

**Ministry of Higher Education and  
Scientific Research  
Scientific Supervision and  
Evaluation Authority  
Quality Assurance and Academic  
Accreditation Department  
Accreditation Section**



# **Academic Program and Course Description Guide**

## **Introduction:**

The educational program is a coordinated and organized package of courses that include procedures and experiences that are organized in the form of study vocabulary, the main purpose of which is to build and refine the skills of graduates, which makes them qualified to meet the requirements of the labor market, which is reviewed and evaluated annually through internal or external audit procedures and programs such as the external examiner program.

The description of the academic program provides a brief summary of the main features of the program and its courses, indicating the skills that are being acquired for students based on the objectives of the academic program, and the importance of this description is evident because it represents the cornerstone of obtaining program accreditation and is co-written by the teaching staff under the supervision of the scientific committees in the scientific departments.

This guide, in its second edition, includes a description of the academic program after updating the vocabulary and paragraphs of the previous manual in light of the developments and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the description of the academic program circulated under the letter of the Department of Studies TM3/2906 on 3/5/2023 with regard to the programs that adopt the Bologna Track as the basis for their work.

In this regard, we can only emphasize the importance of writing the description of academic programs and courses to ensure the smooth functioning of the educational process.

## Concepts and Terminology:

**Academic Program Description:** The academic program description provides a brief summary of its vision, mission, and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

**Course Description:** Provides a brief summary of the most important course features and the learning outcomes expected of the student to achieve, demonstrating whether they have made the most of the available learning opportunities. It is derived from the program description.

**Program Vision:** An ambitious picture of the future of the academic program to be an advanced, inspiring, stimulating, realistic, and viable program.

**Program Mission:** Briefly outlines the objectives and activities needed to achieve them, as well as outlines the program's development paths and directions.

**Program Objectives:** These are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

**Curriculum Structure:** All courses/subjects included in the academic program according to the approved learning system (semester, yearly, Bologna track), whether they are required (ministry, university, college, and scientific department) with the number of credits.

**Learning Outcomes:** A consistent set of knowledge, skills, and values acquired by the student after the successful completion of the academic program, and must determine the learning outcomes of each course in a way that achieves the goals of the program.

**Teaching and Learning Strategies:** These are the strategies used by the faculty member to develop the student's teaching and learning, and they are plans that are followed to reach the learning goals. That is, they describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

## Academic Program Description Form

University Name: **University of Samarra**

Faculty/Institute: **College of Engineering**

Scientific Department: **Architecture Engineering Department**


Academic or Professional Program Name: **Bachelor of Architecture**

Final Certificate Name: **Bachelor of Science in Architecture**

Academic System: **Bologna Process System for the first and second stages and the semester system for the third, fourth and fifth stages**

Description Preparation Date: **20/9/2025**

Completion Date: **1/7/2025**



Head of Department  
**Raed Abdullah Hasan**  
30/06/2025



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**Ahmed Mohammed Ahmed**  
30/06/2025



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30/06/2025

## 1. Program Vision

The Department of Architecture should be a pioneer and distinguished in preparing architects who possess high competence and deep knowledge in architectural and technical disciplines, and are qualified for creativity and innovation in the design and planning of urban spaces, while enhancing their abilities to conduct advanced scientific research that contributes to the development of the built environment and architectural identity, and to strive tirelessly to achieve academic and professional recognition regionally and globally.

## 2. Program Mission

Providing distinguished architectural education that combines solid theoretical foundations with innovative practical applications, through integrated academic programs, classroom activities, and interactive training that support critical thinking and design innovation. The department is keen to develop students' abilities through continuous learning, workshops, and specialized courses, in order to enhance their professional and knowledge skills, and enable them to contribute effectively to building a sustainable urban environment that meets the needs of society and takes into account the cultural, technical, and environmental context.

## 3. Program Objectives

- Proficient in **theoretical principles and basic applied skills in the fields of architectural design, urban planning, and contemporary building techniques**, which qualifies them to provide innovative design solutions that take into account the needs of the community and are in harmony with environmental and cultural contexts.
- The graduate **practices the architectural profession efficiently and with high professional awareness**, through his ability to prepare and develop integrated architectural projects that meet the functional, aesthetic, and structural aspects, in accordance with the national and international standards adopted in the field of architecture.
- The graduate persists in **continuous learning and knowledge and technical modernization**, through his involvement in specialized workshops and courses, and his follow-up of intellectual and technological developments in digital architecture, sustainable design, and contemporary architectural theories.
- The graduate demonstrates **a high level of competence in analytical, critical and creative thinking**, which qualifies him to understand and diagnose complex design problems accurately, and to propose authentic and effective solutions that are in line with contemporary environmental, social and technological challenges.
- The graduate is proficient in **professional communication skills and working in multidisciplinary teams**, and has a professional ethics and a spirit of social responsibility, which enables him to contribute effectively to the improvement of the built environment, and the promotion of aesthetic and architectural taste at the local and international levels.

## 4. Program Accreditation

The program is in the process of submitting a readiness review form with the report to the National Council for Accreditation of Engineering Education (ICAAEE).

## 5. Other External Influences

Deanship of the College of Engineering

6. 1. Program Structure Bologna Process				
Program Structure	Number of Courses	ECTS	Percentage	Reviews *
Enterprise Requirements	8	18	%15	
College Requirements	0	0	%0	
Department Requirements	20	102	%85	
Summer Training	1	Fulfilled or not		
6.2. Program Structure Semester System				
Program Structure	Number of Courses	ECTS	Percentage	Reviews *
Enterprise Requirements	2	4	%3.92	
College Requirements	0	0	%0	
Department Requirements	34	98	%96.08	
Summer Training	1	Fulfilled or not		

\* Comments may include whether the course is basic or elective.

<b>7.1 Program Description Bologna Track</b>					
Year/Level	Course Code	Course Name	Hours		ECTS
			Schedul ed	Unsched uled	
<b>First Level - First Semester</b>	AE1101	Architectural Design I	120	80	8
	AE1102	Architectural Painting and Demonstration I	78	47	5
	AE1103	Free Hand I	78	47	5
	AE1104	Principles of Art and Architecture	63	37	4
	AE1105	Math	63	37	4
	UOE-1102	Arabic I	33	17	2
	UOE-12012	Democracy and Human Rights	33	17	2
Total Hours & Units			468	282	30
<b>First Level Second Semester</b>	AE1201	Architectural Design II	120	80	8
	AE1202	Architectural Painting and Illustration II	78	47	5
	AE1203	Free Hand II	78	47	5
	AE1204	Installation of Buildings I	63	37	4
	AE1205	History of Architecture I	48	27	3
	UOE-12011	English I	33	17	2
	UOE-1101	Computers I	48	27	3
Total Hours & Units			<b>420</b>	<b>330</b>	<b>30</b>

<b>Second Level - First Semester</b>	AE211	Architectural Design III	150	100	10
	AE212	Architectural Painting and Demonstration III	75	75	6
	AE213	Construction I	63	37	4
	AE214	Digital Design and Presentation with AutoCAD	63	37	4
	AE215	Building Installation II	63	37	4
	UOE-2303	Crimes of the Baath regime	33	17	2
Total Hours & Units			<b>447</b>	<b>303</b>	<b>30</b>
<b>Second Level - Second Semester</b>	AE221	Architectural Design IV	150	100	10
	AE222	History of Architecture II	63	12	3
	AE223	Hand Drawing III	63	37	4
	AE224	Digital Design & RFIT Display	48	27	3
	AE225	Engineering Area	48	27	3
	UOE-2305	Computers II	33	42	3
	UOE-2305	Arabic II	33	17	2
UOE-2305	English II	33	17	2	
Total Hours & Units			<b>471</b>	<b>279</b>	<b>30</b>

## 7.2. Description of the Program Semester System

Year/Level	Course Code	Course Name	Credit Hours			Units
			theoretical	practical	discussion	
<b>Third Year / First Semester</b>	A301	Architectural Design III	1	8	-	10
	A311	Building Construction	1	2	1	2
	A312	Structure III	2	-	-	2
	A313	Planning Principles	2	-	-	2
	A314	History of Architecture III	2	-	-	2
	A315	Computers V	1	2	-	2
	A316	Sanitary Services	2	-	-	2
	U311	English III	1	-	1	2
Total Hours & Units			<b>12</b>	<b>12</b>	<b>2</b>	<b>24</b>
<b>Third Year / Second Semester</b>	A301	Architectural Design III	1	8	-	-
	A321	Installation of VI Buildings	1	2	1	2
	A322	Construction IV	2	-	-	2
	A323	Air conditioning services	2	-	-	2
	A324	History of Architecture IV	2	-	-	2
	A325	Computers IV	1	2	-	2
	A326	Logic and Design Methodology	2	-	-	2
Total Hours & Units			<b>11</b>	<b>12</b>	<b>1</b>	<b>12</b>

<b>Fourth Year / First Semester</b>	A401	Architectural Design IV	2	8	-	12
	A411	Interior Design	1	2	1	2
	A412	Lighting Services	2	-	-	2
	A413	Housing I	2	-	-	2
	A414	Architectural Theories I	2	-	-	2
	A415	Arab-Islamic Architecture I	2	-	-	2
	U411	English IV	2	-	-	2
	Total Hours & Units			<b>13</b>	<b>10</b>	<b>1</b>
<b>Fourth Year / Second Semester</b>	A401	Architectural Design IV	2	8	-	-
	A421	Outdoor Space Design	1	2	1	2
	A422	Housing II	2	-	-	2
	A423	Architectural Theories II	2	-	-	2
	A424	Arab-Islamic Architecture II	2	-	-	2
	A425	Architecture Acoustics	2	-	-	2
Total Hours & Units			<b>11</b>	<b>10</b>	<b>1</b>	<b>22</b>

<b>Fifth Year / First Semester</b>	A501	Architectural Design V	4	12	-	18
	A511	Contemporary Arab Architecture	2	-	-	2
	A512	Specifications and Estimation	2	-	-	2
	A513	Philosophy of Architecture	2	-	-	2
	A514	Architecture and climate	2	-	-	2
Total Hours & Units			<b>12</b>	<b>12</b>	-	<b>26</b>
<b>Fifth Year / Second Semester</b>	A501	Architectural Design V	2	14	-	-
	A521	Contemporary Arab Architecture	2	-	-	2
	A522	Professional Practice	2	-	-	2
	A523	Advanced Design Theories	2	-	-	2
	A524	Architectural Criticism Theories	2	-	-	2
Total Hours & Units			<b>10</b>	<b>14</b>	-	<b>8</b>

<b>8. Expected Learning Outcomes of the Program</b>	
<b>Knowledge</b>	
<ol style="list-style-type: none"> <li>1. <b>Acquisition of theoretical and historical knowledge</b> <ul style="list-style-type: none"> <li>• A deep understanding of the evolution of architecture through the ages: from traditional style to contemporary sustainable architecture.</li> <li>• Analyzing the Impact of Historical Architectural Sculptures on the Current Urban Space.</li> </ul> </li> <li>2. <b>Acquire the principles of architectural design</b> <ul style="list-style-type: none"> <li>• Interpretation of proportion, composition, lighting, conscious movement and indoor and outdoor spaces.</li> <li>• Link them to environmental, social, and economic contexts.</li> </ul> </li> <li>3. <b>Understanding construction materials and techniques</b> <ul style="list-style-type: none"> <li>• Understand the differences between building materials (wood, concrete, steel, etc.) and their technical, economic, and environmental characteristics.</li> <li>• Applying safety and sustainability standards.</li> </ul> </li> <li>4. <b>Understanding the relationship between architecture, society and the environment</b> <ul style="list-style-type: none"> <li>• Analyze the social and cultural role of architecture, and understand the diversity of public housing styles and the functional separation of spaces.</li> <li>• Recognize the urgent need to understand the cultural context locally, especially within the Arab region.</li> </ul> </li> <li>5. <b>Familiarity with laws and regulations</b> <ul style="list-style-type: none"> <li>• Comprehensive supervision of local and international standards for construction, health and safety, and obtaining implementation licenses.</li> </ul> </li> </ol>	<b>Learning Outcomes (A)</b>

Skills	
<ol style="list-style-type: none"> <li>1. <b>Transform knowledge into integrated architectural design</b> <ul style="list-style-type: none"> <li>• Create accurate manual and numerical diagrams using AutoCAD, Revit, SketchUp.</li> <li>• Typical includes site planning, functional planning, and executive designs.</li> </ul> </li> <li>2. <b>Environmental and Architectural Climate Analysis</b> <ul style="list-style-type: none"> <li>• Perform photo analysis, air, temperature, wind and humidity depending on the climate of the region.</li> <li>• Develop energy-conserving design strategies (e.g., insulation of buildings, use of local, environmentally friendly materials).</li> </ul> </li> <li>3. <b>Preparation of Models and 3D Models</b> <ul style="list-style-type: none"> <li>• Creating manual and digital models (including 3D printing), to test and discuss spatial thought.</li> </ul> </li> <li>4. <b>Manage and organize the design process</b> <ul style="list-style-type: none"> <li>• Work in multidisciplinary teams including engineers, planners, and environmental experts.</li> <li>• Apply project management methods (Gantt, WBS, cost estimation, implementation scheduling).</li> </ul> </li> <li>5. <b>Presenting projects in professional ways</b> <ul style="list-style-type: none"> <li>• Preparation of design files, written reports and oral presentation techniques.</li> <li>• Use Arabic and English at the academic and professional level.</li> </ul> </li> </ol>	<b>Learning Outcomes (B)</b>

Values	
<ol style="list-style-type: none"> <li>1. <b>Ethical and Professional Responsibility</b> <ul style="list-style-type: none"> <li>• Commitment to the ethics of the engineering and architecture profession, protecting public health and maintaining safety.</li> <li>• Selecting materials and designs that take into account the building's long-term maintainability.</li> </ul> </li> <li>2. <b>Innovation and critical thinking</b> <ul style="list-style-type: none"> <li>• Evaluation of design alternatives and their methodologies.</li> <li>• Supporting creativity in the face of environmental and social challenges.</li> </ul> </li> <li>3. <b>Continuous Learning</b> <ul style="list-style-type: none"> <li>• Keeping track of the latest technologies (e.g. BIM, 3D printing, sustainable performance models).</li> <li>• Selecting and interacting with research resources.</li> </ul> </li> <li>4. <b>Collaborative work and team spirit</b> <ul style="list-style-type: none"> <li>• Actively participate in the grouping of meetings, working in a team, and applying conflict resolution mechanisms.</li> </ul> </li> <li>5. <b>Commitment to Sustainability and Quality</b> <ul style="list-style-type: none"> <li>• Designing projects that take into account environmental efficiency, emission reduction, circular sustainability, and quality of materials.</li> </ul> </li> </ol>	<b>Learning Outcomes (C)</b>

## 9. Teaching and Learning Strategies

### 1. Project-Based Learning (PBL)

- **Methodology:** Students receive an architectural design course equipped with clear and integrated guidelines, and work in teams to develop real architectural solutions.
- **Academic Benefit:** Supports the development of critical thinking skills, teamwork, time and resource management, which achieves knowledge, skills, and value outputs in an integrated manner.

**Application:** A comprehensive project that starts with site and climate analysis, and ends with a three-dimensional modular planning and design, with aggregate critique.

### 2. Problem Based Learning (PBL) Strategy

- **Methodology:** Presenting open-ended architectural issues (e.g., sustainability or restoration issues), resolved in research groups.
- **Academic Benefit:** Promotes analytical thinking, investment of technical knowledge, and self-directed learning.

**Application:** A challenge such as rehabilitating a heritage building according to modern standards requires environmental, legal and design research.

### 3. Design Studio (Traditional and Developed Design Studio)

- **Methodology:** Weekly critique sessions with the participation of faculty members, interactive workshops, and linking it to technical lectures.
- **Academic Benefit:** Connects theory with practice in an interactive environment, where collective criticism performs a fundamental function in creative construction.

**Application:** Presenting design developments, discussing them with faculty and peers, and improving solutions based on critical feedback.

### 4. Active Learning

- **Methodology:** Techniques such as "Think-Discuss-Share", accurate papers, and real-time insights into lectures related to the environment and materials.
- **Academic Benefit:** Supports interactivity, promotes deep understanding, and demonstrates direct application of cognitive learning outcomes.

**Application:** Dividing students into pairs to analyze the properties of building materials, then exchanging their results and discussing them classified.

### 5. Design Studio 2.0 & Digital Tools

- **Methodology:** Use of Web 2.0 environments and environmental/geographic analysis tools to promote reflective thinking and digital documentation.
- **Academic Interest:** Deepens the skills of research, collaboration, and documentation of design processes in a sophisticated environment

**Application:** A common digital platform that collects models, drawings, and analytical outputs of the website, and opens electronic criticism.

<p>6. Constructivist Learning</p> <ul style="list-style-type: none"> <li>• <b>Methodology:</b> Building knowledge through stages: observation, analysis, suggestion, implementation, and review, in line with the student's experience.</li> <li>• <b>Academic Benefit:</b> Encourages independent thinking, deep understanding, and scientific application of theoretical knowledge.</li> <li>• <b>Application:</b> The study of building materials begins with a laboratory experiment, then its applications in a project, and finally with a combed critical analysis.</li> </ul>
<p>7. Continuous &amp; Authentic Assessment</p> <ul style="list-style-type: none"> <li>• <b>Methodology:</b> Continuous evaluation using accurate rubrics that link any knowledge, skill, and value targets.</li> <li>• <b>Academic Benefit:</b> Provides tangible performance indicators, allows for continuous adjustment and confirmation of the achievement of the Academic Accreditation Standards (ABET/NAAB).</li> <li>• <b>Application:</b> <b>Interim assessment showing project progress, student self-assessment, peer reaction, and climate analysis reports.</b></li> </ul>

<b>10. Evaluation methods</b>
<ul style="list-style-type: none"> <li>• <b>Semester and final exams.</b></li> <li>• <b>Short daily exams.</b></li> <li>• <b>Reports and duties.</b></li> <li>• <b>Seminars</b></li> <li>• <b>Continuous Evaluation</b></li> </ul>

<b>11. Faculty</b>					
Faculty Members					
Academic Rank	Specialization		Special requirements/skills (if applicable)	Preparation of the Teaching Staff	
	General	particular			
Professor	Civil Engineering	Environment		1	
	Civil Engineering	Construction		1	
	Agricultural Engineering	Plant Technologies		1	
Assistant Professor	Architecture	Urban Planning		1	
	Building & Construction Engineering	Roads & Transportation		1	
	Civil Engineering	Environment		1	
	Civil Engineering	Construction		1	
teacher	Architecture	Philosophy and Theories of Architecture		1	
	Architecture	Architectural Design		1	
Assistant Lecturer	Architecture	Architecture		1	
	Civil Engineering	Construction		1	
	Mechanical Engineering			1	
	Architecture	Philosophy and Theories		1	
	Archaeology	Maintenance and restoration		1	

## 12. Professional Development

### Mentoring new faculty members

The academic program aims to empower new faculty members in various fields of education through:

- Organizing training courses to improve teaching methods, designing courses, and evaluating students' learning, in addition to introducing the university's systems and e-learning.
- Continuously evaluate faculty performance to identify areas that need to be developed.
- Encouraging participation in the teaching skills development courses organized by the university.

## 13. Professional Development of Faculty Members

The Department of Architecture has strong links with the Ministries of Higher Education and Scientific Research and several other ministries in Iraq, and many seminars have been organized in cooperation with the Ministry of Higher Education. These links contribute to providing practical experiences for faculty members. In this context, lectures, workshops, and training courses for faculty members have been organized in the Department of Architecture over the past years, as well as participation in conferences as well as scientific publications

## 14. Acceptance Criterion

The capacity of the department is determined within the admission plan and according to the department's capacity in admission, then it is sent to the Deanship, then the university, and then the Ministry to obtain official approvals. After the issuance of the central admission of students through the Ministry of Higher Education and Scientific Research, where they are admitted to the Ministry according to the average and according to the student's choice. After that, the application to the college is done through the Registration Division at the Deanship of the College of Engineering and the receipt of the required official documents. After the student's admission to the Department of Architecture Engineering appears. Registration and its commencement are available in this section.

## 15. Top sources of information about the program

### University Directory

- College Website
- University Website

## 16. Program Development Plan

To enhance the quality of education, raise the results of graduates, and meet the required competencies, the department has adopted the "Bologna Education System".

This system includes the European Transfer and Accumulation of Credits (ECTS) system.





<b>Fourth Year / First Semester</b>	A401	Architectural Design IV	basic		•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A411	Interior Design	basic		•	•	•	•	•	•	•	•	•		•	•	•	•
	A412	Lighting Services	basic		•					•					•			•
	A413	Housing I	basic	•			•	•							•			•
	A414	Architectural Theories I	basic	•			•											
	A415	Arab-Islamic architecture I	basic	•			•											
	U411	English IV	basic											•				
<b>Fourth Year / Second Semester</b>	A401	Architectural Design IV	basic		•	•	•	•	•	•	•	•	•		•	•	•	•
	A421	Outdoor Space Design	basic		•	•	•	•	•	•	•	•	•		•	•	•	•
	A422	Housing II	basic	•			•	•							•			•
	A423	Architectural Theories II	basic	•			•											
	A424	Arab-Islamic architecture II	basic	•			•											
	A425	Architecture Acoustics	basic		•						•					•		

<b>Fifth Year / First Semester</b>	A501	Architectural Design V	basic		•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A511	Contemporary Iraqi architecture	basic	•			•											
	A512	Specifications and guess	basic			•		•				•		•				•
	A513	Philosophy of architecture	basic	•			•											
	A514	Architecture and climate	basic		•						•				•			•
<b>Fifth Year Second Semester</b>	A501	Architectural Design V	basic		•	•	•	•	•	•	•	•	•	•	•	•	•	•
	A521	Contemporary Arab Architecture	basic															
	A522	Professional practice	basic			•		•				•		•				•
	A523	Advanced Design Theories	basic	•			•											
	A524	Architectural Criticism Theories	basic	•			•											

• Note: Please tick the individual learning exits links from the individual program for the participants.