

## **Curriculum Plan of Master Degree in Architecture/Thesis Program**

### **First: General requirements**

1. This curriculum plan conforms with the general framework of the Master Program.
2. Majors that are eligible to the Master Program
  - A- Bachelor of Architecture.
  - B- Bachelor of Urban Planning.
  - C- Bachelor of Urban Design.
  - D- Bachelor of Landscaping.

### **Second: Special Requirements:**

Not applicable.

### **Third: This plan consists of the following:**

A- Compulsory Courses (9 cr. hrs.), level 700

	Course No.	Course title	Cr. Hrs.	Weekly Hours	
				Theory	Studio
1-	0902700	Research Methods in Architecture	3	3	-
2-	0902711	Advanced Theory of Architecture	3	3	-
3-	0902721	Methods of Urban Design & Planning	3	3	-

B- Elective Courses (15 cr. hrs.), level 700 to be selected from the following:

	Course No.	Course title	Cr. Hrs.	Weekly Hours	
				Theory	Studio
1.	0902701	Special Topics in Architecture*	3	3	-
2.	0902712	Architectural Communication Techniques	3	3	-
3.	0902713	Advanced Design Project	3	2	2
4.	0902714	Conservation of Architectural Heritage	3	3	-
5.	0902715	Architecture in the Islamic Context	3	3	-
6.	0902722	Environmental Design & Behavior	3	3	-
7.	0902723	Analysis & Criticism in Urban Design & Planning	3	3	-
8.	0902724	Housing Policies & Development	3	3	-
9.	0902725	Urban Landscape	3	3	-
10.	0902731	Architecture & Contemporary Technology	3	3	-
11.	0902732	Architecture & the Environment	3	3	-
12.	0902733	Advanced Computer Applications	3	2	2

\* Credits for this course will be considered only once even if the course content will vary.

C- Thesis (9 cr. hrs.), No. (0902799).

#### **Fourth: Course Description:**

##### **(0902700) Research Methods in Architecture**

This course aims at research methods used in the fields of Architecture and Planning with emphasis on scientific methods, formulation of hypothesis and computer use in architectural research. The course will introduce students to the objectives of scientific research, methods of data collection, data analysis and documentation. Students also will be given a detailed explanation of technical report writing.

##### **(0902701) Special Topics in Architecture**

This course is meant to be free in content within the fields of architecture, urban planning, urban design and housing. A proposed course content should be approved by the departmental council for graduate studies. This course will be credited for students only once.

##### **(0902711) Advanced Theory of Architecture**

This course concentrates on readings of architectural theoretical texts, including essays, treatises, drawings, and ideologies that have significant impact on architectural thinking. Analysis of theoretical texts to understand their underlying meanings. Three levels of analysis will be considered: first, the internal structure of the text, second, influences on the text, third, self reading guided by these two levels. To develop a critical analytical thinking that students can use in scientific research. The course will include a historical review of the ideas and thoughts of architectural critics and methods of criticism and analysis in architecture, and to be reflected on professional practice in architecture.

##### **(0902712) Architectural Communication Techniques**

This course is a study of the relationship between architectural and design ideas and tools used by architects for presentation of forms and spaces. This entails a critical analysis of different forms of architectural drawing, orthographic, praline, perspectival, and computer-generated drawings. It also entails a study of different tools used in their production such as models, photographic imaging, and cinematic techniques, and what may be enlisted under the general heading of “design technology”. This also entails a study of mechanisms and products of architectural design in relation to the mechanisms and products of related arts such as photography and film, as the products in Post-Industrial society.

##### **(0902713) Advanced Design Project**

This course is an analytical study to advanced comprehensive design project in an urban context that harmonizes with the contemporary architecture and enhances the urban built environment. Emphasis will be placed on the relationship between urban architectural space and on functional use and urban context of the given project. Emphasis also will be given to basic principles of architecture, urban design, urban planning and landscape architecture with readings to the tangible elements of architecture through design, in addition to historical, social and architectural heritage in design. The project will also use evaluation and comparison of distinguished examples of architecture and urban design and their relationship to the surrounding urban context.

### **(0902714) Conservation of Architectural Heritage**

This course deals with ideas and concepts related to conservation in architecture and its relationship to urban environment. Explanation of the various methods of conservation and their social, cultural, economic, technical and legal considerations. Analysis of case studies that includes local Islamic and foreign examples. Explanation of various methods of conservation and management of heritage buildings and historical sites. The course includes a study of the behavior of local societies and its effect on architecture and the environment and issues of conserving energy in buildings and human settlements.

### **(0902715) Architecture in the Islamic Context**

This course deals with the interaction between Islam and ancient civilizations. Impact of Islamic ethics on the architecture in different Islamic regions. Cultural, social, climatic, and environmental influences on the local identity of buildings in the Islamic world. Analysis of contemporary trends of architecture in some of the Islamic countries.

### **(0902721) Methods of Urban Design and Planning**

This course includes a study of basic principles in urban design through history especially civilizations that had impact on Jordan and Palestine. The concept of urban design, its development along with the analysis of shapes and functions of various urban spaces. The relationship between urban design and urban planning through the study of city development. Contemporary methods of urban design during the twentieth century. Theory of research, design, simulation and objective prediction. Methods of analytical policies. Examples of urban design and planning in various cities and capitals.

### **(0902722) Environmental Design and Behavior**

This course is a study of problems in the built environment including economic, social and ecological issues. The city as a social system. The relationship between people, the built environment and environmental behavior. Environmental perception, interaction between people and the built environment. Stages of human development on the surrounding environment. The impact of urban environment on people and the issue of adaptation and adjustment. Study of some problems related to the use of the built environment.

### **(0902723) Analysis and Criticism in Urban Design and Planning**

This course is to explain the theoretical principles of criticism and analysis of urban design. Analytical study of selected examples of international, national and local urban design schemes to explain lessons that relate to social, economic, technical and environmental issues. The role of urban design between urban planning and architectural design at the city level. The influence of the private and public sectors on the future of urban design. Presentation of some contemporary trends in urban design. Study of policies of urban design and the formulation of strategic objectives. Analytical study of the social, economic and environmental issues and their role in urban design in developing countries. Explanation of land use policies, regulations and planning criteria.

### **(0902724) Housing Policies and Development**

This course emphasizes the importance of low income housing in developing countries. Income groups in Jordan. Patterns of low income housing and target groups. Analytical study of national housing strategies and their effect on housing stock and limitations of supply and demand in the housing market. Issues of land supply for housing, building materials, building technology, and housing finance. Methods of planning, housing strategies and their relationship to development programs. The role of private and public sectors in housing supply for various income groups. The phenomenon of owner/builder in Jordan. The importance of post-occupancy evaluation in the process of decision making for the development of housing supply. The objectives of post-occupancy evaluation towards the development of more appropriate housing environment.

### **(0902725) Urban Landscape**

This course is a study of contemporary cultural and behavioral influences on design and planning of out-door spaces. Comparative studies on design of public spaces, community gathering places, and recreational areas, parks, and beaches in urban environment. The importance of ecological factors on design of the built environment. Analytical study of advanced models urban landscape sites in Arab World and international countries. A modern approaches to landscape practice in Jordan.

### **(0902731) Architecture and Contemporary Technology**

The course is to review the international socio-economic, cultural, and political transformation during the second half of the 20th century. Highlighting concepts of architectural design based on recent ideologies of advanced technology methods in building construction including hi-tech. A review of design concepts, hi-tech use employed by prominent contemporary architects. Review of local building codes.

### **(0902732) Architecture and the Environment**

This course is a study of the environmental factors and their implication on building design and materials. The comfort zone for human body, and the different means of environmental control in buildings. Means of structural control in buildings. Study of environmental control in traditional buildings by means of courtyards. Studying examples of buildings which adapt physical means of environmental control and appropriate technology versus mechanical equipment.

### **(0902733) Advanced Computer Applications**

It is an introductory theoretical aspect and relevant models for advanced computer aided design. The use of different equipment and techniques of computer in their different design stages. The use of software in 2D and 3D modeling and design. Different applications in design, simulation, shadowing, modeling, and presentation in architectural drawings. The use of special software for design management and categorization.

### **(0902799) Thesis**

According to the regulations of awarding Master Degree/ (Thesis Program) at the University of Jordan, students can select a topic in the field of specialty after completing two academic semesters. The student should present a written proposal

that will identify the title, main components and list of references. An advisor will be nominated to supervise research work. By the end of the third semester of the student enrollment in the Master Program, he or she should receive an approval on the presented proposal. The student will be required to present a report about the progress of research work to the chairman of the department at the end of each semester. This report should indicate the progress of research work. The advisor should comment on the report. The student will be required to defend his or her thesis by the end of the research before a jury panel that will be nominated by the relevant council in the department.

## **Curriculum Plan of Master Degree in Architecture/Comprehensive Exam Program**

### **First: General requirements**

1. This curriculum plan conforms with the general framework of the Master Program.
2. Majors that are eligible to the Master Program
  - A- Bachelor of Architecture.
  - B- Bachelor of Urban Planning.
  - C- Bachelor of Urban Design.
  - D- Bachelor of Landscaping.

### **Second: Special Requirements:**

Not applicable.

### **Third: This plan consists of the following:**

A- Compulsory Courses (19 cr. hrs.), level 700

	Course No.	Course title	Cr. Hrs.	Weekly Hours	
				Theory	Studio
1-	0902700	Research Methods in Architecture	3	3	-
2-	0902711	Advanced Theory of Architecture	3	3	-
3-	0902713	Advanced Design Project	3	2	2
4-	0902721	Methods of Urban Design & Planning	3	3	-
5-	0902724	Housing Policies & Development	3	3	-
6-	0902733	Advanced Computer Applications	3	2	2
7-	0902740	Seminar	1	1	-

B- Elective Courses (15 cr. hrs.), level 700 to be selected from the following:

	Course No.	Course title	Cr. Hrs.	Weekly Hours	
				Theory	Studio
1-	0902701	Special Topics in Architecture*	3	3	-
2-	0902712	Architectural Communication Techniques	3	3	-
3-	0902714	Conservation of Architectural Heritage	3	3	-
4-	0902715	Architecture in the Islamic Context	3	3	-
5-	0902722	Environmental Design & Behavior	3	3	-
6-	0902723	Analysis & Criticism in Urban Design & Planning	3	3	-
7-	0902725	Urban Landscape	3	3	-
8-	0902731	Architecture & Contemporary Technology	3	3	-
9-	0902732	Architecture & the Environment	3	3	-

Credits for this course will be considered only once even if the course content will vary.

C- Succeeding in the Comprehensive Exam (0902798).