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**RESPONSIBLE EDUCATION OF ARCHITECTS –  
EXPERIENCE FROM INTERNATIONAL RESEARCH  
PROJECTS AT THE UNIVERSITY OF BELGRADE –  
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## RESPONSIBLE EDUCATION OF ARCHITECTS – EXPERIENCE FROM INTERNATIONAL RESEARCH PROJECTS AT THE UNIVERSITY OF BELGRADE – FACULTY OF ARCHITECTURE

### ABSTRACT

EAAE Charter on Architectural Research states that architecture is facing challenges of globalization, rapid urbanization, ecological disturbance and social transformation that necessitate permanent development in the field of education [1]. Educators, in particular, faculties and universities, need to understand and explain those changes and find a way to broaden the competencies of future generations to accept and deepen a responsible attitude towards the environment. Apart from permanent curricula improvements and innovative ways of intertwining research and teaching into a unique educational agenda, one of the essential components is also internationalization, both on the level of the study program and the level of student and staff mobility. The University of Belgrade – Faculty of Architecture is determined to strategically enhance the educational process through internationalization under the umbrella of Sustainable Development Goals (SDGs), Green Deal and New European Bauhaus. In that way, research and education expand horizons mutually, with international experience and expertise widening our knowledge and learning to accept differences and responsibilities as educators and architects.

**Keywords:** *architectural education, internationalisation, research in architecture, innovative study program*

## 1. BACKGROUND: RELATING ARCHITECTURAL EDUCATION AND RESEARCH

*“Architectural education should have two basic purposes: to produce competent, creative, critically minded and ethical professional designers/builders; and to produce good world citizens who are intellectually mature, ecologically sensitive and socially responsible.” [2]*

Today, in the age of the Anthropocene, engaging with different socio-economic, cultural and environmental conditions which influence the everyday quality of life, architecture is facing challenges of climate change, globalization, urbanization and social transformation [3]. These challenges need vital research and permanent development in the fields of practice and education [4]. Consequently, there has been a trend among architects, urban designers and planners to introduce a new paradigm of responsible thinking as a new approach to the design of the built environment with an emphasis on the concept of sustainability.

The architectural education sphere accordingly faces contemporary challenges, including a lack of concern for sustainability, the growth of faceless urban sprawl and deregulation, the deterioration of historic fabric, and the loss of local traditions and identities. Therefore, architectural education is committed to supporting this responsibility agenda and reconfiguring its curricula, involving art, science, design, conservation, planning, management, construction and representation, with the aim of addressing issues of ethics, aesthetics, culture and society [5]. Therefore, the horizons of architectural education are changing and nowadays are expanding rapidly, mainly through the collaboration of architectural research and education with the development of new technologies and media, with globalization and the frame of internationalization through European and Worldwide funds [5]. In this context, schools of architecture are faced with a new set of challenges emerging from the contemporary debate on architectural research, professional engagement, the broader cultural framework, as well as the national and international institutional environment [3].

Guided by the challenging context in which schools of architecture are developing, this paper aims to illustrate one of the models for strengthening the institution’s capacity and developing new study programs in line with contemporary educational strategies. The specific goal of the research is to provide an introduction to the current projects being implemented at the University of Belgrade – Faculty of Architecture and thereby provide an insight into the ways in which sustainability, and particularly a responsible attitude towards the environment, can be included in architectural education.

In the first part of the paper, a general framework on responsible education, the starting points for the subject research are explained, as well as the three key domains of action (cultural difference, mobility and flexibility, and widening knowledge base). The core shows the strategic initiative of the faculty through accreditation on one side and international Erasmus research projects on the other. The last part discusses the overall benefits of internationalization.

### 1.1. RESPONSIBLE EDUCATION FRAMEWORK

A considerable amount of attention has been focused recently on the responsible attitude toward the education of architects [2]. It is necessary to anticipate and act in respect to socio-political, environmental and cultural issues facing architecture so as to provide an

educational environment that is socially and environmentally responsible and acts in respect to sustainable goals.

In an open letter to the Architectural community, more than 2500 students and educators (<https://www.architectureeducationdeclares.com/>), namely academics, signed for a substantial curriculum change. It starts with the ecological crisis and goes into the unprecedented social, political and ecological challenges our generation is faced with. A wider scope of responsibility to meet an uncertain future with a socially and environmentally informed education is evident; therefore, a nuanced understanding and engagement are needed. The manifesto focuses on ecological understanding and interconnection between the social and ecological dimensions of the environment. However, it also proclaims that reevaluation of an existing and the development of a new deep competency, together with diversifying international cooperation and forming alliances, is an essential ingredient of a future responsible education. This way, the urgency of establishing a connection between education and sustainability as an overall approach is demonstrated. In this sense, environmental awareness is listed here as just one example that is the reason for a large petition that further indicates how many topics of education in the field of sustainability are not part of the formal curriculum.

Educators, in particular, faculties and universities, need to understand and explain those changes and to find a way to broaden the competencies of future generations to accept and deepen a responsible attitude towards the environment. Therefore, apart from permanent curricula improvements and innovative ways of intertwining research and teaching into a unique educational agenda, one of the essential components is also internationalization, both on the study program level and on the level of student and staff mobility.

## 1.2. INTERNATIONAL ARENA FOR EDUCATION

While debating on the link between education and internationalization, the current research framework on designing an innovative pedagogy for sustainable development in higher education is directed toward developing (1) an internationally recognized and accepted regional leader and (2) creating supportive strategies for improving the knowledge base and networking of researchers, students and institutions. The international arena is also essential for the development and improvement of teaching competencies. Therefore, there is a clear indication of the need for further enhancement of international research projects on one side and international recognition on the other, as tools that can contribute to creating responsible education for a sustainable environment at different scales. In this regard, one of the leading challenges for faculties and schools is the need to develop research that interrelates the leading sustainability agenda with internationalization and accreditation.

## 1.3. CHARTER, STRATEGY AND AGENDA FRAMEWORK

*“There is no doubt that the architect’s capacity to solve problems, can greatly contribute to tasks such as community development, self-help program, educational facilities, etc., and thus make a significant contribution to the improvement of the quality of life of those who are not accepted as citizens in their full right and who cannot be counted among the architect’s usual clients...Beyond all aesthetic, technical and financial aspects of the professional responsibilities, the major concerns, expressed by the Charter, are the social commitment of the profession, i.e. the awareness of the role and responsibility of the*

*architect in his or her respective society, as well as the improvement of the quality of life through sustainable human settlements.” [2]*

As the standard for architectural education within the international community, UIA Charter is an important medium for advocating social responsibility in architectural education around the world. The Charter sets forth a number of ‘General Considerations’ and ‘Objectives of Architectural Education’, which take a similarly strong stance on the role of social responsibility in the architectural profession. Points 0, 2, and 7 in General consideration and points 4, 5 B2, and 5 B3 in Objectives of Architectural education are those most relevant to this discussion of social responsibility in architectural education [2].

Among others, three issues prevail when the responsibility of architectural education is taken into consideration [7]. The first one implies acknowledging cultural differences. The second one focuses on expanding and reevaluating disciplines knowledge base focusing on sustainability Goals through awareness and responsibility towards the environment. And finally, the third covers mobility and flexibility of education, enhancing interdisciplinarity and diversity.

### **1.3.1. Acknowledge Cultural Difference**

Cultural diversity contradicts the ideas and concepts of globalization. While globalization has the potential to homogenize the world, a cultural difference diversifies subcultural values. Global perspectives and technologies flatten cultural variety and erase differences. Acknowledging cultural differences thrives to integrate architectural research and curricula considering global as well as local perspectives in terms of cultural, social, economic, environmental, and technical aspects of planning, designing and building [8] as to achieve the right balance between them and improve the way in which architecture as a discipline is perceived on both regional and global level. It values flexible education capable of conforming to different and diverse surroundings, learning to manage cultural differences as a means for all students to become more global in their outlook and behavior, as well as more flexible and effective in their own local environment.

In the era of the development of New European Bauhaus (NEB) as an initiative of hope and perspectives, we are experiencing a new cultural and creative dimension to the European Green Deal to enhance sustainable innovation, technology and economy [9]. NEB recognizes social practices, cultural activities and education programs as a beacon of the initiative and inspires new ideas. This recognition is confirmed within the NEB co-design phase, highlighting the crucial role of education and culture in the paradigm shift towards a new behavior and values.

Architectural education needs to position these concerns at the core of its program and a means of learning about them [10]. When cultural differences are understood as a resource, then all benefit. Instead of proclaiming the impossible global perspective, we should opt for cultural openness and sophistication. Employing a wide range of cross-cultural perspectives, the focus is on the flexibility of the global to fit the regional through an international framework.

### **1.3.2. Expand Knowledge Base: Research-based Framework for Education**

*“Tell me and I forget, teach me and I may remember, involve me and I learn.” [11]*

Bringing innovation into education implies permanent improvement of the curricula on the one hand and designing ways in which students can take an active role in the development of the syllabus. Therefore, the efficiency of pedagogy is under question [10]. A permanent change in curricula due to uncertain future needs is an essential ingredient of every study program. Teaching should grasp a critical momentum by generating a new approach to dealing with discords within and beyond the built environment [12]. Imbedding constant development and flexibility is one of the focal points of today's education agenda. Instead of redefining the core of education, we should consider adapting to current critical realities by rethinking and redesigning the relationship between teaching and learning [13].

The research-based framework for education is stimulated through the EAAE Charter on Architectural Research which highlights Architecture both as a Discipline and as a Field of Knowledge. It derives the following notions: (1) Architectural Research as a generator of knowledge base, mode, scope, tactics and strategies, (2) Research by Design as a pathway through which new insights, knowledge, practices or products come into being, and (3) Connection to Other Disciplines as a fertile for trans- and inter-disciplinary endeavors [14].

Architectural education needs to seek new relations between education and research, focusing curricula toward urgent topics and through a problem-based methodology. Employing a wide range of cross-cultural perspectives and multiple set of skill development models drawing on place-based and case-based study approach results in an inter-cultural and trans-cultural exchange of knowledge and experience.

### **1.3.3. Enhance Flexibility and Mobility on the International Level**

*“Practice is the raw data on which architectural knowledge is founded”* [6]

Curricula that embrace this notion have better chances to increase student motivation in learning, and they foster student engagement [15]. The four pillars of this specific pedagogical approach are: 1) to push students to think outside of their comfort zone and inside their personal capabilities, 2) to create collaborative and beyond-disciplinary experiences, 3) to blur the academic and industry boundaries by engaging student's projects into the industry opportunities from the beginning of the process, and 4) to reinforce experimentation towards a positive environmental and social impact [16]. Also, architecture incorporates knowledge of other disciplines. It is comprised of practice-based and place-based education, inter- and trans-disciplinarity and global connectivity. On the other side, opportunities offered by digital technologies and global connectivity through internet platforms and social media put pressure on education to reimagine the learning framework and introduce flexible and adaptable knowledge delivery. Architectural education needs to understand and accept mobility as a means to support and widen the base upon which architecture as a discipline is conceived.

All three measures of responsible education capitalize on each partner's diversity of perspectives and practices being offered in hopes of providing innovative solutions and culturally different perspectives. Educators have to be sensitive and advocate for multicultural competency to facilitate international research and education. Through awareness of one's own disciplinary culture and sensitivity to others, international research may provide creative solutions for future education. By embracing cultural differences, a research-based framework for education as well as enhancing mobility and flexibility of the teaching and learning agenda, various aspects of education practices blend together, enriching architectural education to better suit a sustainable future.

## 2. CASE STUDY: UNIVERSITY OF BELGRADE – FACULTY OF ARCHITECTURE

The University of Belgrade - Faculty of Architecture is the oldest school of architecture in the region, with over 170 years of experience in educating architects and engineers. It is aimed at the development, promotion and dissemination of knowledge in the field of architecture and urbanism. The specificity of the study program is based on an integrative approach to teaching and learning architecture in which fields of Urbanism, Architectural Design, History and Theory, Technologies and Construction intertwine, providing a unique experience where technical and technological sciences, arts and humanities, and social sciences overlap and engage with current social, political, spatial and environmental issues.

During the Bologna process and through permanent accreditation processes since 2008, and particularly since 2012, the Faculty has been building a flexible and adaptable program structure that corresponds to the European educational arena, with the idea to expand institutional networks and borders as easily as possible, ensuring compatibility. In this way, the knowledge exchange, mobility and institutional networking are facilitated and simplified. While undergraduate studies are a place to gather basic knowledge and tools in all areas of the discipline, master's studies are focused on one of the offered modules (Architecture, Urbanism, Technologies and Structural Engineering) or the master's studies of Interior Architecture or Integral Urbanism and enable more profound research in focused areas of expertise for both teachers and students. In order to further emphasize the international perspective, the Faculty has been accredited by the RIBA validation system since 2014, and again in 2021, which gives the Diploma worldwide legitimacy. The RIBA accreditation process particularly emphasizes the importance of connecting all theoretical, experimental and applied knowledge and techniques through a Design studio as a focal point of an architect's education, and enables the almost palpable connection between research, education and practice through a single learning framework. Finally, starting from the second year, students have the possibility to slowly individualize their studies according to their interests. The selection rate increases with the year of study, where by the fifth year, only 20 per cent of credits are obligatory, which gives students additional self-confidence, enabling them to study abroad, and additionally provides the opportunity for teachers to connect with their colleagues from other institutions through various programs in order to form joint programs, study units and courses.

Belgrade, on the other hand, with its rich history and culture, represents a fertile ground and a platform for learning and acquiring knowledge through different scales and in different fields of education. As such, it is also attractive on an international level, as it intertwines diverse political and cultural-historical influences providing a fertile ground and a complex built environment full of educationally interesting and challenging topics. Thus, having that in mind, the Faculty of Architecture in Belgrade provides a vibrant field for the development of an international framework for the development of the connection between research and learning. In this sense, the Center for Research was launched in 2018 as a strategic platform for developing learning and research, promoting student and teacher results, encouraging extracurricular activities, exhibitions and alike.

Today, the Faculty is strategically following the sustainability agenda, reaching the goal of responsible education through three distinctive tracks. The first one considers international accreditation. The second one follows urgent global discipline problems on the international level through relating research and education. The third focuses on the development of

existing and new study programs that offer flexibility and mobility, as well as on regional visibility and leadership.

Future perspectives are reflected in the development of partnerships with international partners with the aim of developing: a) international joint study programs, international summer schools, b) a research platform for the development of key topics dealing with environmental problems, c) collaboration with the aim of tailoring and disseminating different public policies and strategies on the national level, and d) mobility support for teachers and students through various funds. One of the next steps is building a platform for cooperation between faculties in the region, which would aim at networking for mutual support in the application and implementation of projects, as well as for the exchange of teachers and students.

### 2.1. INTERNATIONAL ACCREDITATION

International accreditation systems vary substantially. According to various research [17, 18] on individual accreditation criteria in the world's leading education countries, it is evident that social responsibility is being, almost universally, acknowledged and embraced [2]. Although responsible accounting has always been a part of all strategic documents, it has not found an adequate way to become an integral part of the study program, and it is not widely applicable. The need to form a measurable system of review and evaluation of aspects covering environmental and social responsibility in the design process has not yet been established.



Figure 1. RIBA Exhibition. 1 October 2021. Source: <https://exhibition.arh.bg.ac.rs/>

International accreditation is a voluntary procedure applied by faculties in order to carry out internal control and self-evaluation and define the degree of modernity of the school on the one hand, as well as to align the faculty program and strategy with international standards and strategies aimed towards sustainable development recommendations on the



other hand. NAAB and RIBA international accreditations are the most common in the field of architecture [19,20]. Both go in line with the UIA general consideration focusing the assessment on a strong connection between study contents and learning outcomes through Student Performance Criteria.

It is a valuable bottom-up approach in which a structural variety of the local study program is being kept with a flexibility to focus on the global outlines through the structure and learning outcomes of the whole study program. The study program is not a fixed matrix but a flexible and open project in which learning outcomes outline the whole structure, leaving the specificities of the content on the regional level. In that way, the creativity of the curricula is preserved, as well as the diversity and particularity of the school, with particular topics given according to the global aims and perspectives of the future profession and practice.

Given the growing relevance of accreditation and recognition, the first step for UB AF was acquiring RIBA validation so as to be ranked and perceived [21]. For the Faculty of Architecture in Belgrade, the process of RIBA accreditation was beneficial for two main reasons, being (a) internal reevaluation and (b) external recognition. Therefore, the Faculty outlines the RIBA accreditation as a tool of continuous assessment for the architectural program to foster competitiveness in both academia and professional practice. It validates equivalency for professional practice worldwide and compatibility of the outcomes on a global scale. On the school level, it promotes equality, grade levelling among peer students and educators, content transparency, focusing on introspection and balancing between teaching agendas through curriculum development and learning outcomes through student results.

## 2.2. INTERNATIONAL COOPERATION

An increase in international cooperation is necessary to encourage knowledge exchange and help architecture schools to develop in a more systematic, scientifically aware and internationally recognized way [21]. Funding helps to establish a mutually valued framework as to develop synergies and strategies to transfer knowledge and locally engage, and to globally deepen the teaching and learning capacity building.

In academia, architectural education is supported by research, both directly through research projects and indirectly by providing for permanent knowledge exchange and development [14]. The goal of architecture students' education is to master design and research tools, with the idea of developing analytical, critical and reflective knowledge. As future architects, they must recognize the problem, determine its position in relation to society and proctor, that is, conduct a critical analysis and dynamic research, and independently propose a spatial synthesis.

Given the growing relevance of establishing the relation between research and education, the first step for UB AF was the assessment of ERASMUS + projects. It is important for the Faculty of Architecture in Belgrade for two reasons, being (a) knowledge exchange on the international level and (b) recognition of the variety of research specializations on a national and regional level.

Therefore, the Faculty outlines the ERASMUS project HERSUS (<https://hersus.org/>), which proposes enhancing and testing innovative teaching practices in the field of sustainability of the built heritage. The project strives to enhance the competence and motivation of

educators and researchers to include curricula elements that will have tangible results, preparing students and educators to become real actors of the environmental change. The practice and education in the field of architectural and urban design related to raising awareness about the sustainability of the built environment and heritage face numerous challenges, such as social transformation, climate change, globalization, urbanization and housing issues. HERSUS target groups (teachers/trainers/tutors, and students) need specific training and teaching activities within the frame of sustainability of the urban and architectural heritage: (1) a new profile of an architect/urban designer, a professional that is trained in the broad architectural domain, who owns technical, technological, socio-humanistic and artistic skills and, therefore, is equipped to contribute to the socio-environmental challenges, and (2) a new profile of architectural educator capable of assuming responsibility for the improvement of education and training of future architects to enable them to meet the expectations of 21st-century societies worldwide for sustainable human settlements in every cultural heritage. (<https://hersus.org/> - The material used to describe the HERSUS project was taken from the project application and intellectual outputs).



Figure 2. HERSUS Intellectual Outputs. Source: hersus.org

The main project objective is to create and pilot new innovative courses/groups of courses/extracurricular activities within existing study programs of the participating HEI, which can contribute to bridging the gap between sustainability and heritage. HERSUS aims (1) to enhance existing study programs at the MSc level, and (2) to achieve a stable and sustainable education framework complementary to the globally established goals in the field of architectural and urban studies education.

The results of the HERSUS project and the longer-term impact lie in five output perspectives:

- The development of new and innovative courses/groups of courses/extracurricular activities and teaching methods for urban and architectural design schools in Europe.
- The first phase of the project creates state of the art in the field of urban and architectural design education in line with the concepts of sustainability and

heritage through a review of good practices, a critical questionnaire report and Statements for Teaching through design for Sustainability of the Built Environment and Heritage Awareness.

- The second phase is focused on strengthening the research and practical relationships between sustainability and heritage frameworks.
- In the sense of the transnational strategic partnership established between urban and architectural design schools in Europe, processes and synthesis of project results will be disseminated at the national and European level through the Sharing Platform open publicly. The participating organizations share common interests and ambition to enhance cross-culture connectedness and to enhance a sustainability-based approach in the learning-teaching design process
- The improvement of the quality of teaching and curricula provides innovative methods developed through teacher seminars and student workshops that will allow to increase and update the educational offer in sustainability and heritage thematic framework within urban and architectural study programs.

Therefore, the project has introduced and enhanced all three perspectives of internationalization. The experience gained so far from this project shows the importance of looking at specific topics at the international level, where all phases of the study program development, from the understanding of basic concepts to the scope of learning methodologies within the discipline of architecture and urban design, are checked, harmonized and developed uniquely.

### 2.3. STUDY PROGRAM

Blending different educational environments opens various horizons. It opens and expands school abilities and enables sharing of competencies among partners. It points towards understanding different legislation frameworks, increasing mobility, levelling up the faculty competency and enabling the study program development within which the competencies of several different schools and frameworks intertwine. It also harmonizes the legislative framework at the international level, ensures the development of studies in English, and the development of current global topics at the local level. Finally, it provides a change in the local perspective in terms of targeting a particular group of countries or a particular topic or specialization.

Given the growing interest in the topic of responsibility and awareness of Modernist heritage, the faculty outlines the Master program RMB – REUSE OF MODERNIST BUILDINGS (follow-up of the ERASMUS+ program: REUSE OF MODERNIST BUILDINGS. DESIGN TOOLS FOR SUSTAINABLE TRANSFORMATION. The material used to describe the RMB project was taken from the project application and intellectual outputs.

RMB is an educational platform on a European level based on existing research, educational practices and reference projects in the RMB partner countries with the aim of developing a unique strategy for learning about the reuse of modernist buildings. The adaptive reuse of buildings has been the subject of considerable attention by the end of the 20th century. RMB collects existing national and international results from different European regions to develop them as new transnational teaching material. In this relevant professional area and research field, a European approach to reuse can integrate different European contexts in

respect to the varied urban fabric, cultural and socio-political heritage, as well as climate and morphology specificities on one side and regulatory framework on the other side.

The RMB study program is based on togetherness and interdisciplinary work, a holistic vision where collaboration leads to excellence and new visions in a cross-fertilizing process. Innovation in RMB lies mainly in the way it addresses a specific topic (reuse) on a specific segment (modern movement) and does this by enclosing national and regional knowledge, combining it and making it accessible to an international global audience.

All RMB partners strive for a broadening of their international activities. The increased interaction between national and international activities necessarily implies a qualitative boost. The national and regional position of the HEIs increases significantly with the following perspectives:

- Education can be used more effectively; educational offerings can be developed and deployed in different places, thus achieving more with less.
- The exchange of ideas, knowledge and research activities will, by definition, lead to an increase in the quality of the HEIs and, thus, of the European educational system.
- The smaller HEIs benefit from the experience and the wider educational offer of larger partners. The larger HEIs benefit from the flexibility of the smaller ones.
- The interaction with academics, professionals and institutional partners will offer a solid network for future employment opportunities and applied research.
- The dissemination of scientific and design results (conferences, magazines and websites) will positively impact the RMB partners' position in local and international contexts.

In general, RMB contributes to the realization of the EU strategies for increasing the attractiveness of the European Higher Education Area. Modernism and modern movement architecture are completely intertwined with European history and identity. RMB works with this heritage, promotes it, and questions the positive and negative aspects of this heritage, making it a part of being in Europe. RMB establishes a network of European universities with a legal status and awards a European joint degree. It establishes automatic mutual recognition of learning periods across the member states. To conclude: RMB actively aligns skills with the needs of the labor market.

Given the growing need for framing the mutual international platform for joint degree, the faculty outlines the ECOBUILT project (The material used to describe the ECOBUILT project was taken from the project application and intellectual outputs). The reason for undertaking ECOBUILT Consortium is based on the recognition that the framework of research, practice and education in the field of architectural and urban design faces numerous eco-oriented challenges and thematic issues such as climate change, environmentally sensitive development, green economy, sustainable cities and human settlements, and preservation of biodiversity and ecosystems. The above-mentioned challenges require the improvement of curricular and extracurricular activities in higher education, which should be transnationally carried out; to equip the future graduates of the program with the knowledge, skills, and competencies which will help them to set the trends in a dynamically changed environment; to embrace new concepts of teaching and learning in a subject field;

to effectively work in different locations and cultures, and to bridge Europe's skills and competencies gap in an Eco-friendly Built Environment.

The concept of the project is to develop an integrated Master program in an Eco-friendly Built Environment aimed at training highly qualified professionals who will be able to design and restore buildings and landscapes in urban and rural settings with a minimal impact on human health and the environment. The concept of the ECOBUILT is to design a multidisciplinary program with regard to the-state-of-the-art trends in architectural and urban design education, and the philosophy of the green architecture. The program will bring together several scientific fields: architectural design, civil engineering, circular economy, and horticulture.

Whatever the track, it will be based on three topical approaches: sustainability, diversity, and practicality. The methodology behind the ECOBUILT will take into account region-specific features in terms of culture, climate conditions, and natural resources to cover diverse settings presented by the project partnership: historic and classic Italian environment; medieval and modern Latvian urbanism; hills and rivers in Serbia, and steppe and rivers in Southern Russia. Besides, all the territories involved in the project are within different climate zones: subtropical - Serbia, Mediterranean Italy, moderate sea zone in Latvia, and moderate continental in southern Russia, which will provide an opportunity to develop design solutions for diverse settings.

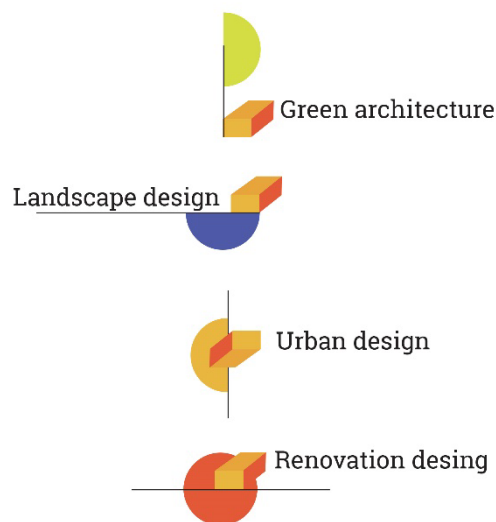


Figure 3. ECOBUILT Track. Source: UB ECOBUILT Team

Therefore, both ECOBUILT and RMB help each partner faculty expertise to permeate each other, building a program that meets the needs of modern society in accordance with international strategies of sustainability.

### 3. CONCLUSION: TOWARDS RESPONSIBLE EDUCATION

The UNESCO/UIA Charter gives us an inspiring vision of the role of architectural education and the architectural profession in addressing society's challenges and needs. It provides a

suitably ambitious set of criteria to serve as a benchmark for national and international architectural education accreditation criteria, and will hopefully serve to guide the profession toward a future in which all architectural education program produces graduates who are inspired and empowered to take an active and effective role in helping society to meet the challenges ahead [22].

UB-FA benefits from the project by expanding the network through both the international visibility on the account of RIBA accreditation, and enhancing the dynamic development of the study program through research projects. Firstly, the awareness of the way to include sustainability and the attitude towards sustainable education becomes more developed. The faculty also has the opportunity to cooperate with experts from the wider national framework and enable students to access new professional paths. Furthermore, students and programs taught at UB-FA through an international perspective can become recognized and verified for those areas in which they still do not have developed human resources. Research projects provide funds for the study program development and motivate teachers to constantly develop expertise in the areas in which they work. They provide a platform for testing new teaching techniques and models. Lastly, the overall international agenda provides students with work in a specific learning environment, especially when it comes to multiple learning models (from one-to-one to one-to-many) through extracurricular workshops, seminars and alike.

The architectural schools, as a whole, are places for international research practice par excellence that should be transferred to educational practices. Valid architectural research, which goes in line with internationally validated and responsible education, produces outputs (1) meaningful and relevant for the discipline and society; it explores regional limits and internationally expands them, (2) important for better spatial understanding. It also broadens knowledge (3) through intellectual work characteristic of architecture and design practice; (4) through varied methods, contexts, processes and results communicated and submitted to regular internal and external peer review. In the end, internationally enhanced responsible education creates and exploits trans-disciplinary connections. A clarification of this position is necessary, stimulating stronger links between different cultures, between theoretical and practice-based research and between academic and professional arenas.

In that way, research and education expand horizons, mutually developing educational strategies and methodologies, and updating curricula, with international experience and expertise broadening our knowledge and learning to accept differences and responsibilities as educators and architects.

In the light of responsible education that supports the agenda of sustainability, it is necessary to reconsider the role that education plays in building the profile of an architect. It is clear that a paradigm shift is inevitable, with an emphasis on connecting research, learning and practice. It can be said that one of the basic challenges facing education is the conflict between the rigorous rules imposed by the study program structure and creative research that requires a sustainable and responsible approach. In this sense, curriculum development must simultaneously ensure the integration of these fields and provide a dynamic and adaptable transfer of knowledge that lies in the essence of a responsible and sustainable relationship to space and, therefore, also to the disciplines of architecture, tourism and urbanism.

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## AUTHOR'S BIOGRAPHIES

**Ana Nikezić** lives and works in Belgrade. She holds a PhD in Architecture (2006) with more than 20 years of teaching experience in the area of Architectural and Urban Design and over 14 years of experience in research projects. Since 2010 she has been a member and mentor for the elaborations of doctoral thesis. In 2015 she was named Vice Dean for post-graduate studies, and in 2018 Vice Dean for Education and Research. Nikezić is fluent in English and has solid knowledge of French. She has published more than 30 papers in monographs, magazines, journals and conference proceedings of international importance. Nikezić is the author of the book "Formats for Urban Living – Family House in a Contemporary City" and editor and one of the authors of the scientific monograph "Playing Landscape – Košutnjak: Principle of Architecture Design in the Context of Climate Change", published by the Faculty of Architecture. Her research and architectural design are regularly exhibited at the Salon of Architecture and at the Salon of Landscape Architecture. She was also a member of the organizing and science committee for a number of national and international conferences. She has also participated in a significant amount of international and national workshops. She is particularly interested in connecting the theoretical and practical dimensions of designing and architecture in general. A direct contact with students represents a special pleasure and an opportunity to acquire new experiences and strengthen her knowledge. Particular academic attention has been brought to the subject of relations between architecture and nature, architecture and urban culture, sustainability and heritage, as well as to the subject of socially responsible architectural education based on an interdisciplinary approach.

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## ОДГОВОРНО ОБРАЗОВАЊЕ АРХИТЕКАТА ЗАСНОВАНО НА ИСКУСТВУ ИНТЕРНАЦИОНАЛНИХ ПРОЈЕКТА

**Сажетак:** Архитектура се суочава са изазовима глобализације и урбанизације, еколошких поремећаја и друштвених трансформација које захтевају стални развој у области образовања. Уколико желимо да разумемо, објаснимо, предвидимо и утичемо на последице ових промена, да припремимо и развијемо компетенције за будућу генерацију архитеката, интернационализација образовне арене је од суштинског значаја. Универзитет у Београду – Архитектонски факултет опредељен је да интернационализацијом унапреди образовни процес. На тај начин, истраживање и образовање проширују хоризонте и са међународним искуством и експертизом обједињују и унапређују наше знање и учење да прихватимо разлике и одговорности као едукатори и архитекте.

**Кључне ријечи:** *архитектонско образовање, интернационализација, истраживање у области архитектуре*