

Course Plan for Architecture (Bachelor Program) No.: (2021/2022)

Approved by Deans Council by decision (19/2020-2021) dated (28/7/2021)

(165) Credit Hours

Study system / hybrid program

Type of specialty

Humanities

**Scientific
technical**

/

**Medical
Sciences**

Teaching style	Percentage of study plan hours / number	Model used (synchronous: asynchronous)
Complete e-learning courses	17% (27) Ch	1:1 (For THER. SAT.)
Blended Learning courses (For Humanities)	40% - 60% Maximum / number () C h	1:1 (For SUN. TUE.) or (MON. WED.)
Blended learning courses (for scientific and medical)	30% -50% Maximum / number () C h	1:1 (For SUN. TUE.) or (MON. WED.)
Traditional learning courses (for humanities)	20% Minimum / number () C h	2:0 For all academic divisions
Traditional learning courses (for scientific and medical)	30% Minimum / number () C h	2:0 For all academic divisions

Important note: (The teaching patterns of the subjects are distributed at all academic levels in the program)

Program vision: Building specialized competencies in the field of Architecture, provided with the knowledge, skills and leadership, creative and entrepreneurial competencies necessary to compete in the global labor market, through creative application in the use of information technology and modern teaching and learning strategies.

Program mission and objectives:

1. Achieving the conformity of the learning outcomes in all areas of specialization with the seventh level descriptors (knowledge, skills and competencies) in the National Qualifications Framework.
2. Integrating modern information technology and employing it creatively in the teaching and learning processes in order to achieve more effective learning and take into account the needs of the learner.
3. Promote the principle of self-sustainable, lifelong learning, and highlight the creativity of the learner in light of global changes through the application of various teaching and learning strategies
4. Integrating professional practice, technical skills, and architectural knowledge for students to meet the development needs of the labor market
5. Preparing the students with the architectural knowledge of leadership concepts for the professional practice after graduation.

Program learning outcomes ((MK= Main Knowledge, MS= Main Skills, MC= Main Competences)

Main knowledge	
MK1	A7: History and Global Culture: Understanding of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, ecological, and technological factors.
MK2	A8: Cultural Diversity and Social Equity: Understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the responsibility of the architect to ensure equity of access to sites, buildings, and structures.
MK3	B5: Structural Systems: Ability to demonstrate the basic principles of structural systems and their ability to withstand gravitational, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.
MK4	B6: Environmental Systems: Ability to demonstrate the principles of environmental systems' design, how design criteria can vary by geographic region, and the tools used for performance assessment. This demonstration must include active and passive heating and cooling, solar geometry, daylighting, natural ventilation, indoor air quality, solar systems, lighting systems, and acoustics.
MK5	B7: Building Envelope Systems and Assemblies: Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.
MK6	B8: Building Materials and Assemblies: Understanding of the basic principles used in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies

	based on their inherent performance, including environmental impact and reuse.
MK7	B9: Building Service Systems: Understanding of the basic principles and appropriate application and performance of building service systems, including lighting, mechanical, plumbing, electrical, communication, vertical transportation, security, and fire protection systems.
MK8	B10: Financial Considerations: Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.
Basic skills	
MS1	A1: Professional Communication Skills: Ability to write and speak effectively and use appropriate representational media for both, within the profession and with the public.
MS2	A2: Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
MS3	A3: Investigative Skills: Ability to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.
MS4	A4: Architectural Design Skills: Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design.
MS5	A5: Ordering Systems: Ability to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.
MS6	A6: Use of Precedents: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects.
MS7	B1: Pre-Design: Ability to prepare a comprehensive program for an architecture project that includes an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); a review of the relevant building codes and standards, including relevant sustainability requirements, and an assessment of their implications for the project; and a definition of site selection and design assessment criteria.
MS8	B2: Site Design: Ability to respond to site characteristics, including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation, in the development of a project design.
MS9	B4: Technical Documentation: Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

MS10	C1: Research: Understanding of the theoretical and applied research methodologies and practices used during the design process.
MS11	C2: Integrated Evaluations and Decision-Making Design Process: Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.
MS12	C3: Integrative Design: Ability to make design decisions within a complex architecture project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.
General competencies	
MC1	B3: Codes and Regulations: Ability to design sites, facilities, and systems that are responsive to relevant codes and regulations, and include the principles of local life-safety and accessibility standards.
MC2	D1: Stakeholder Roles in Architecture: Understanding of the relationships among key stakeholders in the design process—client, contractor, architect, user groups, local community—and the architect’s role to reconcile stakeholder needs.
MC3	D2: Project Management: Understanding of the methods for selecting consultants and assembling teams; identifying work plans, project schedules, and time requirements; and recommending project delivery methods.
MC4	D3: Business Practices: Understanding of the basic principles of a firm’s business practices, including financial management and business planning, marketing, organization, and entrepreneurship.
MC5	D4: Legal Responsibilities: Understanding of the architect’s responsibility to the public and the client as determined by local regulations and legal considerations involving the practice of architecture and professional service contracts.
MC6	D5: Professional Conduct: Understanding of the ethical issues involved in the exercise of professional judgment in architectural design and practice and understanding the role of local rules of conduct and ethical practice.

Teaching style			Course No.	Course name	Credit hour	Theory Hours	Practical Hours	Prerequisite Co-requisite	Indicative	
learning electronic	learning blended	learning traditional							Semester	Year
1. Requirements (27) Credit Hours										
1.1 Mandatory requirement (21 credit hour)										
•			042010 1	Military Sciences	3	3	0		1	1
•			042015 1	National Education	3	3	0		2	1
•			042027 1	Life skills	3	3	0		1	2
•			042011 5	Communication skills in Arabic	3	3	0	Remedial Arabic Language	1	1
•			042012 3	Communication skills in English	3	3	0	Remedial English Language	2	1
•			042026 1	Entrepreneurship and innovation	3	3	0		2	2
•			042024 1	Leadership and social responsibility	3	3	0		1	2

Teaching style			Course No.	Course name	Credit hour	Theory Hours	Practical Hours	Prerequisite Co-requisite	Indicative	
learning	electronic	Blended learning							Semester	Year
1.2 University elective requirements(06 credit hour)										
			042014 2	Human Civilization	3	3	0		1	1
			042025 3	Development and environment	3	3	0		1	2
			042017 2	Digital skills	3	3	0	Remedial computer skills	2	1
			042020 1	first aid	3	3	0		2	2
			042013 4	Sports and health	3	3	0		1	1
			042021 2	Islamic culture	3	3	0		1	2
			042039 2	Principals of Psychology	3	3	0		1	3
			042034 1	Principals of German Language	3	3	0		2	3

Teaching style			Course No.	Course name	Credit hour	Theory Hours	Practical Hours	Prerequisite Co-requisite	Indicative	
learning	electronic	Blended learning							Semester	Year
2. Faculty Requirements (25) Credit Hours										
			1001173	Basic Design	3	3	0		1	1

	•		1201990	General Math	3	3	0		1	1
		•	1004151	Free hand sketching	3	1	4		1	1
		•	1001192	Architectural drawings	3	1	6		1	1
	•		1201310	General physics 1	3	3	0		2	1
		•	1001193	Architectural communication and presentation	2	1	3	Architectural drawings	2	1
		•	1001221	Surveying for architecture	2	1	3	General Math	2	1
	•		1003213	Research skills and technical writing	3	3	0	Communication skills in English	1	2
	•		1001313	History and theory of architecture 1	3	3	0	Architecture Basic Design	2	2

Teaching style	Course No.	Course name	hour	Hours	Hours	Hours	Practical	Prerequisite	Indicative
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electronic learning	learning	Blended learning	100117				Co-requisite	Semester	Year	
3. Major Requirements (113) Credit Hours										
3.1 Mandatory requirements (110) credit hours										
		•	100117 4	Architecture Basic Design	3	1	6	Basic Design	2	1
	•		100121 2	Design and Architecture modelling	3	3	0	Architecture Basic Design	1	2
	•		100122 3	Structural systems	3	3	0	General Math	1	2
		•	100127 3	Architecture design 1	4	1	9	Architecture Basic Design	1	2
	•		100122 4	Building construction	3	1	6	Architecture design 1	2	2
	•		100122 6	Building materials	2	2	0	Structural systems	2	2
	•		100125 1	Computer applications in architecture	3	1	6	Architecture Basic Design	2	2
		•	100127 4	Architecture design 2	4	1	9	Architecture design 1	2	2
	•		100132 6	Building services	2	2	0	Architecture design 2	1	3
	•		100131 4	History and theory of architecture 2	3	3	0	History and theory of architecture 1	1	3
		•	100137 5	Architecture design 3	5	1	12	Architecture design 2	1	3
		•	100138 1	Working drawings 1	3	1	6	Architecture design 2	1	3
	•		100134 1	Architecture and environmental control	3	3	0	Architecture design 2	2	3

Teaching style			Course No.	Course name	Credit hour	Theory Hours	Practical Hours	Prerequisite Co-requisite	Indicative	
electronic learning	learning	Blended learning							Semester	Year
		•	100135 2	Simulation and architectural modeling	3	1	6	Computer applications in architecture	2	3
		•	100137 6	Architecture design 4	5	1	12	Architecture design 3	2	3
		•	100138 2	Working drawings 2	3	1	6	Working drawings 1	2	3
		•	100140 1	Engineering practical training	6	0	18	Architecture design 4 + passing 115 CH	3	3
	•		100141 6	Islamic architecture	3	3	0	History and theory of architecture 1	1	4
	•		100141 5	Theories and design principles	3	3	0	History and theory of architecture 2	1	4
		•	100143 1	Landscape architecture	2	1	3	Architecture design 3	1	4
		•	100144 2	Green architecture	3	1	6	Architecture and environmental control	1	4
		•	100147 7	Architecture design 5	5	1	12	Architecture design 4	1	4
	•		100141 7	Proportions and geometry in architecture	3	3	0	Islamic architecture	2	4
		•	100143 2	Planning and urban design	3	2	3	Architecture design 4	2	4
	•		100143 3	Conservation of architectural heritage	3	3	0	Islamic architecture	2	4
	•		100146 1	Building legislations and professional practice	2	2	0	Architecture design 3	2	4

