UOU4EUROPE Project: A Teaching Model for the UNIVERSITY of EUROPE

Letter from the director

Sánchez Merina, Javier[1]

[1]Department of Graphic Expression, Design and Projects / Alicante University, Spain
https://orcid.org/0000-0003-1973-690X
jsm@ua.es

NEEDS, RELEVANCE, AND FEASIBILITY OF A STEP BEYOND

Last October the University of Alicante (UA) was represented at the TRANSFORM4EUROPE International Conference: "Innovative Teaching and Learning Methods in Higher Education (INNO-METHODS)", held in Kaunas (Lithuania). Our participation was decisive in consolidating two points that justify the present proposal and the need for this teaching model:

A) In the first place, after the presentation of our paper "Enhancing students' critical thinking at UNIVERSITY of Universities", it became clear that the hybrid teaching experience we are developing in the Architecture Degree with numerous European universities, is putting numerous teaching innovations into practice.

The comments made by the audience, most of them experts in education, valued the results obtained from the incorporation of different types of Blended Learning Models:

The Flipped Classroom Model, the Enriched Virtual Model, the Individual Rotation Model, the Flex Model, the A La Carte Model, Inquiry based learning, Object based learning, Collaborative learning.

Our initiative, known as UNIVERSITY of Universities (UOU), is an educational program consisting of fortnightly workshops exchanged between international architecture schools. Originated during the pandemic with six universities, the success of the program is evidenced by its rapid growth, with forty-two universities currently participating:

ALICANTE UNIVERSITY (SPAIN) / AMERICAN UNIVERSITY DUBAI (UAE) /BERGEN SCHOOL OF ARCHITECTURE (NORWAY) / BOLOGNA UNIVERSITY (ITALY) / BRANDENBURG UNIVERSITY OF TECHNOLOGY (GERMANY) / BUDAPEST UNIVERSITY OF TECHNOLOGY (HUNGARY) / EDINBURGH SCHOOL OF ARCHITECTURE AND LANDSCAPE (UK) / ENSAP BORDEAUX (FRANCE) / ENSAM REUNION ISLAND (FRANCE) / EUROPEAN UNIVERSITY MADRID (SPAIN) / EVORA UNIVERSITY (PORTUGAL) / GERMAN UNIVERSITY IN CAIRO (EGYPT) / ION MINCU UNIVERSITY (RUMANIA) / INTERNATIONALE HOCHSCHULE HAMBURG (GERMANY) / KARLSRUHER INSTITUT FÜR TECHNOLOGIE KIT (GERMANY) / KTH SCHOOL OF ARCHITECTURE (SWEDEN) / KU LEUVEN BRUSSELS (BELGIUM) / LONDON SOUTH BANK UNIVERSITY (UK) / MALMÖ UNIVERSITY (SWEDEN) / MEF UNIVERSITY İSTANBUL (TURKEY) / POLITECNICO DI MILANO (ITALY) / PORTO UNIVERSITY (PORTUGAL) / UNIVERSITÀ MEDITERRANEA REGGIO CALABRIA (ITALY) / QUEEN'S UNIVERSITY BELFAST (UK) / UCLOUVAIN (BELGIUM) / UNIVERSITÀ DI NAPOLI FEDERICO II (ITALY) / UMEÅ UNIVERSITY (SWEDEN) / UNIVERSIDAD POLITÉCNICA DE MADRID (SPAIN) / UNIVERSITY OF BRIGHTON (UK) / UNIVERSITY OF LINCOLN (UK) / UNIVERSITY OF LJUBLJANA (SLOVENIA) / UNIVERSITY OF NICOSIA (CYPRUS) / UWE BRISTOL (UK) / WROCLAW UNIVERSITY (POLAND) / YASAR UNIVERSITY IZMIR (TURKEY) / ANKARA AYBU UNIVERSITY (TURKEY) / PEDAGOGICAL UNIVERSITY OF CRACOW (POLAND) / KAUNAS UNIVERSITY OF TECHNOLOGY (LITUANIA) / UNIVERSITY OF NAPLES FEDERICO II (ITALY) / POLITECHNIKA WROCŁAWSKA (POLAND) / UNIVERSITATEA DE ARHITECTURA ION MINCU (BUCHAREST) / TALLINN UNIVERSITY OF TECHNOLOGY (ESTONIA)

Reunion Island School of Architecture

Reunión Island

Umea School of Architecture

All of them are totally committed to the organization of workshops that are carried out in parallel, in such a way that multiple options are offered to the students, thus enabling the personalized learning that they wish:

https://uou.ua.es

Each workshop is directed by an academic expert from one of the schools involved, and all students participate in it. This is organized in international work groups through the MOODLE learning platform. The techniques involved adopt a learning model centred on the student, making use of the flipped classroom, and inquiry-based learning and collaborative engagement.

An important part of **UOU** is the interdisciplinary and intercultural nature of the workshops, combining architecture, urbanism, and art.

This teaching experience is only possible thanks to the use of Learning and Communication Technologies (TAC); it is multilingual, developing a horizontal, inclusive, participatory teaching-learning process that engages with the gender perspective in the design processes. In addition, it strengthens the student's commitment to their education.

In addition to the fundamental use of MOODLE resources provided by the UA Vice-Rector for Digital Transformation over the past five academic semesters, and the Publications Service offered by the UA Vice-Rector for Research and Knowledge Transfer for the dissemination of the work developed, it is also necessary to mention the work carried out by the UA research Network last year; the "**UNIVERSITY of Universities**", which served to define the 21st century classroom, a space that goes beyond its materiality.

With all this great help we have achieved, from a realistic

perspective, and building with imagination - as if it were a building - a revolutionary learning structure based on the idea of exchanging intercultural techniques and methods: a whole innovative model for the **University of Europe**.

B) However, the recognition from the Kaunas Conference has provoked an important reflection: it is no longer enough to work only from intuition.

From now on, it is essential to identify the different methodologies used in the teaching practice among the different universities participating in this international network. In addition, it is necessary to be able to evaluate the knowledge and attitudes acquired, not only by the students, but also by the teachers participating in **UOU**.

The viability of the proposal is taken to be indisputable, evidenced by the **UOU** teaching in the module of Architecture Design Studio (International Group) of the Degree of Architecture at UA and, of course, the continuously growing number of students and professors from universities that are part of **UOU**.

BRIEF DESCRIPTION AND PURPOSE OF THE PROJECT

UOU4EUROPE is a two-year Project, each year having well-defined goals:

- The first year consists of identifying the different methodologies used in teaching practice so that they are included in the guide for the module Architecture Design Studio offered in the **UOU** program.

- The second year of work focuses on evaluating the knowledge and skills acquired by the students who participate, as well as the attitudes developed by them in comparison to the

European University of Madrid

IUBH Internationale Hochschule, Hamburg
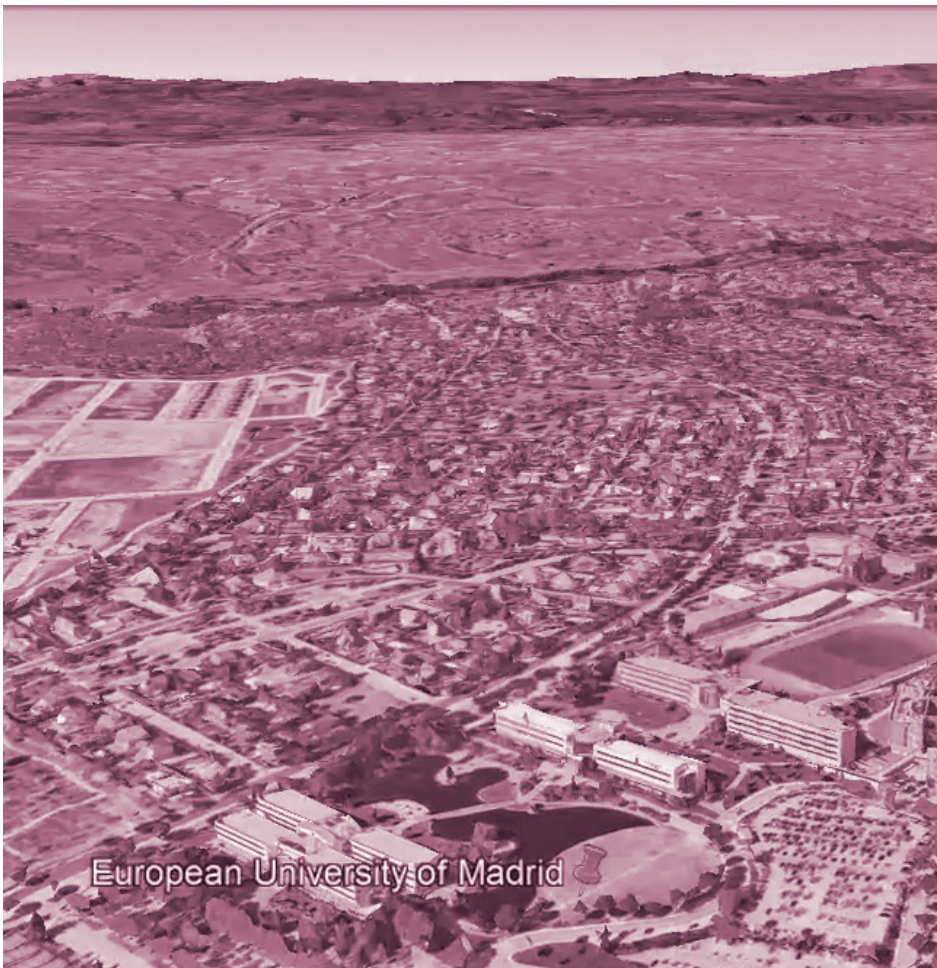
groups taking this degree who do not participate in **UOU**.

The attitudes developed by the teachers will also be evaluated.

In the methodology section, it will be detailed how each of the phases is carried out.

OBJECTIVES TO ACHIEVE

By putting into practice the teaching innovations valued at the international conference in Kaunas, the **UOU4EUROPE** Project aims to identify the teaching methodologies that are used in the different universities that participate in **UOU**, and make an evaluation of the knowledge and attitudes acquired by students (as well as attitudes acquired by teachers).

In conjunction with this, other objectives from **UOU** will also be achieved in parallel, which involves the incorporation of the following notions:

- Interculturality as defined by UNESCO: Refers to the existence and equitable interaction of diverse cultures and the possibility of generating shared cultural expressions through dialogue and mutual respect.

- The immediate response of the university will have the effect of exploding the bubble that can isolate us from society. It is about the capability of response to emergencies and other important facts; (one still gets emotional when reminding **UOU** professors and students to design reception areas for Ukrainian war refugees upon arrival in Poland), an attitude that in turn promotes the employability of the students.

- The incorporation of new advances that transform the role of the architect, such as Artificial Intelligence and the Metaverse.
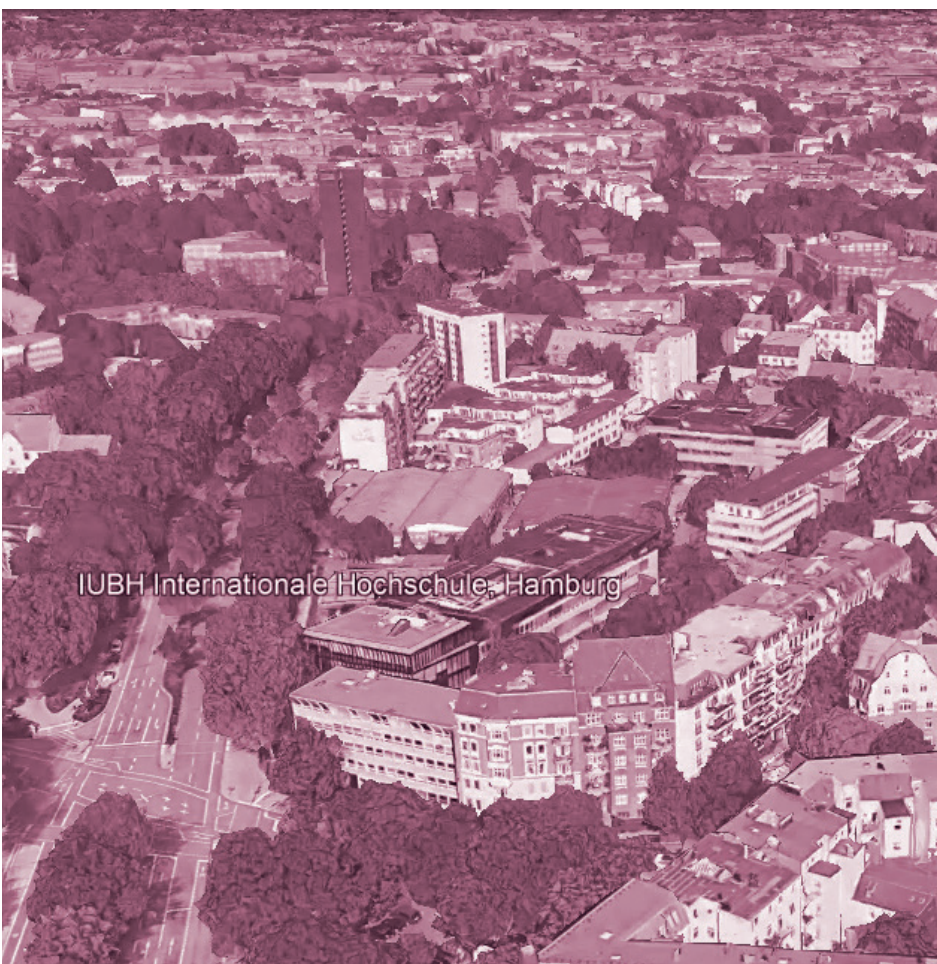
- To solve family reconciliation problems, thanks to this teaching innovation that transcends space and time.

- Sustainability; for example, not only by saving on transportation, but also on air-conditioning, avoiding economic difficulties in increasingly long hot periods, and aggravated by the sharp increase in the price of electricity.

- The possibility of "breaking borders in education".

Speaking of the Mediterranean, for example, only the upper part of it is usually mentioned from the European perspective.

From now on, the existing asymmetry, both political and economic, with North Africa will begin to fade as students from there study in Europe.

METHODOLOGY

A framework of assessment is established that includes internal factors:

Existing curricula, cultural expectations, language skills, design skills base, accreditations, etc.

And external factors:

A vision of an increased online learning, evolution of the pedagogical thinking, economic viability of the campus in the future, sustainability, and climate change, etc.

Which provides a solid reflection upon the last three years of **UOU**.

To this end, the following series of actions a to be carried out in the following two years of the Project are proposed:

- All the participants from the 42 schools of architecture will be organized into international research groups, each group coordinated by one of the members of this Project.
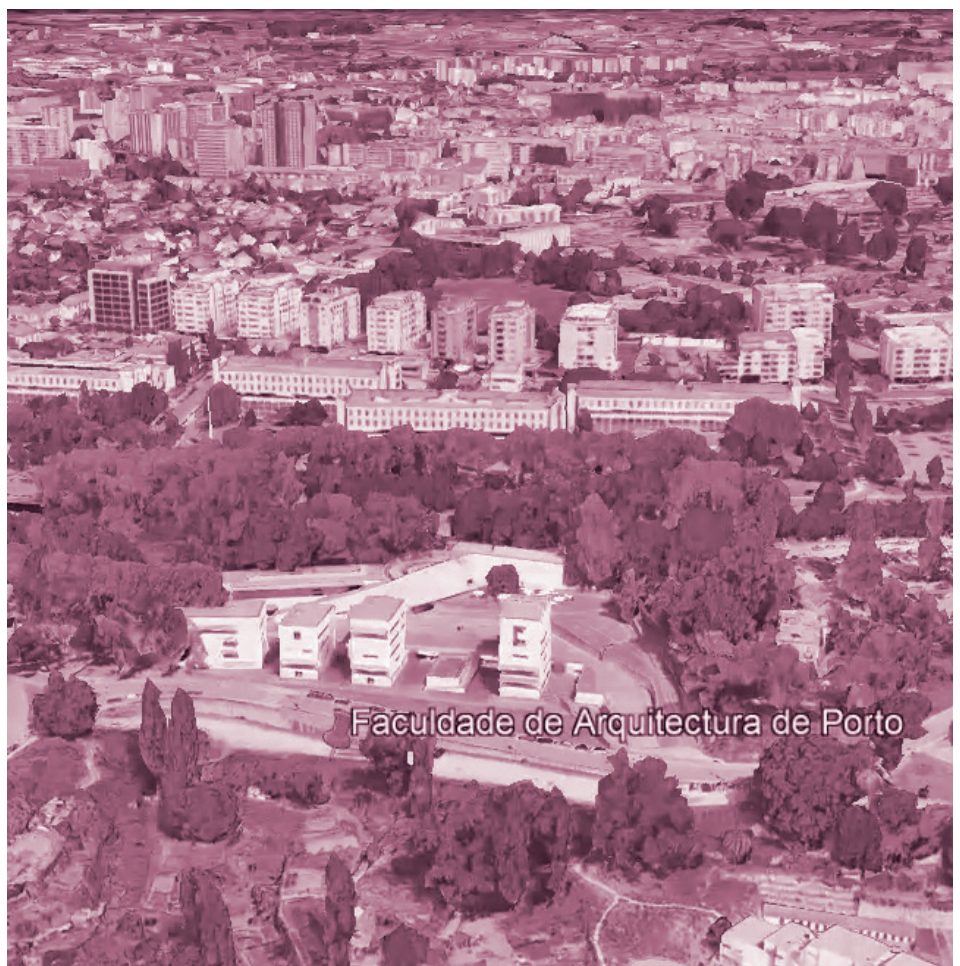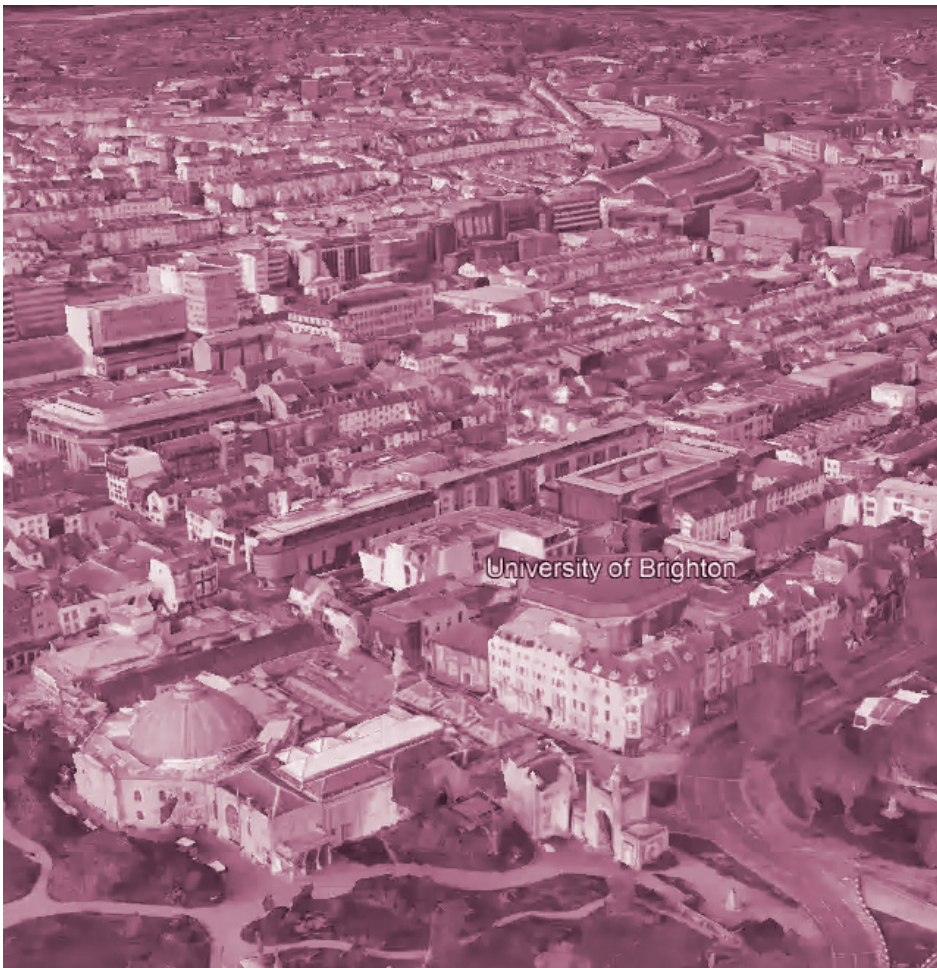
- During the first semester of the first year of the Project, each group will identify the methodologies, as a taxonomy.

- In the second semester of this first year, questionnaires will be designed that function as authentic quality indicator tools to improve the **UOU** teaching innovation experience.

In this way, Indicators will be established demonstrating the acquired Knowledge, and Aptitudes that evaluate the experience, and Skills.

In this phase, three questionnaires will be prepared:

- One to measure the knowledge acquired by the students in the module Architecture Design Studio.

- A second one to measure the attitudes developed by the students.

- And a third for the attitudes of the teachers participating in **UOU**.

But before being able to use these questionnaires for the purpose for which they have been designed, they will have to be validated by experts and through the Pilot Test.

Therefore, the next step will be, during the first semester of the following course, to formulate and elaborate a Pilot Test, concluding in the fourth semester of this Project, with a comparison between the students of the **UOU** Experimental Groups and those of a control Group.

Once the questionnaires have been validated, they will be used to assess the knowledge and attitudes of students and teachers in the Experimental Groups. Here, the number of Experimental Groups that participate will be indicated by comparison with the Control Group following the same subject, although taught in a traditional way.

The collected data will be analysed using filters that direct the focus to a particular subgroup, for example, of gender, cultural, or entrepreneurship.

This working plan is accompanied by seminars, held every six months at a UA partner university, which will serve to disseminate the advances of the Project internationally, all of them accompanied by their publication in the **UOU scientific journal**.

The series of 4 seminars along with the corresponding publications in the two years of the Project will, in turn, have an impact on the UOU's teaching strategies and methodology.

Among the 42 participating universities, 4 colleagues with innovative experience will be in charge of coordinating each research work group, and preparing minutes of the meetings that allow monitoring of the work of this first phase:

   - Maria Luna Nobile: Associate Professor / Umeå University, Sweden.

   - Markella Menikou: Associate Professor / University of Nicosia, Cyprus

   - Sofia Aleixo: Assistant Professor / University of Évora, Portugal.

   - Jerzy F. Łątka: Assistant Professor / Wroclaw University of Science and Technology, Poland.

   - They are joined by a collaborator from another degree at the UA, in the Area of Didactics of Experimental Sciences: Asunción Menargues Marcilla is the professor in charge of supervising the identification of methodologies and the design of questionnaires.

   - The Project is completed by the professors from the UA, Joaquín Alvado Bañón and
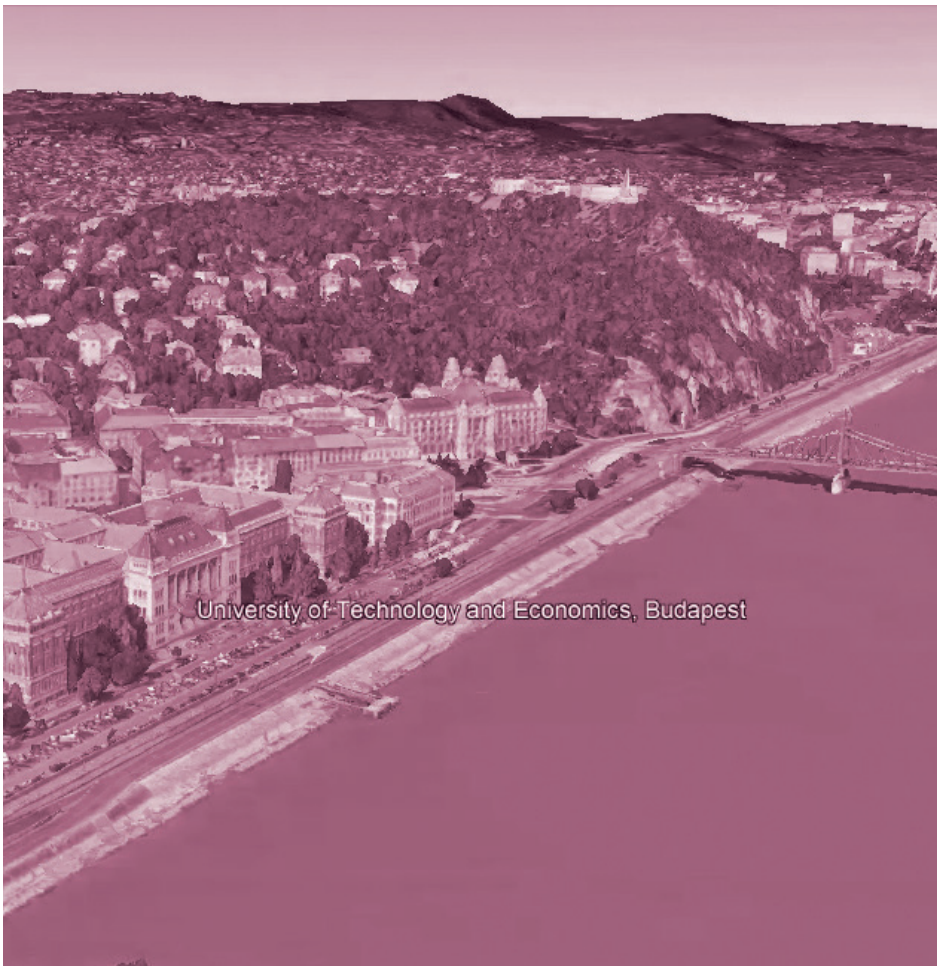
University of Technology and Economics, Budapest

UWE Bristol

Bristol

Javier Sánchez Merina. They will oversee the publications and seminars, as well as the dissemination of the work developed.

The second year ends with the full exposure of **UOU** as a UA Teaching Model for the "**UNIVERSITY of EUROPE**".

IMPACT, EXPECTED RESULTS AND SUSTAINABILITY OF THE PROPOSAL

The final document of the **UOU4EUROPE Project** is necessary for the consolidation of such an ambitious and exciting teaching proposal that is **UOU**.

Firstly, this is due to its continuous growth, which presents it as an international model for the "**UNIVERSITY of EUROPE**".

But, in addition, and focusing specifically on architecture schools, it is urgent for them to take the step from a teaching carried out by the intuition of architects to a solid educational program that contrasts with, and complements, its more typical outcomes.

This is the real impact to be achieved as a result of the objectives of this Project, and that will ensure the sustainability of the proposal over time:

The conclusions of the Project will enable us to analyse and reason the evidence of success:

A growing model, an international and cultural development of the future architect.

It embraces 'personal responsibility' in education, multidisciplinary learning, expansion of the skills base, employability, etc., at the same time as acknowledging challenges such as: national accreditations, campus versus the agendas and

pressures of online learning, the need for an element of co-management, and the 'formalisation' of what, up to now, has been a voluntary agreement for the advancement of the learning of architecture.

This international teaching approach in shared studios has rethought the learning space.

The commitment of so many academics and practitioners has enabled a timetable that sequences learning and skill development and, crucially, allows students to create their own curriculum. It is noteworthy how, being voluntary and not too institutionalized, it allows for immediate architectural responses to contemporary problems, much faster than traditional curricula.

As already mentioned, examples include responding to advances in artificial intelligence and the Metaverse or allowing students from across Europe to jointly design welcome areas in Poland for Ukrainian war refugees.

The Project will also identify how **UOU** seeks to engage beyond Europe, breaking boundaries in education by actively encouraging participation from other continents.

Participants now include, for example: university schools of architecture in Cairo, Reunion Island, Dubai and Izmir.