Erasmus+KA2 (IMPAQT)

Project Title:

[IMPAQT] Integrative Multidisciplinary People-centered Architectural Qualification & Training.

Project Partners:

European Partners:

- Technische Universität Wien – TUW
- Universitat Politècnica De Catalunya – ETSAB
- Universität Kassel – KU
- University of Cagliari – UNICA

Egyptian Partners:

- Nile University – NU
- Ain Shams University – ASU
- Suez Canal University – SCU
- Alexandria University – AU
- Housing and Building National Research Center – HBRC
- Engineering Consultants Group – ECG
- The Built Environment Collective – BEC

Scope of Work:

This 3-year project funded by the European Commission aims to breed architects capable of initiating a paradigm shift in Egyptian architecture practice; to become more integrative, multidisciplinary, people-centered, utilizing ICT enabling technology to better consider social, psychological and cultural dimensions of design and meet the needs of current and future generations, to create more supportive and inclusive settlements that positively impact human well-being, safety and satisfaction leading to the prosperity of cities convincing other actors and shapers of the environment to adopt this approach. A consortium of highly esteemed partners in their fields of specialization, from Europe and Egypt, come together to realize this vision through several outputs.

Vision/ Innovative Character/ Innovative Features:

The vision is to develop academic programs that are "innovative;" reconciling technology and culture, reconciling arts, social sciences and engineering, utilizing latest technology in a context-sensitive manner to address the challenges facing the building of human settlements that support and sustain the wellbeing, prosperity and fulfillment of human values.

Innovative elements include:

- People-oriented, experiential-based teaching material founded on multidisciplinary and integrative approaches that cuts across the scales of professional intervention (architecture, urban design, landscape design, urban planning).
- Programs that produce socially responsible architects who consider people's needs and lifestyles as a primary function of architecture and urban design based on an integrative knowledge of human interaction with place, of change over time, and of urban dynamics.

- Programs that equip architects to bridge the gap between theory, research, design and practice, as well as between disciplines offering interdisciplinary constructs, methods and tools of inquiry, participatory design thinking and grounded theories to understand and design the built environment.

- Programs where this integrative approach to architecture is enabled by a strong IT component that maximizes the efficiency and expands disciplines into dimensions beyond their conventional boundaries.

- Programs that capitalize on the integrative thematic strength of each partner university and introduces Virtual Reality, and 3D scanning to provide media and tools for the new generation of architects to further their capacity in documentation, analysis, design and evaluation.

- Programs that offer unique courses to all academic partners relying on the rich context of the Egyptian experience as an open City Lab that embodies diverse phenomena, challenges and opportunities and lessons relevant to the future of cities worldwide.

Aims and Objectives:

The aim of the project is to develop a new breed of architects capable of initiating a paradigm shift in Egyptian architecture practice; to become more integrative, multidisciplinary, people-centered, and technologically agile, utilizing ICT enabling technology to better consider the social and psychological dimensions of design and meet the needs of current and future generations, to create supportive and inclusive settlements that positively impact human well-being, safety and satisfaction leading to the prosperity of cities convincing other actors and shapers of the environment to adopt this approach. This is realized through the following objectives and milestones:

- Develop gap analysis of architecture education, role of architecture in community, integrative approaches and ICT enabling technology.

- Develop ECTS-based 5-year undergraduate academic system in integrative architecture and urban design offered at NU/SCU/AU with EU-student exchange ingredient.

- Develop professional training modules for integrative approaches and tools in Building Ecology, Contemporary Cities and Human Behavior.

- Introduce Virtual Reality and ICT as enabling technologies and develop Egypt's first Virtual Architecture Studio for 3D stereoscopic, immersive, shared learning environment.

- Develop the academic program in a modular fashion integrating core architecture and urban design knowledge with social, environmental and human factors.

- Develop integrative human and practicum "plug-ins" for existing courses offered at EG universities.

- Accredit developed program in EG and EU.

- Establish exchange links between EG and EU.

- Implement the program during the project lifetime.