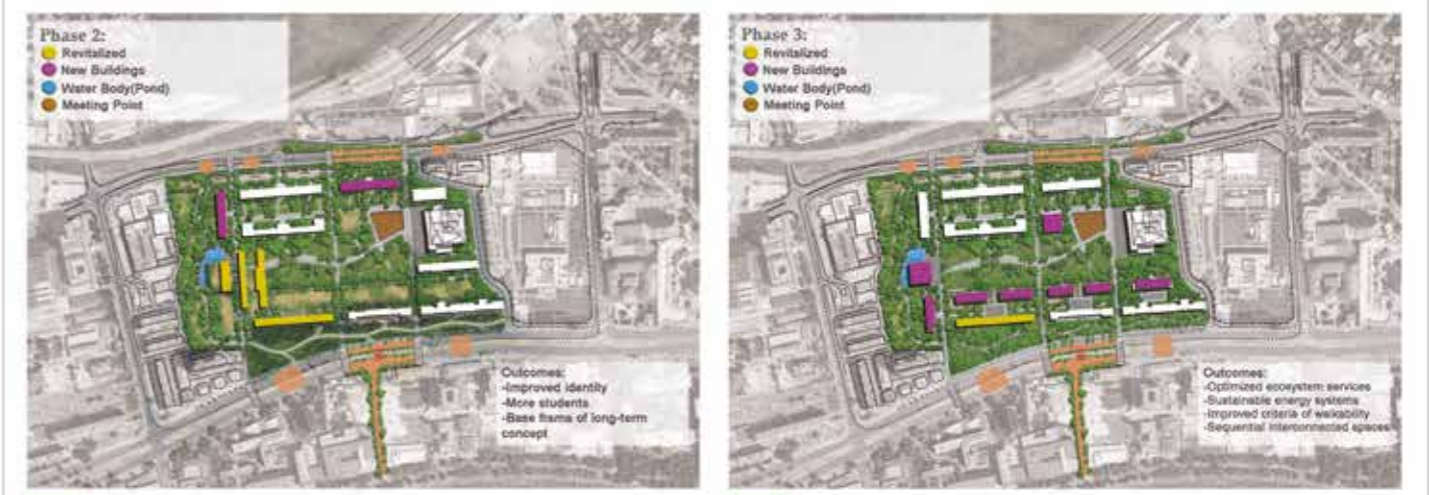






**Changes:**  
 Revitalizing historical and abandoned buildings in south-west  
 Building the pond and its surrounding green area in west  
 Building the faculty & Commercial Building with the front parking area in north  
 Preparing half of the student garden in north

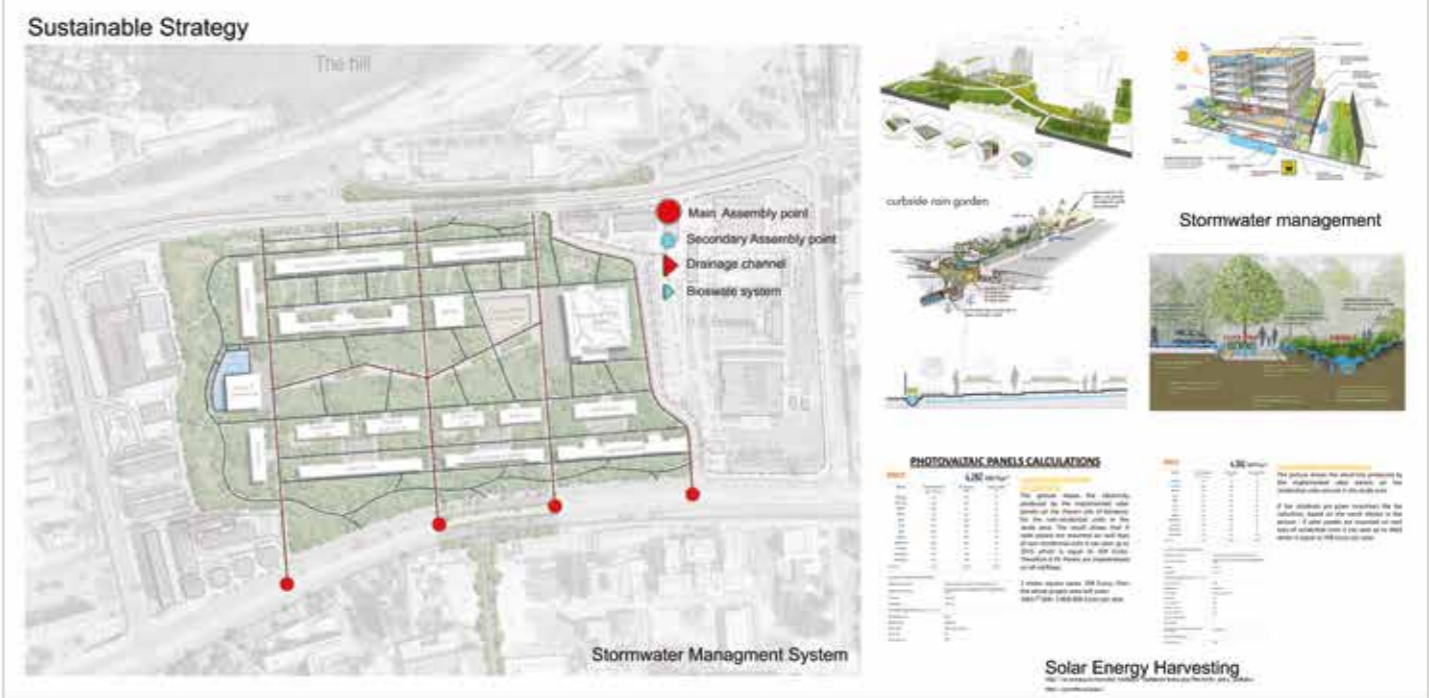
Improving green space in south  
 Changing the location of tram station  
 Designing new crosswalks and street surfaces  
 Connecting campus to the wider urban texture



**Changes:**  
 Library accomplishment with the bicycle parking in east  
 Completing the student garden in north  
 Building the faculty of Architecture with front green space in north  
 Building the dormitory in north-west

Building the meeting point in front of library  
 Making the foundation of polar connection from library to the pond  
 Green space accomplishment in west

**Changes:**  
 Building Canteen in front of the meeting point  
 Building the inner line of buildings within the main rectangular frame  
 Building the sport center and Gallery in west  
 Accomplishment of the central open space



# DIRECTION. NATURE. ACADEMIC.



Mohammad al Najdawi (IMLA, Jordan)  
 Achim Widera (HWU, Germany)  
 Yasaman Rahimi (IMLA, Iran)  
 Farzana Sharmin (IMLA, Bangladesh)  
 Yinglan Liang (IMLA, China)  
 Valentin Merti (HWU, Germany)  
 Emir Hasaganić (IMLA, Bosnia Herzegovina)

The power of open space - under this title we started our journey to Sarajevo discovering the Campus of Sarajevo University in the former army barracks. Our target was first to get inspired on site and to find out what could motivate us as landscape architects. The experience of living in Sarajevo for ten days was a great chance for us to understand the site and its context. We spent a lot of time observing the place, people and circulation analyzing the site to have better design decisions according to the needs of the community living in the city.

„This site is the last open space that we have in the city of Sarajevo“ That was one of the statements that one of the Bosnian audiences wrote on a small piece of paper after our first presentation that touched us and we decided to stop a while thinking about it.

D.N.A. Stands for What? Direction, Nature, and Academy - these three terms are summarizing our project physically and mentally as the concept of converting a military site into an academic campus considering the conservation of nature and open spaces in the same time the first impression of DNA delivers a message of Identity which is very important for new generation representing the future.

The site already contains existing buildings and we renovate some of them specially the three structures with facades facing the southern main street with the tram, and the roofless one will be crossed by people to interact with nature inside then start the

journey with the diagonal leading to the other side of the campus. The library building on the eastern side which will be constructed by 2022 as a public library facing the main plaza as meeting point then students can find their way to the academic buildings.

We used the concept of courtyard for planning the campus with main roads linking all zones together. Some existing buildings were demolished aiming to have better organized spaces and some existing buildings we used as a ruins creating by these walls an outdoor exhibition on the south western side of the campus could be used for seasonal occasions and galleries.

As we observed the location of the campus has a high potential to connect the river side to the south with the hills to the north so we suggest to link the existing cycling route next to the river to our site entering the diagonal, and we have on the top of the cafeteria building a structure for cable cars as a link going up to the hills.

It was a great experience for us, Mohammad, Farzana, Yinglan and Yasaman, to work in this semester on this project. Our international team had the opportunity also to meet new member from Sarajevo, Emir, and learn a lot and exchange knowledge from each other.

In this explanatory text we tried to clarify some points which could be more concrete with the visualization and graphics in our posters.

Main Project II  
 IMLA WiSe.2017/18

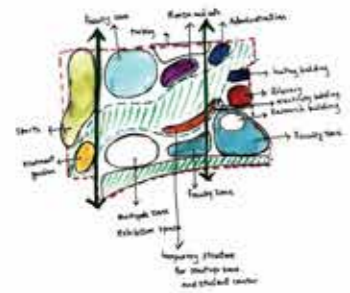
Ingrid Schegg, Christoph Jensen,  
 Ellen Fetzler, Uta-Stock-Gruber, Stefanie Gruber

Mohammad Al Najdawi/ Yinglan Liang/  
 Yasaman Rahimi/ Farzana Sharmin

# Direction. Nature. Academic

## Design (Long Term)

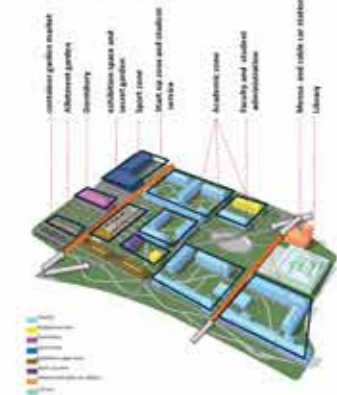
### Strategic Functional distribution



### Actors and Stakeholders



### Function mapping



- |                            |   |  |                       |
|----------------------------|---|--|-----------------------|
| 1. Faculty                 | 6. Parking area                             | 10. Sports & Recreation Center / Multipurpose hall/cafe/ winter indoor game zone | 13. Tennis court      |
| 2. Administration Building | 7. Open air Exhibition Space                | 11. Indoor Swimming pool   | 14. Community Garden  |
| 3. Mensa                   | 8. Cafe/exhibition space in ruined building | 12. Football field   | 15. Cable car station |
| 4. Library                 | 9. Assembly space                           |  | 16. Student dormitory |
| 5. Start-up zone           |   |  | 17. Green house       |



## Visualization



Entrance through the old ruin buildings



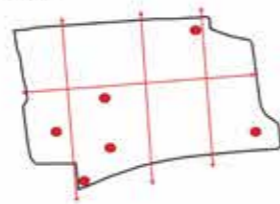
Allotment Garden & Container Garden Market



Secret garden Exhibition area and cafe inside the old ruin buildings



Walls of ruins as exhibition space and Temporal event space



Position of the Visualization



Entrance from the main road and public space



In the private courtyard for academic purpose

Main Project II  
IMLA WiSe.2017/18

Ingrid Schegk, Christoph Jensen,  
Ellen Fetzer, Uta-Stock-Gruber, Stefanie Gruber

Mohammad Al Najdawi/ Yinglan Liang/  
Yasaman Rhimi/ Farzana Sharmin

## Temporal Design Idea

## Timeline of Implementation

2017



Current situation



2019



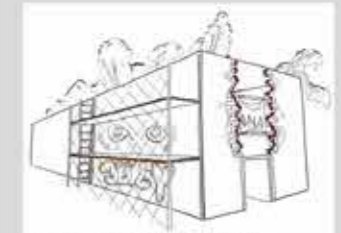
start



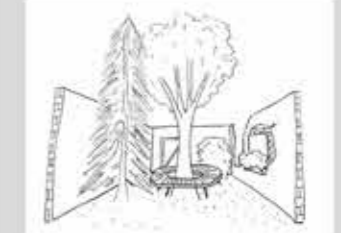
End of D.N.A project



Exhibition in the old ruins



Reclamation of the barracks



Secret gardens



Secret gardens



Viewpoint from the green



Container garden market

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Mohammad Al Najdawi/ Yinglan Liang/  
Yasaman Rhimi/ Farzana Sharmin

# CONNECTION TO THE ROOTS



Mansura Perveen (IMLA, Bangladesh)  
 Edvin Memić (IMLA, Bosnia Herzegovina)  
 Tatiana Nascimento (IMLA, Portugal)  
 Moritz Greiner (HWU, Germany)  
 Carolin Lenzser (HWU, Germany)  
 Nastaranossadat Jenabaliyahromi (IMLA, Iran)  
 Imela Bajrić (UNSA, Bosnia Herzegovina)  
 Haniyeh Golzardi (IMLA, Iran)  
 Sebastian Dages (HWU, Germany - not on the photo)  
 Lukas Drollinger (HWU, Germany - not on the photo)

Besides the various historical monuments which attract tourists, Sarajevo is also known as a university city, where a few thousand students come to develop knowledge and skills through private or public institutes. In Sarajevo, some of the first most famous schools in this part of the Balkans have been founded, which are present today. For the purpose of continuously increasing the number of students in this city, better education and lack of capacity of the space, it was necessary to find the best solution for solving this problem.

The university campus is located in between the streets Zmaja od Bosne and Put Života, which are the main streets and they connect the center of the city with other parts. There are several buildings from that period that were rebuilt and retained in their original form, while most of them were destroyed or new ones were made. Most significant are the three buildings located on the south side of the campus, as they have historical reference. One is used by the faculty, second is used for the purpose of the national library, while the third is not in use due to numerous damage, as well as due to the lack of roof structure. There are also various types of plant material present in the campus, which is very important for this part of the city. By surveying the historical background and getting more information about the city from different aspects, we got the idea of using oak tree which represents strength, connectivity and growing plan. Campus is located in an effective zone of the city; direct connections with bus station in the north and tram station

in south part. Its geographical situation which affects planning the most is the north view to the mountain and the close distance to the river.

We brought strong green connectivity in the campus site to have a comprehensive network with the purposes of: Having more convenient access; connection to the context; bringing people together; activating abandoned spaces; interaction between functions. We defined three main corridors which divide the site into four zones. Our focus was to bring the same quality of spaces through the campus. The corridors start to grow, the same as the trunks of trees, from green zones straight to north side to be attached together with the purpose of making a green edge in south side of the campus. Then we came up with the functioning zone according to the mobility map and required area. We put four parking lots at the edges of four sides of the site in order to prohibit the vehicles come inside. Two zones were considered as dormitory to accommodate the growing number of students attend the university. There is one project that will be implemented in the near future which is the library in east part of the campus and is considered as one significant orientation point. Therefore, we decided to have a large open space in front of it as a plaza to centralize variety of activities in one place which is accessible and visible from different sides.

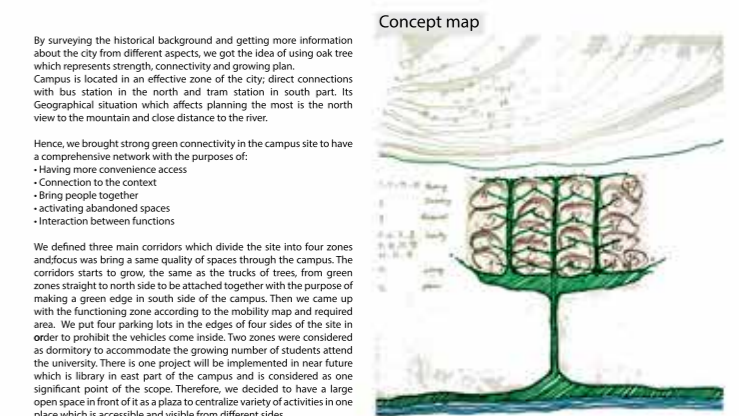
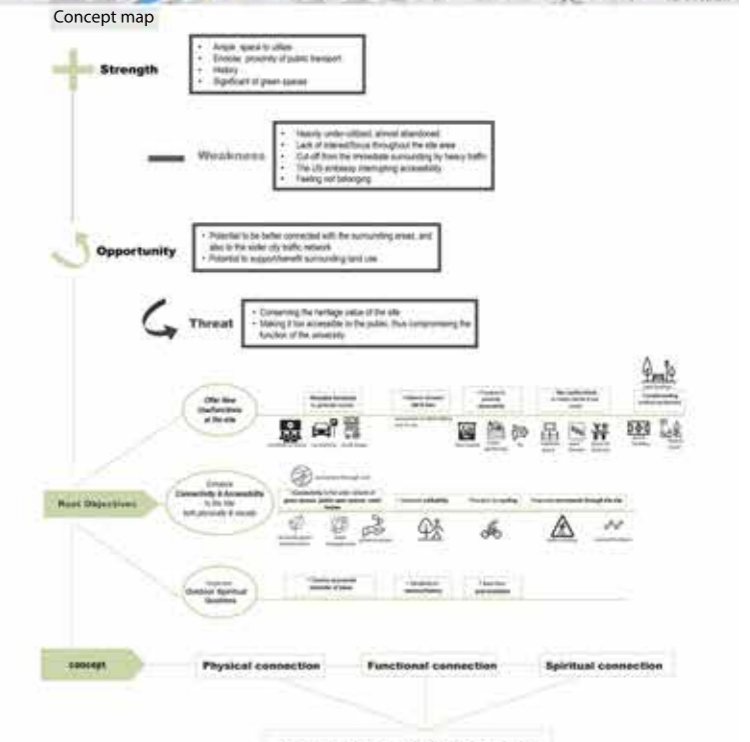
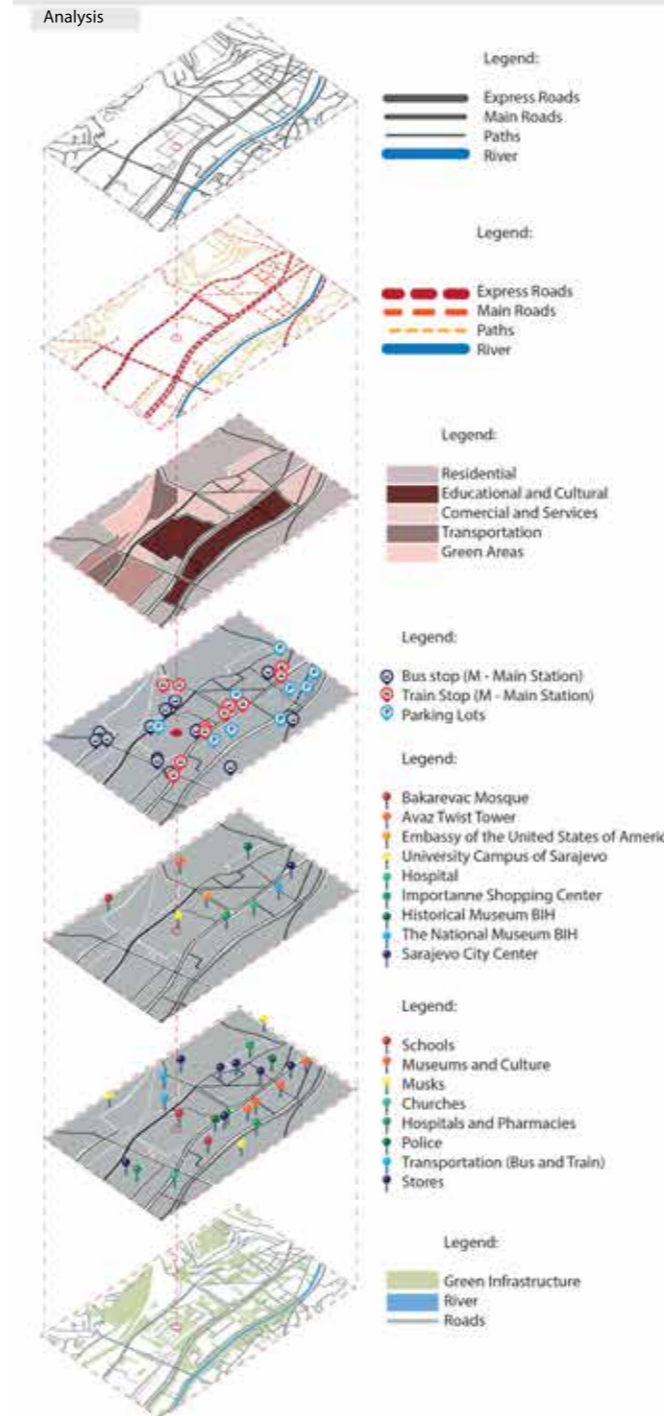
## The Power of Open Space - University of Sarajevo "Connection to the roots"

Sarajevo is the capital of Bosnia and Herzegovina, and also the largest city. It is located in the central part of Bosnia and Herzegovina, shaped by the Miljacka River, and surrounded by few hills. Beside the various historical attractions which attract tourists, city is also known as a university city, where few thousand students come to improve their knowledge, through private or public institutes.

In Sarajevo, some of the first most famous schools in this part of the Balkans have been founded, which are present today. For the purpose of continuously increasing the number of students in this city, better education and lack of capacity of the space, it was necessary to find the best solution for solving this problem. In this purpose, after the Second World War, where many buildings were destroyed, Baracks of Marsal Tito was given for using by the University of Sarajevo. This barracks was later renamed into a University Campus Sarajevo, which is still used for educational purposes.

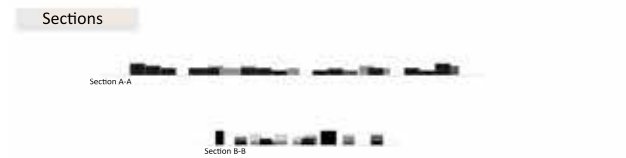
Campus is located in between the streets Zmaja od Bosne and Put Života, which are the main streets and they connect the center of the city with other parts. Near the campus there is a bus station as well as a train station, while on the south entrance, tram station is located.

There are several buildings from that period that were rebuilt and retained in their original form, while most of them were destroyed or new ones were made. Most significant are the three buildings located on the south side of the campus, and have historical reference. One is used by the faculty, second is used for the purpose of the national library, while the third is not in use due to numerous damage, as well as due to the lack of roof structure. There are also various types of plant material present in the campus, which is very important for this part of the city, where the presence of different types of trees is especially emphasized here.



Poster 1 Members: Edvin Memić, Haniyeh Golzardi, Mansura Perveen, Nastaranossadat Jenabaliyahromi, Tatiana Nascimento

The Power of Open Space - University of Sarajevo  
 "Connection to the roots"

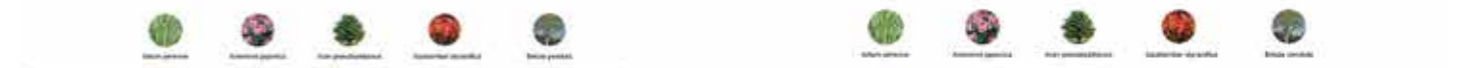


Poster 2 Members: Edvin Memić, Haniyeh Golzardi, Mansura Perveen, Nastaranossadat Jenabaliyahromi, Tatiana Nascimento



Poster 2 Members: Edvin Memić, Haniyeh Golzardi, Mansura Perveen, Nastaranossadat Jenabaliyahromi, Tatiana Nascimento

The Power of Open Space - University of Sarajevo  
 "Connection to the roots"



Poster 3 Members: Edvin Memić, Haniyeh Golzardi, Mansura Perveen, Nastaranossadat Jenabaliyahromi, Tatiana Nascimento

# THE GREEN WAY



Sarajevo is a war-torn city in Bosnia and Herzegovina, severely damaged by military groups which has caused great pains to the people of this city. However, many parts of this city have been rebuilt over the last twentythree years, but there are still lots of brownfield areas. The Campus of the University of Sarajevo is one of these remained places which have been ignored for restoration. This campus due to the unique location and its immense scale in the city has a great potential to be renovated and also could be considered as a new start for reconstruction of this city. While this campus is being used as an educational place today, but it is still under the influence of the former function as a barrack, and there are still also a lot of unused lots without clear functionality. In this project, our group as a first step has tried by analyzing different areas inside the campus as well as studying the outer effective points such as: the hill, railway station and bus station on the North of the site, tramway on the south, the existing of the residential area on the west, and also the building of the American embassy on the east side of the campus which surrounding the campus from all directions, to reach a general understanding in relation with this campus. Our three Bosnian group mates had a prominent role for clarifying some issues such as difficulties, weaknesses, and deficiencies like lack of green spaces and parks in Sarajevo, which all were necessary and useful to know for achieving a right comprehension regarding Sarajevo and its requirements. In the second step, we attempted to define various

and necessary functions on the basis of analysis which could happen in the future plan of the campus in different parts of the site. Then we had to find clear zones for each task separately. In this way, four zones are found, and by considering the exclusivity of each sector, the proper locations of zones were specified. According to the requirements which are existing for the future plan of the campus, we defined these zones as Cultural, Social, Educational and Economic.

Each of the mentioned zones is working as well as servicing in the related field. By applying this procedure we are creating a situation to invite different types of people with diverse ages, targets and motivations to the campus. Because of the lack of green spaces in Sarajevo, creating a vast green area exactly next to the main street which is being used by many people daily as a shortcut way to reach to the north side of the campus or vice versa was one of our main goal which could be used for socializing, gathering and so on. Furthermore, in Bosnia the government is encountered with lack of adequate funds for building infrastructures. As a result, in the economic zone there is a great opportunity to make money for covering the expenses of constructing building, and also maintaining.

In conclusion, there are still many ruined areas in Sarajevo, but this campus could be as a turning point for renovating this city.

## THE GREEN WAY

Site Analysis

Layers Analysis

Buildings

Greenery

Trees

Accessibility

SWOT Analysis

**S Strength**

- The southern green belt
- Existing of monumental heritage (sculpture of Marschal Tito)
- The significant site position in Sarajevo
- Existing a public route as a shortcut way
- The vastness of the site for planning all faculties

**W Weaknesses**

- Lack of proper operation of vacant lot
- Unusable buildings
- Lack of proper spaces for recreation & socializing
- Lack of suitable furniture
- Lack of proper fence/wall in the northern side
- Lack of significant & inviting gate as a main entrance
- The mined land in the green edge

**O Opportunity**

- Having appropriate access from different sides
- Having a nice scenery from inside towards hill in the northern side
- Location of the train and bus station on the both sides of the site
- The unique situation of the site between the hill and the river

**T Threat**

- Political issues (Existing the American embassy)
- High construction budget
- Cultural diversity

Desing Process

1. Considering main directions for identifying various zones

2. Creating new pattern by combination of former and added buildings

3. Achieving open spaces by composing constructions with directions

Overall Concept 1:2500

**Economic Identity:**  
In the economic zone those sectors which are money making, such as athletic complex, dormitory, commercial building and parking are located which could be considered as a source of income for covering the expenses of the campus.

**Educational Identity:**  
In the educational zone has been tried to place most of the faculties, and create an educational identity for this part.

**Social identity:**  
In the social zone more free green space has been considered with the purpose of making enjoyable as well as astonishing area for gathering as well as socializing, whether in the green spaces or the restaurant and cafe which has been situated in this area.

**Cultural identity:**  
In the cultural zone the library has the main role in this part, although, in this section we have also the statue of Marshal Tito as well as a special part between the faculty and library which has been seen as a suitable place for temporary exhibitions from artificial arts which could be take place monthly or annually.

Initial Ideas

Creating open spaces between different faculties

Reviving the main busy route which is connecting the north side of the campus to the south

Considering certain places for installing temporary pavilions

Locating a special area between the library and the faculty which could be used as a suitable place for social events and temporary exhibitions

Hochschule für Wirtschaft und Umwelt Nürtingen-Geislingen | Main Project II | The Campus University of Sarajevo, Winter term 2017 | Supervisors: Prof. Ingrid Schegk| Prof. Christoph Jensen| Prof. Stefanie Gruber| Dr. Ing. Ellen Fetzer | Amirhossein Mashayekhifard, 117410| Negar Rezaei Azghandi, 117412



A perspective from Pavilion in the southern part of the green open space in ( social identity zone) that could be used as a short term future plan in the site with the goal of gathering and socializing place



A perspective from Pavilion in the Northern part of the green open space in ( social identity zone) with the same functionality as the Pavilion in the Southern side of the campus



The view of this visualization is showing the special place between the library and one of the faculties in ( cultural zone). This place could be used as a social place with a cultural approach for taking place some events such as temporary exhibitions and so on.



The view of this visualization is showing the playground in the West side of the campus which is completely connected to the residential area which is located right on West edge.



This perspective is demonstrating the main horizontal way ( West to East) inside the campus which is exactly in front of the library too. In the middle of way a transparent roof has been considered which is covering the open space in front of the two faculties.





# IMPRINT

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