Academic Program Description Form

University Name: ....**WASIT**.....

Faculty/Institute: .... **Engineering**.....

Scientific Department: ... **Architectural Engineering**.....

Academic or Professional Program Name: .. **Architectural Engineering**.....

Final Certificate Name: ... **Architectural Engineering**.....

Description Preparation Date: 2024/9/3

File Completion Date: 2024/9/3

Signa

Head

Asst. Prof. Dr.Rabee Jameel Khalid

Date:2024/9/5

Signature

Scientific

Asst. Prof. Dr. Hussein Razaq Sabah

Date:2024/9/5

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Asst. Prof. D id Hassan

Date: 2024/9

Signature:

Approval of the Dean

Prof. Dr. Ali Nasser Hilo

Academic Program Description

The description of this academic program provides a concise summary of the most important characteristics of the program and the expected learning outcomes that the student is to achieve, demonstrating whether he has made the utmost benefit from the available opportunities. It is accompanied by a description of each course within the program.

1. Educational Institution:	College of Engineering – University of Wasit
2. Scientific Department / Center	Architecture Engineering
3. Name of the Academic or Professional Program	Bachelor
4. Name of the Final Degree	Bachelor of Architecture Engineering
Study System: Annual / Courses / Othe	Semester
5. Accreditation Program Adopted	APET
6. Other External Influences	-
7. Date of Description Preparation	2024-9-3

- **9. Objectives of the Academic Program:**
- To provide comprehensive education and training in architecture for students and professionals.
- To promote sustainable design practices and raise awareness of their impact.
- To engage with the local community to reflect their needs in the design process.
- This can be achieved through:
- **Education and Training:**
  The Department of Architecture should aim to provide students and professionals with comprehensive education in the field of architecture. This may include courses in design, materials, construction methods, building codes and regulations, sustainability, and project management. In addition, the department can offer workshops, seminars, and continuing education opportunities to ensure that students and professionals remain informed about the latest developments and best practices in the field.
- **Sustainable Design:**
  Sustainability has become an increasingly important consideration in the field of architecture. The Department of Architecture should aim to promote sustainable design practices by integrating topics such as energy-efficient building systems, water conservation, and material selection into its curricula. The department can also work with local organizations to promote sustainable design practices in the wider community and increase awareness of the impact of architecture on the environment and public health.
- **Community Engagement:**
  Architecture can have a significant impact on the daily lives of people who live and work in the community. The Department of Architecture should aim to engage local stakeholders in the design process to ensure that the built environment reflects the needs and desires of the community. This may include holding public meetings, design workshops, or other participatory activities. By fostering a sense of community ownership, the department can help create a sense of pride and investment in the built environment, which may lead to more vibrant and livable communities.

- "Required Program Outcomes and Methods of Teaching, Learning, and Assessment"

Knowledge

1. Acquire advanced knowledge of architectural design concepts and methods, with the ability to understand environmental, social, economic, and cultural variables influencing the design process.
2. Understand mechanisms of project management and teamwork within multidisciplinary groups.
3. Gain comprehensive knowledge in using modern software and digital technologies in architectural analysis and design processes.
4. Recognize the principles of supporting engineering sciences (structural, environmental, services) and their integration in formulating design solutions.
5. Be familiar with contemporary issues in architecture and urbanism, linking them to local identity and global standards.

Skills

1. Formulate and analyze architectural design problems and make decisions based on scientific and creative approaches.
2. Innovate integrated design solutions that respond to functional, aesthetic, and environmental needs, while considering realistic constraints (economic, social, cultural).
3. Use digital tools and modern technologies (BIM, simulation, digital modeling) in analysis, design, and project management.
4. Conduct experiments and research, analyze data, and draw objective conclusions to support design decisions.
5. Communicate effectively with academic, professional communities, and the public through written reports, oral presentations, and graphical/visual means.
6. Work collaboratively and interact effectively within multidisciplinary and multicultural environments, with the ability to assume leadership when required.

Ethics

1. Commit to academic integrity and professional ethics in all stages of architectural practice.
2. Bear social responsibility and place community and environmental interests at the core of design decisions.
3. Integrate sustainability and sustainable development principles in all stages from concept to implementation.
4. Respect cultural and human diversity while strengthening local identity and engaging with global values and standards.
5. Apply principles of transparency, accountability, and good governance in academic and professional practice.

"Methods of Teaching and Learning"

1. Theoretical lectures.
2. Architectural critique and practical training.
3. Field and documentary visits, and presenting documentary films to enhance knowledge.
4. Scientific seminars by students, developing presentation, discussion, and persuasion skills.
5. Problem-based design in various projects.
6. Small group learning methods.

"Methods of Assessment"

Quizzes
Monthly or semester written examinations, and quick tests.
Writing scientific reports, and presenting scientific seminars.
Home and class assignments, especially in subjects with continuous assessment.
Assessment by committees (a group composed of professors from multiple specializations).
The external examiner method, especially for graduation projects.

C- The Affective and Value Objectives

1. Feeling of responsibility.
2. Application of standards and adherence to legislations and regulations.
3. Application of professional ethics realistically.
4. Spreading positive energy and constant pursuit of sustainability.

"Methods of Teaching and Learning"

- Continuous weekly presentation.
- Knowledge of standards and adherence to legislations and regulations according to the nature of the project.
- Periodic development of professional ethics by the professors.
- Always focusing on the positives and applying sustainability standards to the projects.

"Methods of Assessment"

- Individual assessment.
- Group assessment.
- Observation by professors of the student's behavior individually and collectively.
- Comparison and updating.

D- General and Transferable Skills (Other Skills Related to Employability and Personal Development)
1- Dealing with pressure and individual criticism.
2- Managing the project timeline.
3- Dealing with laws and regulations.
4- Interacting with group members of the same rank (students) and higher rank (professors).

"Methods of Teaching and Learning"

- **Individual and group critique.**
- **Setting project progress schedules.**
- **Design groups.**
- **Individual and group presentation.**

"Methods of Assessment"

- **Individual and group assessment.**
- **Examinations in the studio (day sketch).**
- **Confidential assessment.**
- **Periodic project evaluation.**

"Program Structure"

Approved Standards:

1. **Total study hours = 4350 hours**
2. **Total theoretical hours = 2010 hours**
3. **Total practical hours = 2340 hours**
4. **University requirements = 16 credit units**
5. **College requirements = 29 credit units**
6. **Department requirements = 151 credit units**
7. **Total number of units = 206 credit units**

"(Third Academic Year)"

"First: Annual Subjects"								
Units	**Second Semester**			**First Semester**			Subject	Code
		Practical	Theory		Practical	Theory		
14	-	10	2	-	10	2	Architectural Design	AE 3301
14							Total	
	12			12				

"Second: Semester Subjects / First Semester"					
Units	**First Semester**			Subject	Code
	-	Practical	Theory		
3	-	2	2	**Building Construction V**	**AE 3302**
2	-	-	2	**Reinforced Concrete Structures**	**AE 3303**
2	-	-	2	**Planning Fundamentals I**	**AE 3304**
2	-	-	2	**History of Architecture I**	**AE 3305**
2	-	2	1	**Computer Applications III**	**AE 3306**
2	-	-	2	**Lighting Services**	**AE 3207**
2	-	-	2	**Architectural Conservation Methods**	**AE 3308**
1	-	-	1	**English Language (3) I**	**AE 3109**

16	-	4	14	Total
	18			

"Third: Semester Subjects / Second Semester"					
Units	"Second Semester"			Subject	Code
	تطبيقي	Practical	Theory		
3	-	2	2	**Building Construction VI**	**AE 3310**
2	-	-	2	**Steel Structures**	**AE 3311**
2	-	-	2	**Planning Fundamentals II**	**AE 3312**
2	-	-	2	**History of Architecture II**	**AE 3313**
2	-	2	1	**Computer Visualization**	**AE 3314**
2	-	-	2	**Air Conditioning Services**	**AE 3215**
2	-	-	2	**Sanitary Services**	**AE 3216**
1	-	-	1	**English Language (3) II**	**AE 3117**
16	-	4	14	Total	
	18				

Notes:

1. **(AE) refers to Architecture Engineering. Likewise, (1000) = First Year, (100) = University Requirements, (200) = College Requirements, (100) = Department Requirements, and the numbers 01, 02, 03, etc., describe the course name.**
2. **The Architectural Design course is an annual course with continuous assessment.**

"(Fourth Academic Year)"

"First: Annual Subjects"								
Units	**Second Semester**			**First Semester**			Subject	Code
		Practical	Theory		Practical	Theory		
14	-	10	2	-	10	2	Architectural Design	"AE 4301"
14							Total	
	12			12				

"Second: Semester Subjects / First Semester"					
Units	**First Semester**			Subject	Code
	Practical	Practical	Theory		
3	-	4	1	**Interior Space Design**	**AE 4302**
2	-	-	2	**Architecture Theories I**	**AE 4303**
2	-	-	2	**Arab-Islamic Architecture I**	**AE 4304**
2	-	-	2	**Housing**	**AE 4305**
2	-	-	2	**Architecture and Climate**	**AE 4306**
2	2	-	2	**Advanced Construction Techniques**	**AE 4307**
1	-	-	1	**English Language (4) I**	**AE 4108**
14		4	12	Total	
	18				

"Third: Semester Subjects / Second Semester"					
Units	"Second Semester"			Subject	Code
	Practical	Practical	Theory		
3	-	4	1	**Exterior Space Design**	**AE 4309**

2	-	-	2	**Architecture Theories II**	**AE 4310**
2	-	-	2	**Arab-Islamic Architecture II**	**AE 4311**
2	-	-	2	**Urban Design Theories**	**AE 4312**
2	-	-	2	**Architectural Acoustics**	**AE 4313**
2	-	-	2	**Surveying**	**AE 4214**
1	-	-	1	**English Language (4) II**	**AE 4115**
-	2	-	-	**Physical Fitness**	**AE 4116**
14	2	4	12	Total	
	18				

Notes:

1. **(AE) refers to Architecture Engineering. Likewise, (1000) = First Year, (100) = University Requirements, (200) = College Requirements, (100) = Department Requirements, and the numbers 01, 02, 03, etc., describe the course name.**
2. **The Architectural Design course is an annual course with continuous assessment, and Advanced Computer Applications are implicitly included in various Architectural Design courses (Architectural Design, Interior Space Design, Exterior Space Design).**

"(Fifth Academic Year)"

"First: Semester Subjects / First Semester"					
Units	**First Semester**			Subject	Code
	Practical	Practical	Theory		
7	-	8	3	**Architectural Design**	**AE 5301**
5	-	6	2	**Thesis Project I**	**AE 5202**
2	-	-	2	**Architectural Design Theories**	**AE 5303**
2	-	-	2	**Contemporary Iraqi Architecture**	**AE 5304**
2	-	-	2	**Specifications and Estimation**	**AE 5205**
2	-	-	2	**Philosophy of Architecture**	**AE 5306**
20	-	14	13	Total	
	27				

"Third: Semester Subjects / Second Semester"					
Units	**Second Semester**			Subject	Code
	Practical	Practical	Theory		
10	-	14	3	**Thesis Project II**	**AE 5207**
2	-	-	2	**Architectural Criticism Theories**	**AE 5308**
2	-	-	2	**Contemporary Arab Architecture**	**AE 5309**
2	-	-	2	**Professional Practice**	**AE 5110**
16	-	14	9	Total	
	23				

Notes:

1. **(AE) refers to Architecture Engineering. Likewise, (1000) = First Year, (100) = University Requirements, (200) = College Requirements, (100) = Department Requirements, and the numbers 01, 02, 03, etc., describe the course name.**
   Advanced computer techniques are implicitly included in various design courses (Architectural Design, Thesis Project).

•Planning for Personal Development

- Developing the student's skills and creative thinking methods.
- Focusing on the student's passion for learning and enhancing their ability to overcome negative energy.
- Assisting the student in overcoming difficulties and developing their skills and abilities in resilience and perseverance to complete projects.
- Focusing on the student's constructive growth by utilizing their previous skills and experiences gained from earlier projects to benefit subsequent projects within the series system and courses with continuous assessment.
- Continuous motivation and building the student's character in a hierarchical, progressive manner as they advance through the academic program.

• Admission Criteria (Establishing the systems related to joining the college or institute)

First / College Admission Requirements:

1. Adherence to the student admission requirements according to the regulations of the Ministry of Higher Education and Scientific Research (Central Admission).
2. Successfully passing any specific test or personal interview deemed necessary by the College or Department Council.
3. Being medically fit for the intended specialization.

Second / Student's Choice of Preference from Multiple Options:

1. Choosing the student's preference from multiple options ranked by priority.
2. High school final grade (overall average).
3. Grade of the department course in which the student wishes to enroll.
4. Capacity of the academic department.

• Main Sources of Information about the Program:

1. Market needs.
2. Local directives.
3. Studies and surveys.
4. Specialized seminars and workshops with beneficiary entities.

Curriculum Skills Map

Please mark the boxes corresponding to the individual learning outcomes of the program subject to assessment

				Required Learning Outcomes of the Program															
Year / Level	Course Code	Course Name	Core or Elective	Cognitive Objectives				Program-Specific Skill Objectives				Affective and Value Objectives				General and Transferable Skills (Other Skills Related to Employability and Personal Development			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4
Third Stage	**AE 3301**	**Architectural Design**		•	•	•	•	•	•	•	•	•	•	•	•	•		•	•
	AE 3302	**Building Construction V**	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	AE 3303	**Reinforced Concrete Structures**	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•
	AE 3304	**Planning Fundamentals I**	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•
	AE 3305	**History of Architecture I**	•		•		•			•		•			•	•			•
	AE 3306	**Computer Applications III**	•	•	•	•	•			•	•						•	•	•
	AE 3207	**Lighting Services**	•	•		•	•				•	•		•		•	•	•	
	AE 3308	**Architectural Conservation Methods**	•	•	•					•	•	•	•	•	•	•		•	•
	AE 3109	**English Language (3) I**	•		•			•	•	•			•				•	•	•
	AE 3310	**Building Construction VI**	•	•	•			•	•	•			•	•				•	•

	AE 3311	Steel Structures	•	•	•			•	•	•			•	•				•	•	
	AE 3312	Planning Fundamentals II	•	•	•			•	•	•			•	•	•	•	•	•	•	
	AE 3313	History of Architecture II	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	
	AE 3314	Computer Visualization	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	
	AE 3215	Air Conditioning Services	•	•	•			•	•	•	•		•	•	•	•	•	•	•	
	AE 3216	Sanitary Services	•	•	•			•	•	•	•		•	•	•	•		•	•	
	AE 3117	English Language (3) II	•	•	•			•	•	•			•	•				•	•	
Fourth Stage	AE 4301	Architectural Design			•	•	•	•	•	•	•	•	•	•	•	•		•		
	AE 4302	Interior Space Design	•	•	•				•	•			•	•	•	•	•	•	•	
	AE 4303	Architecture Theories I	•	•	•				•	•	•		•			•			•	
	AE 4304	Arab-Islamic Architecture I	•	•	•	•	•			•	•		•			•	•	•	•	
	AE 4305	Housing	•		•		•	•	•	•		•	•	•	•	•	•	•	•	
	AE 4306	Architecture and Climate	•	•	•	•	•	•	•	•	•						•	•	•	
	AE 4307	Advanced Construction Techniques	•	•		•	•				•	•		•		•	•	•	•	
	AE 4108	English Language (4) I	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	AE 4309	Exterior Space Design	•		•			•	•	•			•	•	•	•	•			
	AE 4310	Architecture Theories II	•	•	•					•			•	•				•	•	

	AE 4311	Arab-Islamic Architecture II	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	AE 4312	Urban Design Theories	•	•	•	•	•			•				•	•	•	•	•	•	•
	AE 4313	Architectural Acoustics	•	•	•	•	•	•	•	•		•	•	•		•				•
	AE 4214	Surveying	•	•	•	•	•	•	•	•		•	•	•		•	•	•		•
	AE 4115	English Language (4) II	•	•	•	•	•	•	•	•		•	•	•		•	•	•		•
	AE 4116	Physical Fitness	•	•	•	•	•			•		•	•			•				•
Fifth Stage	AE 5301	Architectural Design	•		•		•	•	•	•		•	•	•	•	•				•
	AE 5202	Thesis Project I	•	•	•	•	•	•	•	•	•						•	•		•
	AE 5303	Architectural Design Theories	•	•		•	•	•	•		•	•	•		•		•	•		•
	AE 5304	Contemporary Iraqi Architecture	•	•	•					•	•	•	•	•	•	•		•		•
	AE 5205	Specifications and Estimation	•		•			•	•	•			•				•	•		•
	AE 5306	Philosophy of Architecture	•	•	•			•	•	•			•	•				•		•
	AE 5207	Thesis Project II			•	•	•	•	•	•	•	•	•	•	•	•		•		
	AE 5308	Architectural Criticism Theories			•	•	•	•	•	•	•	•	•	•	•	•		•		
	AE 5309	Contemporary Arab Architecture	•	•	•	•	•	•		•	•		•	•	•	•	•	•		•
	AE 5110	Professional Practice	•	•	•	•	•	•		•	•	•	•			•				•