

Intended Learning Outcomes for the Architecture Program at the University of Petra, Faculty of Architecture and Design

Knowledge and understanding:

- K1.** Demonstrate knowledge and understanding of concepts and theories of basic applied, architectural sciences, and aesthetics appropriate to architecture.
- K2.** Demonstrate knowledge and understanding of the basics of information and communication technology (ICT).
- K3.** Demonstrate knowledge and understanding of the principles of architectural design and planning, as process and product.
- K4.** Acquire knowledge and understanding of different histories and theories of architecture across different eras.
- K5.** Illustrate and describe solutions for different problems in various ways verbally or graphically.
- K6.** Identify different building construction and execution design methods and techniques.
- K7.** Identify the different elements of the natural environment, different energy types, appropriate environmental control techniques and different technical installations in buildings.
- K8.** Understand architectural physical and computer modeling, simulation, rendering and presentation techniques.
- K9.** Demonstrate understanding and appreciation to the social, environmental, ethical and economic considerations and human factors affecting the exercise of the architectural decisions.
- K10.** Identify problems, list clients' needs and requirements and gather relevant information.
- K11.** Demonstrate knowledge and understanding of building regulations and legislations in practicing architecture as well as administration and management principles relevant to architecture.

Intellectual skills:

- I1.** Ability to define and analyze different design problems.
- I2.** Compare, analyze and criticize different case studies, evaluate design alternatives and conclude results based on analytical thinking.
- I3.** Solve architectural problems often on the basis of limited and possibly contradicting information.
- I4.** Visualize and graphically express forms in two and three dimensions.
- I5.** Ability to derive different alternative solutions and reach architectural decisions considering balanced costs, benefits, technology applicability, safety, quality, reliability, site constraints, urban planning context and environmental impact.
- I6.** Select and appraise appropriate ICT tools to a variety of architectural problems.

General and transferable skills:

- T1.** Write technical reports and/or essays in accordance with standard scientific guidelines.
- T2.** Present reports and projects, and deliver presentations demonstrating efficiency in IT capabilities.
- T3.** Discuss conclusions and results of researches or assignments.
- T4.** Deal with others according to the rules of the professional ethics.
- T5.** Defend own ideas, share ideas and work with others.
- T6.** Lead and motivate individuals, and manage tasks and resources.
- T7.** Work coherently and communicate effectively as a part of a multidisciplinary team in researches and /or assignments and projects.
- T8.** Search for information and adopt life-long self-learning.
- T9.** Work under stressful environments and within constraints of time and budget.

Professional and practical skills:

- P1.** Ability to integrate knowledge and understanding of mathematics, science, art, information technology, design and engineering concepts to design and plan buildings and to solve problems
- P2.** Conduct research and collect data from different resources
- P3.** Use appropriate techniques for representation
- P4.** Design architectural projects within proper technical, safety and ethical frameworks
- P5.** Prepare working drawings and construction documents for design projects
- P6.** Use appropriate computer programs in architectural works
- P7.** Build architectural physical and computer models
- P8.** Use special field/lab devices (design manuals and computers)
- P9.** Demonstrate project administration and management skills