جامعة أم القرى
UMM AL-QURA UNIVERSITY

College of
Engineering and Architecture

Department of
Architecture

Electives of
Architecture and Planning Programme (Plan 47)

2025

Electives of Architecture and Planning Programme (Plan 47)

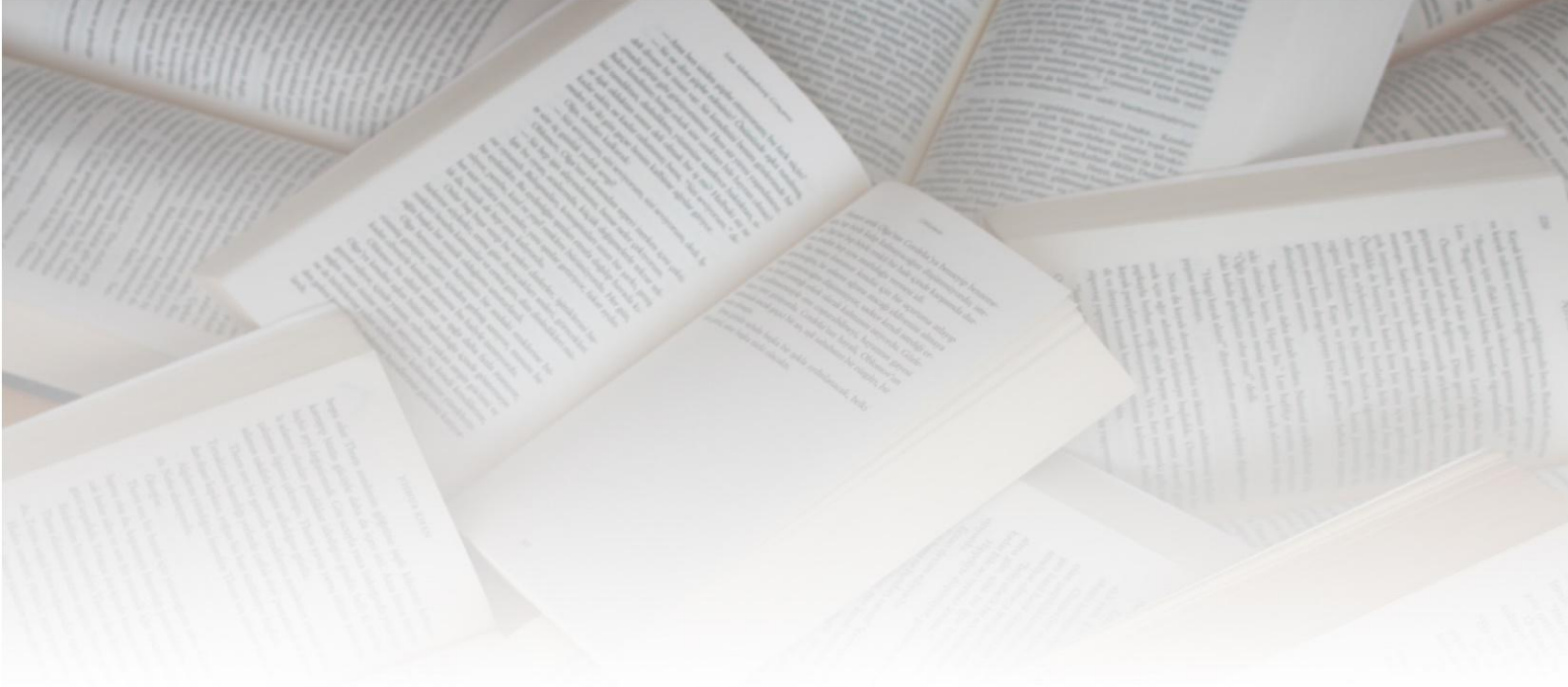
2025

Contents

Electives of

Architecture

Track



Architecture Track

Electives Level 7

Course Specification
(Bachelor)

Course Title:	**Architecture of the Two Holy Mosques**
Course Code:	**ARC 4213**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Architecture)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* AR25-e ** Elective Course 1: Architecture Courses Group: Arc. Hist. & Th.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 7

4. Course general description:

This course focuses on the historical establishment and Saudi expansions of Al Masjid al-Haram and the Prophet's Mosque, examining their role in shaping the urban fabric of Makkah and Madinah and their significant impacts on the surrounding urban environments. Topics include the architectural, social, and cultural effects of these expansions, as well as critical issues related to crowd management, and security and safety within these sacred spaces.

5. Pre-requirements for this course (if any):

ARC 3005	Long-Span Buildings Design Studio	Year: 3	Level: 6

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to deepen students' understanding of the architectural and urban transformations of the Two Holy Mosques, focusing on their historical and modern expansions. The course encourages independent inquiry and the application of architectural principles to contemporary challenges in sacred architecture. It also fosters collaboration, communication, and leadership skills.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of theories of the built environment. (K1-f)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze the Islamic values that shape human and built environments. (S2-a)	**S2**	Collaborative L. (Teamwork Research)	Eval. of Research
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Collaborate effectively and lead diverse teams to complete tasks responsibly and constructively. (V2-c)	**V2**	Collaborative L. (Teamwork Research)	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	The Planning and Design Criteria of Mosque Architecture	2
2	Establishment of Al Masjid Al Haram	2
3	Effect of Al Masjid Al Haram on urban surrounding before the Saudi Extensions	2
4	The Saudi Expansions for Al Masjid Al Haram	2
5	The Architectural and Aesthetic Features of the Last Expansion	2
6	The Technical and Environmental Aspects of the Last Expansion	2
7	Security, Safety and Crowd Management in Al Masjid Al Haram	2
8	Establishment of the Prophet Mosque in Madina	2
9	Effect of the Prophet Mosque on Urban Surrounding Before the Saudi Extensions	2
10	The Saudi Expansions of the Prophet Mosque	2
11	The Architectural and Aesthetic Features of the Last Expansion	2
12	The Technical and Environmental Aspects of the Last Expansion	2
13	Security, Safety and Crowd Management	2
14	Proposals to Facilitate Worshipping in the Two Holy Mosques	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Ministry of Information. (1992). The two Holy Mosques and their Arch. During the Saudi Reign.
	KSU. (1999). Proceedings of the Symposium on Mosque Arch.: The architecture of the two holy mosques.
Supportive References	Adawi, N. (1994). The Two Holy Mosques in Saudi Arabia. Gulf Centre for Strategic Studies.
	Darus Salam. (2011). Islamic Album Galleries of the Two Holy Mosques.
	الهيئة الملكية لمدينة مكة المكرمة والمشاعر المقدسة. (2023). الهوية المعمارية لمدينة مكة المكرمة.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Naif Sultan Alaboud	**Mohamed Wahba Ibrahim Khalil**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد
NCAAA

2024
TP-153

Course Specification
(Bachelor)

Course Title:	**Islamic Values in Architecture**
Course Code:	**ARC 4211**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Architecture)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* AR23-e ** Elective Course 1: Architecture Courses Group: Arc. Hist. & Th.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 7

4. Course general description:

This course examines how Islamic teachings, rooted in principles such as privacy, humility, and hospitality, have historically shaped the design of Muslim's built environments and regulated spatial and social behaviors. By reviewing architectural features across various cities, in addition to their adaptation to diverse environments, the course highlights the enduring role of religious values as pillars of Islamic architecture. Students will explore how these principles can guide contemporary design practices to preserve local identity while meeting modern societal needs

5. Pre-requirements for this course (if any):

ARC 3005 Long-Span Buildings Design Studio Year: 3 Level: 6

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to deepen students' understanding of how Islamic values influence the design and organization of built environments. Students will analyze the application of these principles in various architectural contexts, from city planning to mosque and home design. The course fosters independent research skills and encourages students to effectively communicate and collaborate with others. It also emphasizes leadership and responsibility in integrating Islamic values into contemporary architectural practices.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of theories of the built environment. (K1-f)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze the Islamic values that shape human and built environments. (S2-a)	**S2**	Collaborative L. (Teamwork Research)	Eval. of Research
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Collaborate effectively and lead diverse teams to complete tasks responsibly and constructively. (V2-c)	**V2**	Collaborative L. (Teamwork Research)	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction to Urban Legislation	2
2	Islamic Values in City Planning and Design	2
3	Aspects of Applying Islamic Legislation in City Planning and Design 1	2
4	Aspects of Applying Islamic Legislation in City Planning and Design 2	2
5	Aspects of Applying Islamic legislation in the Design of Mosques 1	2
6	Aspects of Applying Islamic legislation in the Design of Mosques 2	2
7	Aspects of Applying Islamic legislation in the Design of Houses 1	2
8	Aspects of Applying Islamic legislation in the Design of Houses 2	2
9	Aspects of Applying Islamic legislation in the Design of Markets 1	2
10	Aspects of Applying Islamic legislation in the Design of Markets 2	2
11	Aspects of Applying Islamic legislation in the Design of Schools and Hospitals	2
12	Contemporary urban legislation in the Kingdom	2
13	Evaluation of the impact of legislation on contemporary Saudi urbanism 1	2
14	Evaluation of the impact of legislation on contemporary Saudi urbanism 2	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	الهذلول، ص. (2010). المدينة العربية الإسلامية- أثر التشريع في تكوين البيئة العمرانية. سلسلة علوم العمران.
	عثمان، م. (2020). المدينة الإسلامية. دار الآفاق العربية.
Supportive References	إبراهيم، عبد الباقى. أسس التصميم المعمارى والتخطيط الحضرى فى العصور الإسلامية. مرآز الدراسات التخطيطية والمعمارية .
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Naif Sultan Alaboud	**Mohamed Wahba Ibrahim Khalil**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

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Education & Training Evaluation Commission
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TP-153

Course Specification
(Bachelor)

Course Title:	**Islamic Identity in Contemporary Architecture**
Course Code:	**ARC 4214**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Architecture)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* AR26-e ** Elective Course 1: Architecture Courses Group: Arc. Hist. & Th.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 7

4. Course general description:

This course examines the recent development of architecture with Islamic identity, focusing on how Islamic principles and traditions are interpreted in modern architectural design. Students will explore the challenges and opportunities architects face in creating buildings that authentically reflect Islamic identity while addressing contemporary needs and contexts. The course emphasizes the balance between tradition and innovation, providing insights into how architecture with Islamic identity evolves in today's globalized world.

5. Pre-requirements for this course (if any):

ARC 3005	Long-Span Buildings Design Studio	Year: 3	Level: 6

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with an understanding of how Islamic values and design principles shape contemporary architecture. Students will analyze the challenges architects face in balancing Islamic identity with modern needs, focusing on sustainability and innovation. The course encourages independent research and the application of theoretical knowledge to practical design challenges. It also fosters collaboration, communication, and leadership skills.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of theories of the built environment. (K1-f)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze the Islamic values that shape human and built environments. (S2-a)	**S2**	Collaborative L. (Teamwork Research)	Eval. of Research
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Collaborate effectively and lead diverse teams to complete tasks responsibly and constructively. (V2-c)	**V2**	Collaborative L. (Teamwork Research)	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction to Islamic identity	2
2	Design principles of Islamic architecture 1	2
3	Design principles of Islamic architecture 2	2
4	Challenges in reflecting Islamic identity in contemporary buildings	2
5	Sustainability in Islamic architecture (Environmental)	2
6	Sustainability in Islamic architecture (Social)	2
7	Sustainability in Islamic architecture (Economic)	2
8	Examples of Islamic identity in modern architecture 1	2
9	Examples of Islamic identity in modern architecture 2	2
10	Examples of Islamic identity in modern architecture 3	2
11	Examples of Islamic identity in modern architecture 4	2
12	Innovations in Islamic architecture 1	2
13	Innovations in Islamic architecture 2	2
14	Innovations in Islamic architecture 3	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	الهذلول، ص (2010). المدينة العربية الإسلامية. الجمعية السعودية لعلوم العمران.
	Waziri, Y. (2024). The influence of Islamic Heritage on contemporary Architecture. Scholars' Press.
Supportive References	فريد، أ. (1986). القيم الاسلامية في العمران المعاصر.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Naif Sultan Alaboud	**Mohamed Wahba Ibrahim Khalil**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

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Education & Training Evaluation Commission

اعتماد
NCAAA

2024
TP-153

Course Specification
(Bachelor)

Course Title:	**Saudi Regional Architectural Identity**
Course Code:	**ARC 4212**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Architecture)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* AR24-e ** Elective Course 1: Architecture Courses Group: Arc. Hist. & Th.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 7

4. Course general description:

This course delves into Architectural Identities of KAS and the King Salman Charter for Architecture and Urbanism, which provide a strategic framework for the future of architecture and urbanization in Saudi Arabia. It emphasizes a design methodology that respects the nation's rich history and cultural heritage while offering practical guidance for decision-makers and specialists. Students will explore how to shape contemporary architectural practice, ensuring a balance between tradition and modernity in urban and architecture development.

5. Pre-requirements for this course (if any):

ARC 3005 Long-Span Buildings Design Studio Year: 3 Level: 6

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

The course aims at the students to explore how the King Salman Charter guides architecture and urban design to enhance quality of life. It will focus on the values inspired by King Salman's journey in Riyadh, integrating them into a human-centric urban design charter. The course will also demonstrate how these values influence the design process, ensuring the outcome is meaningful for its community.

2. Teaching mode

(Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of theories of the built environment. (K1-f)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze the Islamic values that shape human and built environments. (S2-a)	**S2**	Collaborative L. (Teamwork Research)	Eval. of Research
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Collaborate effectively and lead diverse teams to complete tasks responsibly and constructively. (V2-c)	**V2**	Collaborative L. (Teamwork Research)	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction to King Salman Charter for Architecture and Urbanism	2
2	The Charter's Activation Strategy	2
3	Physical and Natural Design	2
4	Society and Culture-Friendly Design	2
5	Sensory and Experiential Design	2
6	Implementation stages	2
7	Examples of Contemporary Projects adopting the Charter Values	2
8	Architectural Identities: Northern, Eastern and Central Najdi	2
9	Architectural Identities: Madinah Rural and Inner Madinah, and Tabuk Coast	2
10	Architectural Identities: Makkah, Hejazi Coast and Taif Highland	2
11	Architectural Identities: Sarawat Mountains and Aseer Escarpment	2
12	Architectural Identities: Tuhama Foothills and Coast, and Farasan Islands	2
13	Architectural Identities: Abha Highland, Bisha Desert and Najran	2
14	Architectural Identities: Al Qatif and Al Ahsa Oasis, and East Coast	2
15	Research Presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Architecture and Design Commision. (2022). King Salman Charter for Architecture & Urbanism.
	Development Authorities Support Center. (2022). Architecture Identities of KSA.
Supportive References	الهيئة الملكية لمدينة مكة المكرمة والمشاعر المقدسة. (2023). الهوية المعمارية لمدينة مكة المكرمة.
	Hernandez, S. (2022). Islamic Heritage Architecture IV. WIT Press
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Naif Sultan Alaboud	**Mohamed Wahba Ibrahim Khalil**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

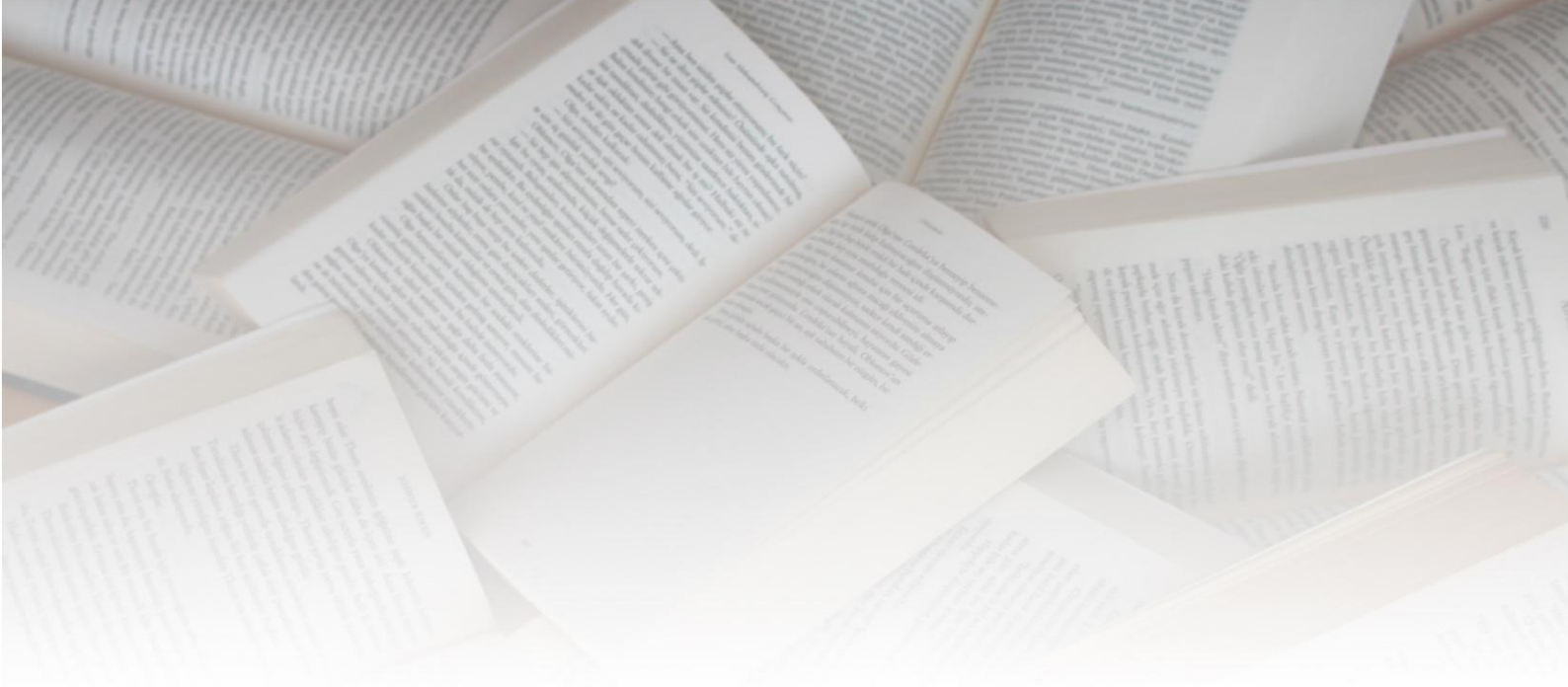
Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators



Architecture Track

Electives Level 8

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Education & Training Evaluation Commission

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NCAAA

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TP-153

Course Specification
(Bachelor)

Course Title:	**AI Applications in Architecture**
Course Code:	**ARC 4113**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Architecture)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* AR29-e ** Elective Course 2: Architecture Courses Group: C. Rep. & Vis.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	4 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 8

4. Course general description:

This course explores the integration of artificial intelligence (AI) into architecture, offering students a comprehensive understanding of AI techniques and their applications across design, planning, and construction processes. Topics also include how AI can enhance creativity, optimize building performance, and streamline workflows. Students will investigate AI-driven tools and technologies, gaining insights into the future potential of AI in revolutionizing architectural practice and shaping the built environment.

5. Pre-requirements for this course (if any):

ARC 4006	Heritage Buildings Conservation Studio	Year: 4	Level: 7

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to introduce students to the applications of artificial intelligence (AI) in architecture. Students will learn how AI can be used to represent and design the built environment, enhancing efficiency and innovation. The course focuses on developing proficiency in AI tools and software relevant to architectural design and construction. Additionally, students will apply digital skills to improve communication and collaboration, while taking responsibility for their ongoing learning and professional development in AI applications.

2. Teaching mode

(Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	4	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	15
2	Practical	45
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**60**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of various ways of representing the built environment. (K1-d)	**K1**	Interactive L. (Dialogue & discussion)	Computer-based Assgs./ Exams
1.2	Demonstrate an understanding of the required knowledge to use software in designing the built environment. (K1-l)	**K1**	Interactive L. (Dialogue & discussion)	Computer-based Assgs./ Exams
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Computer-based Assgs./ Exams
2.2	Effectively apply digital skills to enhance communication. (S5-b)	**S5**	Self–Learning	Computer-based Assgs./ Exams
	()			
	Values, autonomy, and responsibility			
3.1	Mange and complete tasks efficiently under pressure and within deadlines. (V3-a)	**V3**	Self–Learning	Computer-based Assgs./ Exams

C. Course Content

No	List of Topics	Contact
1	Introduction to AI in Architecture	4
2	Ethical and Social Implications of AI in Architecture	4
3	Generative Design in Architecture	4
4	AI in Collaborative Design Workflows	4
5	AI in Education and Training for Architects	4
6	AI in Building Information Modeling (BIM)	4
7	AI in Concept Development	4
8	AI and Parametric Design	4
9	AI for Sustainable Building Design	4
10	Climate-Responsive Design with AI	4
11	Adaptive Facade Design	4
12	AI in Smart Building Design	4
13	AI in Digital Reconstruction and Preservation	4
14	AI and User-Centric Design	4
15	Exploring New AI Applications	4
	Total	60

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	Cont. Assess. (Computer-based Assgs./ Exams)	1 to 15	40
2	Mid-Term Exam (Computer-Based Exam)	7	20
3	Final Exam (Computer-Based Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Current AI apps related to architecture
	0
Supportive References	
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Computer Lab.
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
	Applications software
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Naif Sultan Alaboud	**Wajdy Sadagh A. Qattan**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

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Course Specification
(Bachelor)

Course Title:	**Computer Modeling in Building Construction**
Course Code:	**ARC 4112**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Architecture)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* AR28-e ** Elective Course 2: Architecture Courses Group: C. Rep. & Vis.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	4 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 8

4. Course general description:

This course introduces Building Information Modeling (BIM) as a solution to the construction industry's productivity challenges. Students will explore the advantages of BIM in design, construction process management, and operations. The course covers the transition to BIM technologies and their role in improving efficiency and collaboration in construction projects. Additionally, students will gain foundational skills in using BIM software tools within the building construction field.

5. Pre-requirements for this course (if any):

ARC 4006	Heritage Buildings Conservation Studio	Year: 4	Level: 7

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course teaches students how to use computer modeling software in building construction, focusing on digital representation of the built environment. It emphasizes the effective use of software tools to enhance communication and collaboration in architectural design and construction. Students are encouraged to take responsibility for their ongoing learning and development in computer modeling techniques.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	4	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	15
2	Practical	45
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**60**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of various ways of representing the built environment. (K1-d)	**K1**	Interactive L. (Dialogue & discussion)	Computer-based Assgs./ Exams
1.2	Demonstrate an understanding of the required knowledge to use software in designing the built environment. (K1-l)	**K1**	Interactive L. (Dialogue & discussion)	Computer-based Assgs./ Exams
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Computer-based Assgs./ Exams
2.2	Effectively apply digital skills to enhance communication. (S5-b)	**S5**	Self–Learning	Computer-based Assgs./ Exams
	()			
	Values, autonomy, and responsibility			
3.1	Mange and complete tasks efficiently under pressure and within deadlines. (V3-a)	**V3**	Self–Learning	Computer-based Assgs./ Exams

C. Course Content

No	List of Topics	Contact
1	BIM systems: Definition, emergence and development	4
2	Importance of BIM systems for owners, designers and contractors	4
3	BIM programs: Design and analysis programs, and interoperability	4
4	Efficiency of using BIM during construction process	4
5	BIM Solutions - Part 1	4
6	BIM Solutions - Part 2	4
7	Comparing traditional methods of calculating quantities with BIM system	4
8	Computer Modeling in Building Construction - Part 1	4
9	Computer Modeling in Building Construction - Part 2	4
10	Computer Modeling in Building Construction - Part 3	4
11	Computer Modeling in Building Construction - Part 3	4
12	Computer Modeling in Building Construction - Part 4	4
13	Project Development - Part 1	4
14	Project Development - Part 2	4
15	Project Development - Part 3	4
	Total	60

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	Cont. Assess. (Computer-based Assgs./ Exams)	1 to 15	40
2	Mid-Term Exam (Computer-Based Exam)	7	20
3	Final Exam (Computer-Based Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Crotty, R. (2016). Impact of building information modelling. Routledge.
	Borrmann, A., et al. (2022). Building Information Modeling. Springer.
Supportive References	Garrigo?s, A., et al. (2019). BIM in design, construction and operations. WIT Press.
	Issa, R., & Olbina, S. (2015). Building information modeling: Applications and Practices. ASCE.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Computer Lab.
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
	Applications software
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Naif Sultan Alaboud	**Wajdy Sadagh A. Qattan**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد
NCAAA

2024
TP-153

Course Specification
(Bachelor)

Course Title:	**Environmental Simulation**
Course Code:	**ARC 4114**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Architecture)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* AR30-e ** Elective Course 2: Architecture Courses Group: C. Rep. & Vis.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	4 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 8

4. Course general description:

This course equips students with the skills to use simulation software for predicting and optimizing the environmental performance of spaces or buildings. Students will learn to virtually model geometry, materials, environmental factors, and occupancy patterns of real or assumed structures. The course covers the fundamentals of simulation, required inputs and outputs, and software accuracy. Through hands-on practice, students will manipulate design parameters and rerun simulations to enhance building performance.

5. Pre-requirements for this course (if any):

ARC 4006	Heritage Buildings Conservation Studio	Year: 4	Level: 7

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to teach students how to use environmental simulation tools to analyze and optimize the built environment. Students will gain an understanding of how to represent environmental factors such as energy use, lighting, and airflow within architectural designs. The course focuses on developing proficiency in simulation software and applying it to improve building performance and sustainability. Additionally, students will enhance their communication skills through digital tools while taking responsibility for their ongoing learning and development in environmental simulation.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	4	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	15
2	Practical	45
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**60**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of various ways of representing the built environment. (K1-d)	**K1**	Interactive L. (Dialogue & discussion)	Computer-based Assgs./ Exams
1.2	Demonstrate an understanding of the required knowledge to use software in designing the built environment. (K1-l)	**K1**	Interactive L. (Dialogue & discussion)	Computer-based Assgs./ Exams
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Computer-based Assgs./ Exams
2.2	Effectively apply digital skills to enhance communication. (S5-b)	**S5**	Self–Learning	Computer-based Assgs./ Exams
	()			
	Values, autonomy, and responsibility			
3.1	Mange and complete tasks efficiently under pressure and within deadlines. (V3-a)	**V3**	Self–Learning	Computer-based Assgs./ Exams

C. Course Content

No	List of Topics	Contact
1	Introduction to environmental simulation	4
2	Basic concept of simulation	4
3	Shadows and radiation analysis tools	4
4	Energy and thermal simulation - Part 1	4
5	Energy and thermal simulation - Part 2	4
6	Energy and thermal simulation - Part 3	4
7	Energy and thermal simulation - Part 4	4
8	Daylighting simulation - Part 1	4
9	Daylighting simulation - Part 2	4
10	Computational fluid dynamic simulation - Part 1	4
11	Computational fluid dynamic simulation - Part 2	4
12	Computational fluid dynamic simulation - Part 3	4
13	Computational fluid dynamic simulation - Part 4	4
14	Project development - Part 1	4
15	Project development - Part 2	4
	Total	60

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	Cont. Assess. (Computer-based Assgs./ Exams)	1 to 15	40
2	Mid-Term Exam (Computer-Based Exam)	7	20
3	Final Exam (Computer-Based Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Peters, T., & Peters, B. (2018). Computing the Environment. John Wiley & Sons, Incorporated.
	Amani, N. (2021). Building Energy Management with ECOTECT Analysis. Lap Lambert.
Supportive References	Garg, V. et al. (2020). Building Energy Simulation: A Workbook Using DesignBuilderTM. CRC Press.
	Ho, L. (2018). EnergyPlus Energy Plus. Hansol Academy.
	Clarke, J. et al. (2001). Energy simulation in building design. Butterworth-Heinemann.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Computer Lab.
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
	Applications software
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Naif Sultan Alaboud	**Wajdy Sadagh A. Qattan**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

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Education & Training Evaluation Commission

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NCAAA

2024
TP-153

Course Specification
(Bachelor)

Course Title:	**Photorealistic Rendering Techniques**
Course Code:	**ARC 4111**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Architecture)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* AR27-e ** Elective Course 2: Architecture Courses Group: C. Rep. & Vis.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	4 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 8

4. Course general description:

This course introduces the fundamentals of photorealistic rendering, focusing on creating 3D images indistinguishable from reality. Students will learn advanced rendering techniques and explore post-production processes, such as adding backgrounds and people cutouts. The course emphasizes final image adjustments, including fine-tuning hue, saturation, and contrast. Through hands-on practice, students will master the skills required to produce polished, lifelike architectural visualizations.

5. Pre-requirements for this course (if any):

ARC 4006	Heritage Buildings Conservation Studio	Year: 4	Level: 7

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with the skills to create photorealistic renderings of architectural designs. Students will learn various techniques for visually representing the built environment, utilizing advanced software tools to produce high-quality renderings. The course emphasizes the effective application of digital skills to enhance communication and presentation of architectural concepts. Additionally, students will take responsibility for their ongoing learning and development in mastering photorealistic rendering techniques.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	4	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	15
2	Practical	45
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**60**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of various ways of representing the built environment. (K1-d)	**K1**	Interactive L. (Dialogue & discussion)	Computer-based Assgs./ Exams
1.2	Demonstrate an understanding of the required knowledge to use software in designing the built environment. (K1-l)	**K1**	Interactive L. (Dialogue & discussion)	Computer-based Assgs./ Exams
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Computer-based Assgs./ Exams
2.2	Effectively apply digital skills to enhance communication. (S5-b)	**S5**	Self–Learning	Computer-based Assgs./ Exams
	()			
	Values, autonomy, and responsibility			
3.1	Mange and complete tasks efficiently under pressure and within deadlines. (V3-a)	**V3**	Self–Learning	Computer-based Assgs./ Exams

C. Course Content

No	List of Topics	Contact
1	Introduction to Photorealistic Rendering	4
2	Global Illumination	4
3	Volume Rendering and Participating Media - Part 1	4
4	Volume Rendering and Participating Media - Part 2	4
5	Subsurface Scattering	4
6	Image-based Rendering	4
7	High Dynamic Range Imaging	4
8	Image-based Lighting	4
9	Reconstruction of Reflectance	4
10	Bidirectional Texture Function	4
11	Radiance Transfer - Part 1	4
12	Radiance Transfer - Part 2	4
13	Project Development - Part 1	4
14	Project Development - Part 2	4
15	Project Development - Part 3	4
	Total	60

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	Cont. Assess. (Computer-based Assgs./ Exams)	1 to 15	40
2	Mid-Term Exam (Computer-Based Exam)	7	20
3	Final Exam (Computer-Based Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Kurachi, N. (2020). The magic of computer graphics. A K Peters/CRC Press.
	Sakas, G. (2012). Photorealistic Rendering Techniques. Springer.
Supportive References	Sannino, C. (2019). Chiaroscuto with V-Ray for photorealistic rendering. GC Edizioni.
	Sannino, C. (2013). Photography & rendering with V-Ray. GC Edizioni.
	Cardoso, Jamie. (2017). 3D Photorealistic Rendering. CRC Press.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Computer Lab.
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
	Applications software
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Naif Sultan Alaboud	**Wajdy Sadagh A. Qattan**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

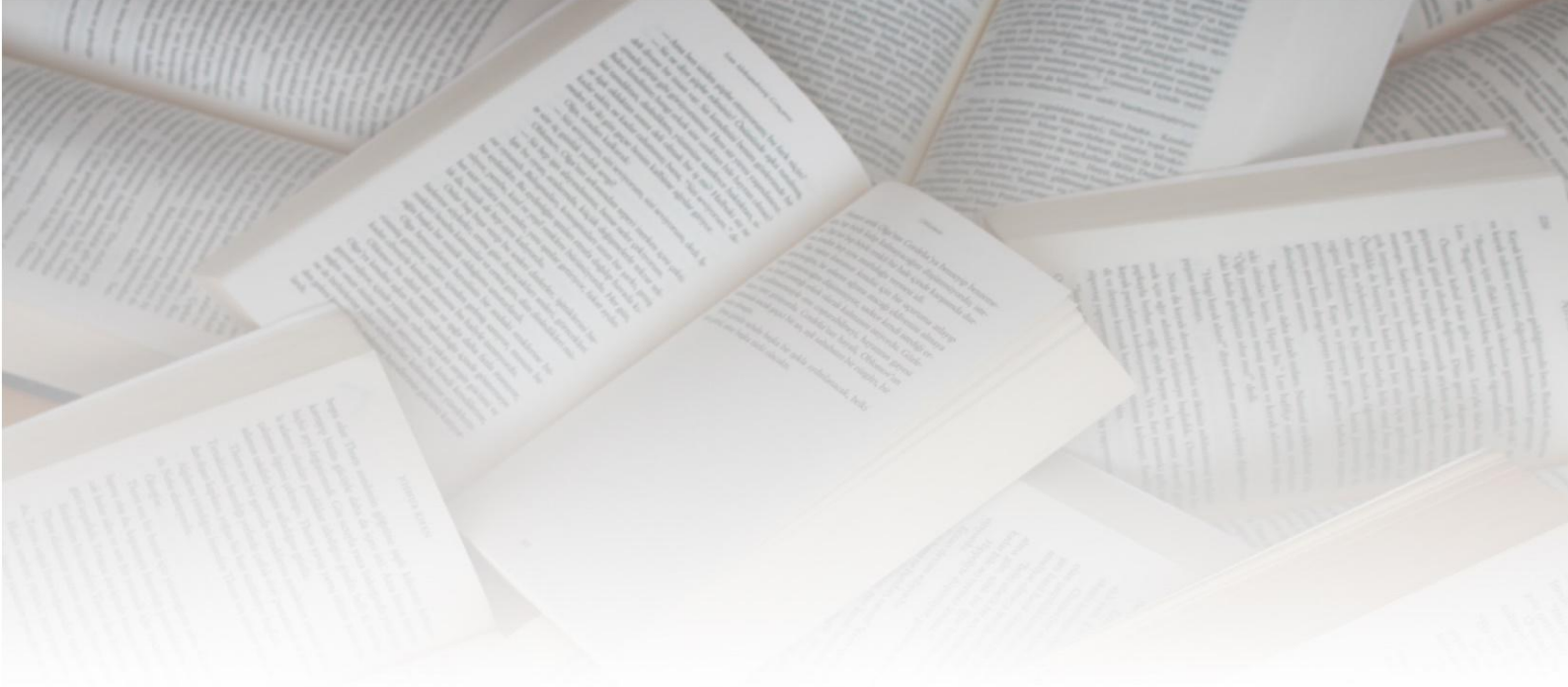
Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators



Architecture Track

Electives Level 10

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد
NCAAA

2024
TP-153

Course Specification
(Bachelor)

Course Title:	**Resilient Urban Design**
Course Code:	**ARC 4411**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Architecture)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* AR31-e ** Elective Course 3: Architecture Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 5 Level 10

4. Course general description:

This course explores the principles and practices of urban design that can withstand and adapt to various environmental, social, and economic challenges. As urban areas face increasing pressures from climate change, population growth, and resource scarcity, resilience has become a critical component of sustainable urban design. Students will engage with concepts of resilience theory, adaptive systems, and disaster preparedness, applying them to urban design strategies that create flexible and robust communities.

5. Pre-requirements for this course (if any):

ARC 4500	Cooperative Training	Year: 5	Level: 9

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with the knowledge and skills necessary to design resilient urban spaces that effectively integrate human needs with the environment. Students will gain a comprehensive understanding of advanced concepts related to sustainable and adaptable urban design. The course encourages independent learning and the application of knowledge to address complex urban challenges. Students will also develop effective communication skills and actively contribute to finding solutions for pressing issues in the built environment.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of the mutual integration between human and the environment. (K1-i)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
1.2	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.2	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction to Cities and Climate Change	2
2	Climate Change Impacts on Cities	2
3	Urban Strategies for Climate Change: Mitigation	2
4	Urban Heat Island Mitigation Through Public Space Design	2
5	Designing Walkable Spaces for Climate and Social Resilience	2
6	Urban Strategies for Climate Change: Adaptation	2
7	Designing Flood-Resilient Streetscapes	2
8	Designing Stormwater-Resilient Urban Parks	2
9	Net-Zero Neighborhood Design	2
10	Circular Economy in Urban Design	2
11	Urban Design for Resource-Efficient Neighborhoods	2
12	Temporary Urban Interventions for Resilience	2
13	Urban Design for Pandemic-Ready Cities	2
14	Smart Urban Design for Resilience	2
15	Research Presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Dodman, D. (2012). Adapting Cities to Climate Change. Routledge.
	Allam, Z., Jones, D., & Thondoo, M. (2020). Cities and climate change. Palgrave MacMillan.
Supportive References	Allaoua, Z. (2011). Guide to Climate Change Adaptation in Cities. The World Bank.
	Sethi, M. (2017). Climate change and urban settlements. Routledge.
	Hamin, E. (2019). Planning for climate change. Taylor and Francs.
	Calthorpe, P. (2010). Urbanism in the Age of Climate Change. Island Press.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Naif Sultan Alaboud	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Sustainable Landscape Architecture**
Course Code:	**ARC 4412**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Architecture)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* AR32-e ** Elective Course 3: Architecture Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 5 Level 10

4. Course general description:

This course provides an in-depth introduction to sustainable landscape principles, focusing on xeriscaping strategies, technologies, and best practices. It covers a wide range of topics, including the design, construction, and management of sustainable systems for hydrology, vegetation, soils, and materials, with an emphasis on promoting human health and well-being. Through practical examples, students will explore the integration of these elements in creating environmentally responsible landscapes that thrive in arid environments.

5. Pre-requirements for this course (if any):

ARC 4500	Cooperative Training	Year: 5	Level: 9

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course equips students with the skills to design sustainable landscapes that integrate human activity with the natural environment. It focuses on advanced landscape architecture concepts, sustainability, and environmental stewardship. Students are encouraged to independently apply knowledge to solve environmental challenges, while developing strong communication skills and contributing to the built environment.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of the mutual integration between human and the environment. (K1-i)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
1.2	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.2	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction to sustainable landscape	2
2	Human health and well-being for sustainable sites	2
3	The sun and the sustainable landscape	2
4	The wind and energy conservation	2
5	Water issues and conservation	2
6	Predesign: Site selection, assessment and planning	2
7	Sustainable landscape design: Water	2
8	Sustainable landscape design: Vegetation and Xeriscaping	2
9	Sustainable landscape design: Soils	2
10	Sustainable landscape design: Materials and resources	2
11	Operations, maintenance, monitoring and stewardship	2
12	Green roofs and vertical landscapes	2
13	Case study analysis Part 1	2
14	Case study analysis Part 2	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Calkins, M. (2013). The sustainable sites handbook. Wiley.
	Marietta Loehrlein, M. (2020). Sustainable Landscaping: Principles and Practices. CRC press.
Supportive References	Dines, N., & Brown, K. (2023). Time-saver standards for landscape architecture. McGraw-Hill.
	Cantor, S. & Peck, S. (2008). Green Roofs in Sustainable Landscape Design. Norton & Co.
	Bousselot, J., Badertscher, K., & Roll, M. (2005). Sustainable landscaping. Colorado State Uni.
	Sorvig, K., & Thompson, J. (2018). Sustainable Landscape Construction. Island Press.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Naif Sultan Alaboud	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد
NCAAA

2024
TP-153

Course Specification
(Bachelor)

Course Title:	**Human and Urban Environment**
Course Code:	**ARC 4413**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Architecture)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* AR33-e ** Elective Course 3: Architecture Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 5 Level 10

4. Course general description:

This course offers students the opportunity to explore the mutual relationship between humans and urban environments through in-depth investigations. It enhances students' understanding of contemporary human issues, including environmental preservation and the impact of the information revolution on the built environment. Weekly seminars provide a platform for students to present on selected topics and engage in discussions and brainstorming sessions with peers, fostering critical thinking and collaborative learning.

5. Pre-requirements for this course (if any):

ARC 4500 Cooperative Training Year: 5 Level: 9

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to help students understand the dynamic relationship between humans and their urban environment. Students will gain advanced knowledge of urban systems and how they impact human life. The course emphasizes independent learning and encourages students to apply their knowledge to address complex urban challenges. Additionally, students will develop effective communication skills and actively contribute to improving the built environment through collaborative efforts.

2. Teaching mode

(Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of the mutual integration between human and the environment. (K1-i)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
1.2	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.2	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	The Distinguished Vision of Islam Towards the Environment	2
2	Urbanization and Land Use: Urban Sprawl, Deforestation and Land Degradation, and Land Use Conf	2
3	Environmental Degradation: Air and Water Pollution	2
4	Environmental Degradation: Waste Generation and Management	2
5	Climate Change Impacts: Urban Heat Island Effect and Carbon Emissions	2
6	Biodiversity and Habitat Loss	2
7	Resource Consumption	2
8	Public Health and Well-Being: Noise and Light Pollution	2
9	Technological and Energy Impacts	2
10	Innovations to Mitigate Impacts: Biophilic Urban Design	2
11	Innovations to Mitigate Impacts: Vertical Gardens	2
12	Innovations to Mitigate Impacts: Net-Zero Carbon Urban Projects	2
13	Innovations to Mitigate Impacts: Circular Economy in Cities	2
14	Innovations to Mitigate Impacts: Human-Centric Cities	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Smith, K. (2013). Environmental hazards. Routledge.
	Agarwal, P. (2021). Environment and We in 21st Century. Scholars World.
Supportive References	Khalid Fazlul, K. (1998). Islam and the environment. Ta-Ha Publishers.
	Acevedo, L. (2018). The Population Explosion. Amazon Digital Services.
	Gehl, Jan. (2010). Cities for People. Washington, Dc, Island Press.
	Sachs, J. (2020). The Ages of Globalization. Columbia University Press.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Naif Sultan Alaboud	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد
NCAAA

2024
TP-153

Course Specification
(Bachelor)

Course Title:	**Urban Wayfinding**
Course Code:	**ARC 4414**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Architecture)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* AR34-e ** Elective Course 3: Architecture Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 5 Level 10

4. Course general description:

This course focuses on the principles of wayfinding in urban environments, exploring its importance in enhancing navigation, accessibility, and safety. Students will examine the behaviors of wayfinders, the fundamentals of urban design that support effective wayfinding, and key concepts such as the movement perceptual system and cognitive mapping. The course covers essential wayfinding elements, along with the types of information needed to guide people through outdoor spaces efficiently.

5. Pre-requirements for this course (if any):

ARC 4500	Cooperative Training	Year: 5	Level: 9

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to provide students with a comprehensive understanding of urban wayfinding and its role in creating navigable and user-friendly environments. Students will explore the relationship between humans and their surroundings, gaining advanced knowledge of how design can enhance spatial orientation and movement within urban spaces. The course encourages independent learning and the application of knowledge to solve wayfinding challenges, while also fostering effective communication and collaboration to address broader built environment issues.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of the mutual integration between human and the environment. (K1-i)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
1.2	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.2	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Definitions of wayfinding and Wayfinders	2
2	Movement perceptual system	2
3	Cognitive map	2
4	Wayfinding elements (Design, operational and behavioral systems) - Part 1	2
5	Wayfinding elements (Design, operational and behavioral systems) - Part 2	2
6	Auditory information needed for wayfinding process	2
7	Optical information needed for wayfinding process	2
8	Urban information needed for wayfinding process	2
9	Urban design foundations for good wayfinding - Part 1	2
10	Urban design foundations for good wayfinding - Part 2	2
11	Urban design foundations for good wayfinding - Part 3	2
12	Case study analysis- Part 1	2
13	Case study analysis- Part 2	2
14	Research development	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Passini, R. (1992). Wayfinding in architecture. Van Nostrand Reinhold.
	Gibson, D., & Pullman, C. (2009). The wayfinding handbook. Princeton Architectural Press.
Supportive References	Hero, C. (2021). Study Guide for Kevin Lynch's The Image of the City. Course hero.
	Olson, D., & Bialystok, E. (2014). Spatial Cognition. Taylor and Francis.
	He, L. (2012). Wayfinding Designs Worldwide. LST Publishing House.
	Calori, C. (2007). Signage and wayfinding design. John Wiley.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Naif Sultan Alaboud	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

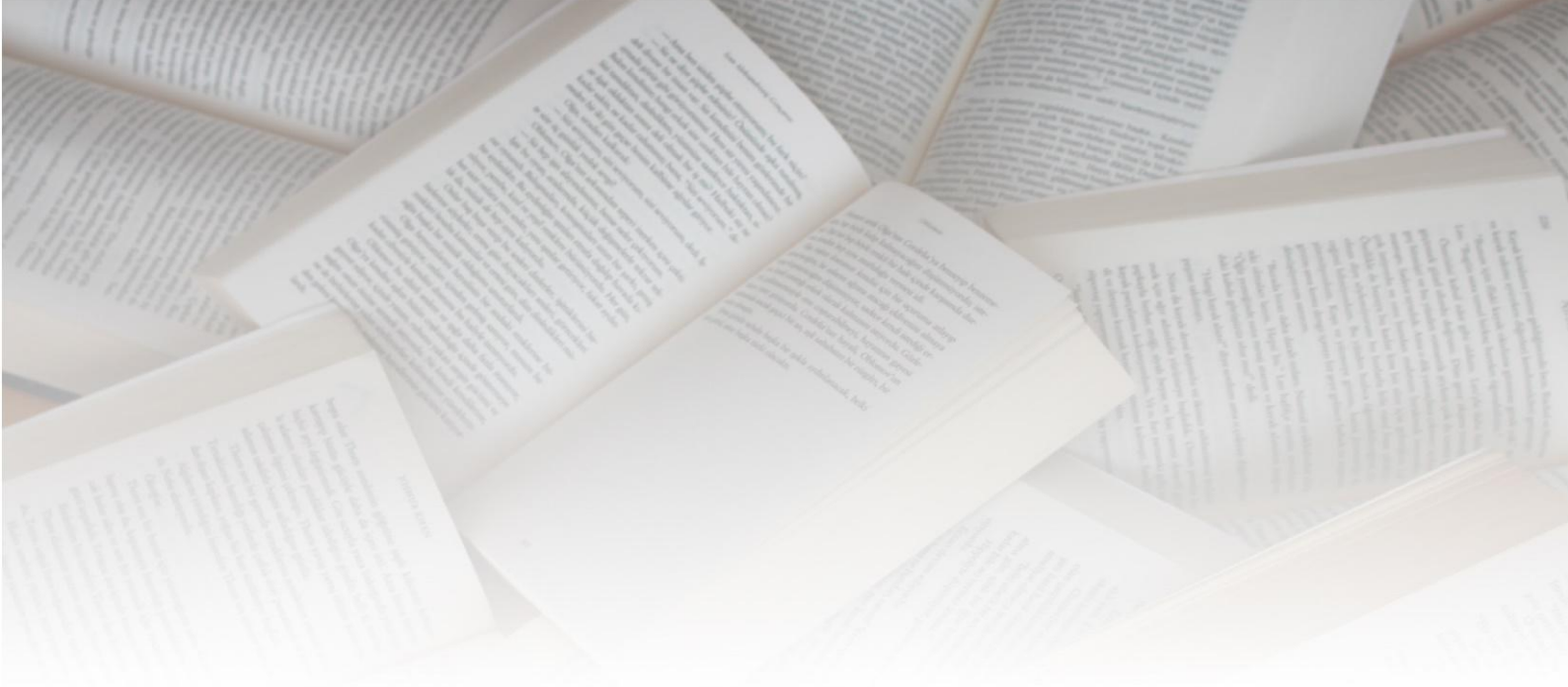
7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Electives of

Urban Design

Track



Urban Design Track

Electives Level 7

Course Specification
(Bachelor)

Course Title:	**Temporary Urbanism**
Course Code:	**ARC 4621**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UD23-e ** Elective Course 1: Urban Design Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 7

4. Course general description:

This course examines the global trend of temporary and tactical urbanism, focusing on the increased use of short-term events and temporary spaces. It provides a theoretical and critical analysis of this approach, highlighting its significance in cities like Makkah al-Mukarramah, where it is prevalent during Hajj in Mina, Muzdalefah, and Arafat. The course explores how these areas can be efficiently utilized outside pilgrimage periods, addressing both opportunities and challenges.

5. Pre-requirements for this course (if any):

ARC 3005	Long-Span Buildings Design Studio	Year: 3	Level: 6

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to provide students with advanced knowledge of the principles and practices of temporary urbanism, focusing on how temporary interventions can shape and influence the built environment. Students will develop analytical skills to assess factors impacting urban spaces, engage in effective communication, and independently seek and apply knowledge to address urban challenges creatively and constructively.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction: What is tactical and temporary urbanism?	2
2	Concepts of time and location	2
3	Inspirations and antecedents of tactical urbanism	2
4	Applying tactical urbanism	2
5	Forms of temporary urbanism - part 1	2
6	Forms of temporary urbanism - part 2	2
7	Principals of temporary and tactical urbanism	2
8	Benefits and problems	2
9	Applications of temporary urbanism- Part 1	2
10	Applications of temporary urbanism- Part 2	2
11	Applications of temporary urbanism- Part 3	2
12	Applications of temporary urbanism- Part 4	2
13	Al Mashaaer: Case study analysis - Part 1	2
14	Al Mashaaer: Case study analysis - Part 2	2
15	Research development	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Lydon, M., & Garcia, A. (2015). Tactical Urbanism. Island Press.
	Stevens, Q., and Dovey, K. (2023). Temporary and Tactical Urbanism. Taylor & Francis
Supportive References	Bishop, P., & Williams, L. (2012). The Temporary City. Routledge.
	Dovey, K. (2016). Urban Design Thinking: A Conceptual Toolkit. Bloomsbury Academic.
	Madanipour., A. (2017). Cities in Time: Temporary Urbanism & the Future of the City. Bloomsbury Ac.
	Ferreri, M. (2021). Permanence of Temporary Urbanism. S.L., Amsterdam University Pr.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Mohanad A. Saddiq Alfelali	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Humanizing the Cities**
Course Code:	**ARC 4622**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UD24-e ** Elective Course 1: Urban Design Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 7

4. Course general description:

This course explores strategies for designing urban environments that prioritize human experience and well-being. Students will examine how to create urban areas that foster social interaction, accessibility, and comfort while addressing issues like overcrowding and environmental stress. The course covers principles of urban design that enhance livability, such as inclusive public spaces, walkability, and community engagement. Students will explore solutions that make urban areas more responsive to human needs and improve overall quality of life.

5. Pre-requirements for this course (if any):

ARC 3005	Long-Span Buildings Design Studio	Year: 3	Level: 6

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with advanced knowledge to foster the humanization of urban environments by analyzing key factors shaping and influencing cities. Students will independently seek and apply knowledge, engage effectively in communication, and contribute actively to addressing urban challenges, emphasizing strategies that prioritize human-centered design and inclusivity in the built environment.

2. Teaching mode

(Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Quality of life in urban environments	2
2	The human dimension in urban design process	2
3	Walkability and car-free city development	2
4	Humanizing cities: Street scape	2
5	Humanizing cities: Plazas	2
6	Humanizing cities: Mixed land use	2
7	Humanizing cities: Tactical urbanism	2
8	Humanizing cities: Human scale	2
9	Inclusivity and equity in urban spaces	2
10	Humanizing cities: Community participation	2
11	Case study analysis - Part 1	2
12	Case study analysis - Part 2	2
13	Research refining - Part 1	2
14	Research refining - Part 2	2
15	Research refining - Part 3	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Doheim, R., Farag, A., & Kamel, E. (2020). Humanizing cities through car-free city development and transformation. Engi
	Watson, D. (2011). Time-Saver Standards for Urban Design. McGraw-Hill.
Supportive References	Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Mohanad A. Saddiq Alfelali	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Floating Cities**
Course Code:	**ARC 4623**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UD25-e ** Elective Course 1: Urban Design Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 7

4. Course general description:

This course delves into the concept of floating cities, examining their history, design, construction, and sustainability. Students will explore the technical, environmental, economic, and social dimensions of creating urban habitats on water. Key topics include addressing rising sea levels, overpopulation, and challenges related to energy, water supply, waste management, and environmental impact. The course features international examples, providing a comprehensive understanding of this innovative urban design concept.

5. Pre-requirements for this course (if any):

ARC 3005	Long-Span Buildings Design Studio	Year: 3	Level: 6

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to provide students with advanced knowledge on the concept and design of floating cities, focusing on analyzing the factors shaping and influencing such innovative built environments. Students will independently seek and apply relevant knowledge, engage effectively in communication, and contribute actively to addressing the unique challenges associated with sustainable and resilient floating urban developments.

2. Teaching mode

(Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Historical Concepts of Floating Communities	2
2	The Concept of Floating Cities	2
3	Addressing Climate Change with Floating Cities	2
4	Structural Engineering of Floating Cities	2
5	Environmental Impact Assessment of Floating Cities	2
6	Water Management Systems for Floating Cities	2
7	Energy Production and Distribution for Floating Cities	2
8	Waste Management and Recycling in Floating Cities	2
9	Transportation and Infrastructure for Floating Cities	2
10	Economic and Community Aspects of Floating Cities	2
11	Technological Advancements in Floating City Design	2
12	Contemporary Floating City Concepts 1	2
13	Contemporary Floating City Concepts 2	2
14	Imaginary Design of a Floating City 1	2
15	Imaginary Design of a Floating City 2	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Łukasz Piątek, et al. (2021).WCFS2020. Springer Nature, 5 Aug.
	Tomoki Ikoma. (2023). Proceedings of the Third World Conference on Floating Solutions. Springer Nature.
Supportive References	
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Mohanad A. Saddiq Alfelali	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**City Branding**
Course Code:	**ARC 4624**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UD26-e ** Elective Course 1: Urban Design Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 7

4. Course general description:

This course explores the concept of city branding, focusing on how cities can develop a distinct identity to attract residents, tourists, and investors. Students will examine the strategies used to create a cohesive urban brand through architecture, culture, history, and economic development. Topics include branding techniques, stakeholder engagement, and the role of urban design in shaping a city's image. The course also analyzes successful global city branding case studies

5. Pre-requirements for this course (if any):

ARC 3005	Long-Span Buildings Design Studio	Year: 3	Level: 6

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with advanced knowledge of city branding, focusing on the factors that shape and influence urban identity and perception. Students will independently seek and apply relevant insights, effectively engage in collaborative communication, and actively contribute to addressing challenges in enhancing the built environment's image and appeal.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	City Branding Definition and Challenges	2
2	Goals of City Branding: Economic Development and Tourism	2
3	Goals of City Branding: Global Competitiveness	2
4	Theoretical Perspectives on City Branding	2
5	City Branding Strategies: Cultural Branding	2
6	City Branding Strategies: Event-Based Branding	2
7	City Branding Strategies: Sustainability Branding	2
8	City Branding Strategies: Technology and Innovation	2
9	City Branding Processes: Place-Based Marketing	2
10	Measuring the Effectiveness of City Branding	2
11	Case Study 1	2
12	Case Study 2	2
13	Research refining - Part 1	2
14	Research refining - Part 2	2
15	Research refining - Part 3	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Dinnie, K. (2016). City Branding : Theory and Cases. Basingstoke, Palgrave Macmillan.
	Deffner, A., and Mihalis K. (2024). City Branding.
Supportive References	
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Mohanad A. Saddiq Alfelali	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

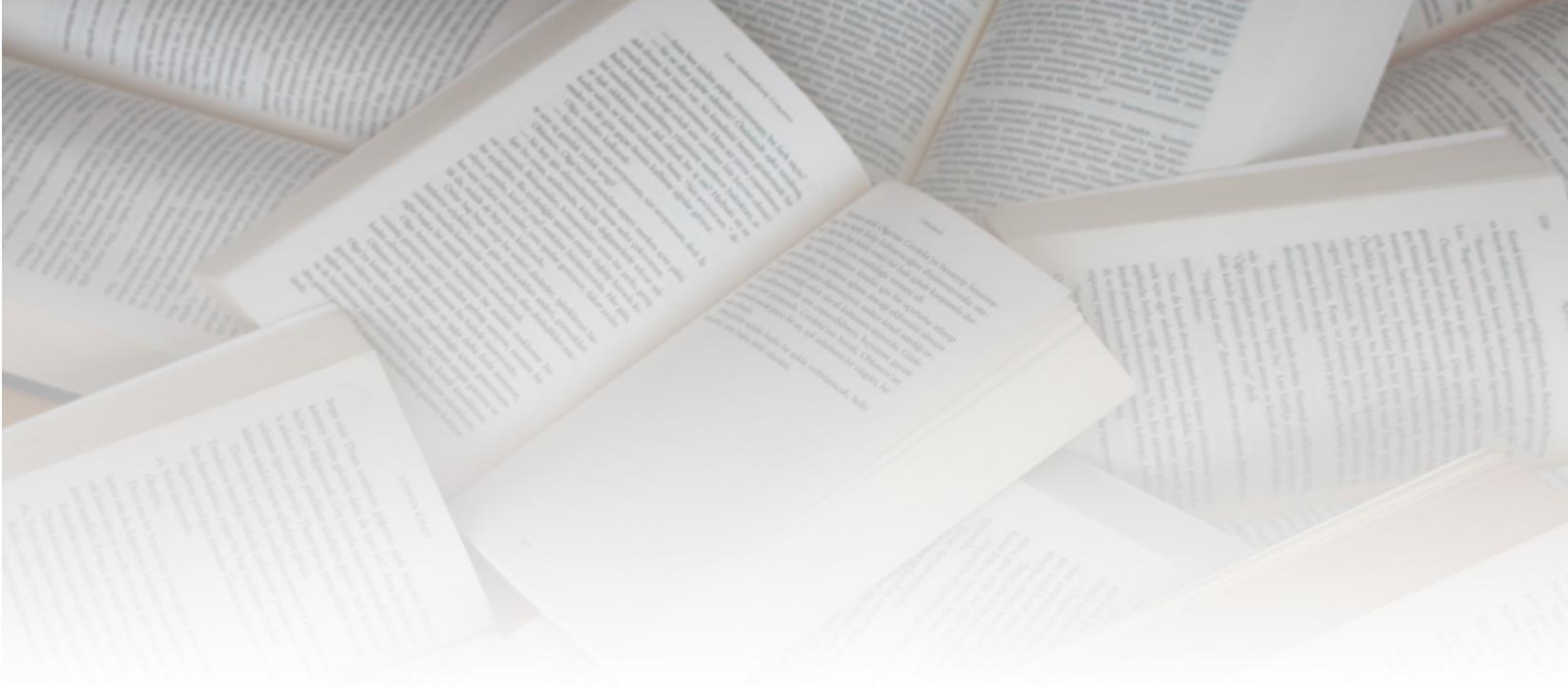
Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators



Urban Design Track

Electives Level 8

Course Specification
(Bachelor)

Course Title:	**Advanced studies in Landscape Architecture**
Course Code:	**ARC 4631**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UD27-e ** Elective Course 2: Urban Design Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 8

4. Course general description:

This course delves into complex landscape architecture concepts, with a focus on sustainable design, ecological systems, and innovative techniques for large-scale projects. Students will explore advanced topics such as green infrastructure, ecological restoration, urban ecology, climate-responsive design, sustainable water management, and biodiversity in urban areas. The course also examines the relationship between landscape design and public health, energy-efficient strategies, cultural landscapes, and the use of innovative materials in landscape architecture.

5. Pre-requirements for this course (if any):

ARC 4601 New Areas Urban Design Studio Year: 4 Level: 7

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to provide students with an in-depth understanding of advanced concepts in landscape architecture. Students will independently seek and apply relevant knowledge, effectively collaborate and communicate, and actively address challenges in creating sustainable and innovative landscape solutions.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Site analysis and assessment	2
2	Techniques: Site grading	2
3	Techniques: Stormwater management	2
4	Site utilities: Water supply	2
5	Site utilities: Sewage disposal	2
6	Site utilities: Recreational water bodies	2
7	Site utilities: Irrigation	2
8	Special conditions: Interior landscapes	2
9	Special conditions: Disturbed landscapes	2
10	Special conditions: Sound control	2
11	Special conditions: Roof and deck landscapes	2
12	Energy and resource conservation	2
13	Outdoor accessibility	2
14	Natural hazards: Land subsidence and expansive soils	2
15	Research development	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Dines, N., & Brown, K. (2023). Time-saver standards for landscape architecture. McGraw-Hill.
	0
Supportive References	Shehata, A. (2021). Design of Outdoor Spaces. Universal Publishing Ltd.
	Allen, E., Ryan, T., & Rand, P. (2013). Detailing for landscape architects. Wiley.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Mohanad A. Saddiq Alfelali	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Cities Centers**
Course Code:	**ARC 4632**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UD28-e ** Elective Course 2: Urban Design Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 8

4. Course general description:

This course explores the foundational theories of planning and developing city centers, with a focus on the challenges faced by urban centers globally and in Saudi cities. Students will examine key issues such as congestion, accessibility, and infrastructure, and study strategies to address these problems. The course covers both quantitative and qualitative survey methods, along with techniques for redeveloping and revitalizing city centers to enhance their functionality and sustainability.

5. Pre-requirements for this course (if any):

ARC 4601 New Areas Urban Design Studio Year: 4 Level: 7

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with advanced knowledge of city centers, focusing on analyzing the factors that shape and influence these dynamic spaces. Students will develop the ability to independently research and apply relevant insights, engage effectively in collaborative communication, and contribute actively to addressing challenges in the built environment.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction	2
2	Main problems of city centers - Part 1	2
3	Main problems of city centers - Part 2	2
4	Main elements of city centers	2
5	Patterns of city centers	2
6	Theoretical and conceptual approaches used in planning city centers - Part 1	2
7	Theoretical and conceptual approaches used in planning city centers - Part 2	2
8	Toward safer city centers	2
9	Strategies for solving problems of city centers - Part 1	2
10	Strategies for solving problems of city centers - Part 2	2
11	City centers in Saudi Arabia	2
12	Main problems of city centers in Saudi Arabia	2
13	Case study analysis - Part 1	2
14	Case study analysis - Part 2	2
15	Research development	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Ruimte, M. (2012). Environmental Problems of the City Centres. Springer.
	Helms, G., Boyle, M., Mitchell, D., & Pinder, D. (2016). Towards Safe City Centres?. Taylor & Francis.
Supportive References	Alexander, I. (1975). The City Centre: Patterns and Problems. Intl Specialized Book Services.
	Oc, T. (1997). Safer city centres. P. Chapman Publ.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Mohanad A. Saddiq Alfelali	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Selected Topics in Urban Design**
Course Code:	**ARC 4634**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP30-e ** Elective Course 2: Urban Planning Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 8

4. Course general description:

This course offers a seminar-style exploration of specialized urban design topics, with a syllabus that evolves annually to reflect current trends and issues. Students will engage in discussions on various subjects such as the impact of human settlements on urban ecosystems, perceptual boundaries within cities, waterfront development, and restorative city concepts. The course provides an opportunity to deepen understanding and complement other urban design studies through contemporary, relevant topics.

5. Pre-requirements for this course (if any):

ARC 4601 New Areas Urban Design Studio Year: 4 Level: 7

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to deepen students' understanding of advanced topics in urban design, emphasizing the analysis of factors that shape and influence the built environment. Students will develop skills to independently research, effectively communicate in collaborative settings, and actively contribute to solving challenges related to urban design.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction to the course	2
2	Research title selection	2
3	Analyze relevant research papers - Part 1	2
4	Analyze relevant research papers - Part 2	2
5	Problem statement and methodology	2
6	Literature review - Part 1	2
7	Literature review - Part 2	2
8	Literature review - Part 3	2
9	Applying the methodology - part 1	2
10	Applying the methodology - part 2	2
11	Applying the methodology - part 3	2
12	The conclusion and recommendations	2
13	Research refining - Part 1	2
14	Research refining - Part 2	2
15	Research refining - Part 3	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	References vary on yearly basis
	0
Supportive References	Coaffee J., and Peter L. (2017). Urban Resilience. Bloomsbury Publishing
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Mohanad A. Saddiq Alfelali	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Terminals Planning and Design**
Course Code:	**ARC 4633**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UD29-e ** Elective Course 2: Urban Design Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 8

4. Course general description:

This course focuses on the planning and design of transportation terminals, including airports, seaports, rail stations, and bus terminals. It covers key principles for designing efficient, functional, and user-friendly terminals. Students will explore topics such as space planning, passenger flow management, safety, and integration with urban infrastructure. The course also addresses strategies for optimizing terminal capacity and operations, ensuring smooth transitions between different modes of transportation.

5. Pre-requirements for this course (if any):

ARC 4601 New Areas Urban Design Studio Year: 4 Level: 7

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to provide students with advanced knowledge of terminal planning and design, focusing on analyzing the factors influencing these critical mega projects. Students will cultivate the ability to independently research and apply relevant insights, effectively communicate in collaborative settings, and actively address challenges associated with terminal design within the built environment.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction	2
2	Transit oriented development - Part 1	2
3	Transit oriented development - Part 2	2
4	Seaports terminals	2
5	Railways terminals	2
6	Airports - Part 1	2
7	Airports - Part 2	2
8	Airports - Part 3	2
9	Bus terminals	2
10	Parking lots	2
11	Examining and improving terminal operations - Part 1	2
12	Examining and improving terminal operations - Part 2	2
13	Terminal operations through modeling - Part 1	2
14	Terminal operations through modeling - Part 2	2
15	Research development	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Blow, C. (2012). Transport Terminals and Modal Interchanges. Routledge.
	Robert, S. (2024). The Evolution of Airport Design. Taylor & Francis.
Supportive References	Brown, L. (2010). Airport passenger terminal planning and design. Transportation Research Board.
	Dittmar, H., and Ohland, G. (2004). The new transit town : Best practices in transit-oriented development. Island Press.
	Angershou, H. (2004). Planning and design of ports and marine terminals. Civil Eng Pub.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Mohanad A. Saddiq Alfelali	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

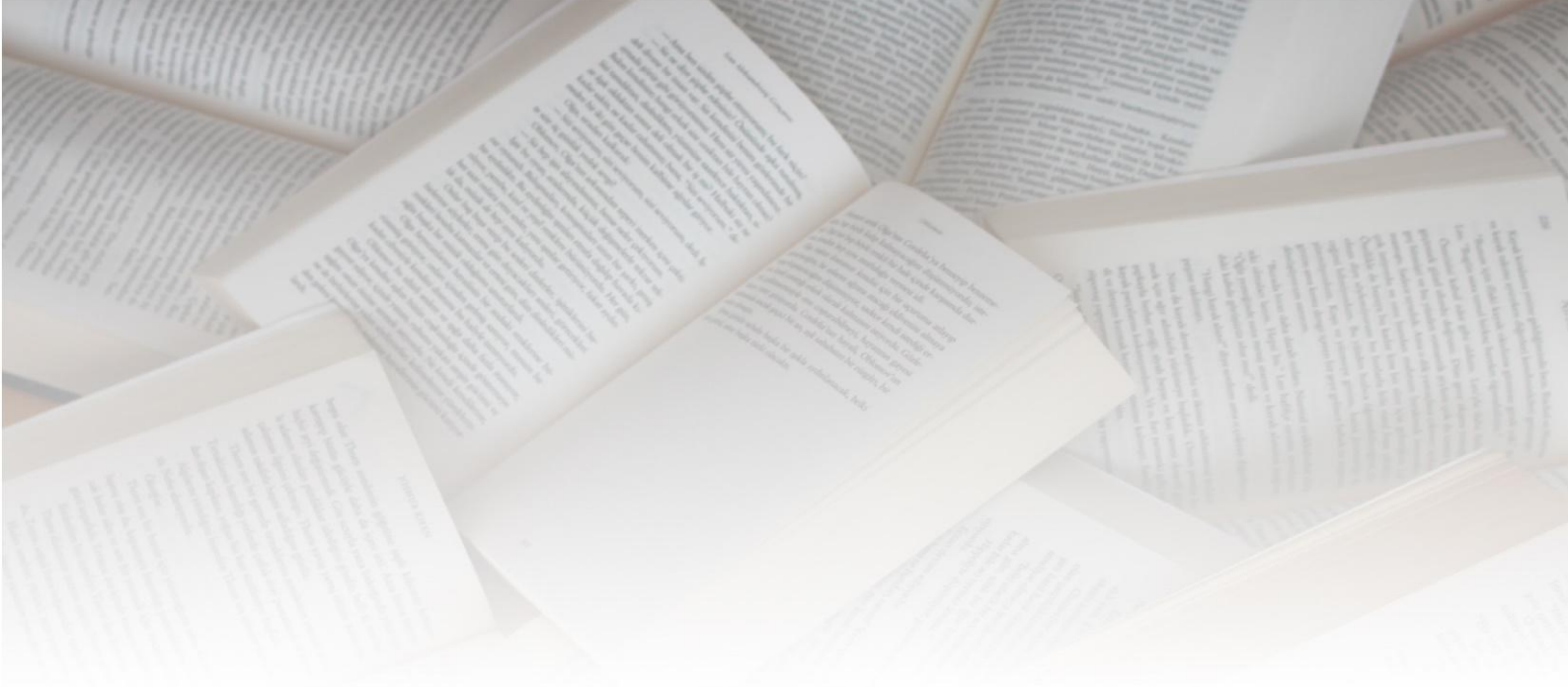
Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators



Urban Design Track

Electives

Course Specification
(Bachelor)

Course Title:	**Crowd Management**
Course Code:	**ARC 4643**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UD33-e ** Elective Course 3: Urban Design Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 5 Level 10

4. Course general description:

This course focuses on the principles and practices of crowd management, emphasizing the organized planning and direction necessary for large gatherings, such as the Hajj pilgrimage in Makkah. Students will explore definitions, concepts, and types of crowds, alongside crowd management strategies and international examples. The course provides an in-depth look at managing the safety and security of large groups, with a special focus on the unique challenges posed during Hajj.

5. Pre-requirements for this course (if any):

ARC 4613 Cooperative Training Year: 5 Level: 9

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with essential knowledge in crowd management within the context of the built environment. Students will learn to independently seek and apply relevant information, engage in effective communication, and collaborate with diverse teams to lead and complete tasks responsibly and constructively.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Eval. of Research
2.2	Effectively engage in communication with others. (S5-a)	**S5**	Collaborative L. (Teamwork Research)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Collaborate effectively and lead diverse teams to complete tasks responsibly and constructively. (V2-c)	**V2**	Collaborative L. (Teamwork Research)	Eval. of Research
3.2	Mange and complete tasks efficiently under pressure and within deadlines. (V3-a)	**V3**	Self–Learning	Assignments & Tasks

C. Course Content

No	List of Topics	Contact
1	Introduction to crowd science and its importance	2
2	Crowds: Definitions, concepts and types	2
3	Crowd disasters: Causes and triggers	2
4	The stages of crowd formation	2
5	Space capacity and crowds	2
6	Perceived crowding	2
7	Crowd management strategies - Part 1	2
8	Crowd management strategies - Part 2	2
9	International examples analysis - Part 1	2
10	International examples analysis - Part 2	2
11	Crowd management in the event of Hajj - Part 1	2
12	Crowd management in the event of Hajj - Part 2	2
13	Research refining - Part 1	2
14	Research refining - Part 2	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation, Assignments & Tasks)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Still, G. (2019). Introduction to Crowd Science. CRC Press
	Kemp, C. & Smith, P. (2010). Case Studies in Crowd Management. Entertainment Technology Press.
Supportive References	Marx, B. (2018). Crowd Management Made Easy. Independent Publishing Platform
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Mohanad A. Saddiq Alfelali	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد
NCAAA

2024
TP-153

Course Specification
(Bachelor)

Course Title:	**Fundamentals of Real Estate Development**
Course Code:	**ARC 4641**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UD31-e ** Elective Course 3: Urban Design Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 5 Level 10

4. Course general description:

This course introduces the basic principles of real estate development, focusing on the fundamental processes of planning, financing, and managing development projects. Students will explore key topics such as site selection, market analysis, project feasibility, and zoning regulations. The course covers financial modeling, risk management, and the role of developers in shaping urban environments, providing a solid foundation for understanding real estate development dynamics.

5. Pre-requirements for this course (if any):

ARC 4613 Cooperative Training Year: 5 Level: 9

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with foundational knowledge in real estate development, emphasizing the built environment's complexities. Students will cultivate independent research skills, effective communication abilities, and collaborative leadership in diverse teams to complete tasks responsibly and constructively.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Eval. of Research
2.2	Effectively engage in communication with others. (S5-a)	**S5**	Collaborative L. (Teamwork Research)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Collaborate effectively and lead diverse teams to complete tasks responsibly and constructively. (V2-c)	**V2**	Collaborative L. (Teamwork Research)	Eval. of Research
3.2	Mange and complete tasks efficiently under pressure and within deadlines. (V3-a)	**V3**	Self–Learning	Assignments & Tasks

C. Course Content

No	List of Topics	Contact
1	Introduction	2
2	Real estate in context	2
3	The diversity of real estate	2
4	Real estate as an asset	2
5	Real estate as a resource	2
6	Real estate people	2
7	The basics of real estate law	2
8	The landlord and tenant relationship	2
9	Interests in real estate	2
10	Real estate transactions	2
11	Real estate valuation concepts	2
12	Real estate valuation methods	2
13	Effective real estate management	2
14	Contemporary issues in real estate	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation, Assignments & Tasks)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Wilcox, J., and Forsyth, J. (2022). Real Estate: The Basics. Routledge
	0
Supportive References	The first Built Environment Development Symposium: Real Estate and Sustainable Housing. (2012). University of Damma
	Brueggeman, W. and Fisher, J. (2021). Real Estate Finance and Investments. McGraw-Hill
	Gaddy, Jr. and Hart, R. (2019). Real estate fundamentals. DF Institute.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Mohanad A. Saddiq Alfelali	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

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Education & Training Evaluation Commission

اعتماد
NCAAA

2024
TP-153

Course Specification
(Bachelor)

Course Title:	**Multicriteria Assessment of Urban Development Projects**
Course Code:	**ARC 4644**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UD34-e ** Elective Course 3: Urban Design Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 5 Level 10

4. Course general description:

This course introduces students to the principles and processes of multicriteria impact assessment, focusing on evaluating short and long-term environmental consequences of proposed urban projects. Students will learn how to assess impacts on natural resources, biodiversity, air and water quality, and human health. The course covers methods for mitigating negative impacts and enhancing positive outcomes.

5. Pre-requirements for this course (if any):

ARC 4613 Cooperative Training Year: 5 Level: 9

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with essential knowledge in multicriteria assessment for urban development projects. Students will learn to independently seek and apply relevant information, engage in effective communication, and collaborate with diverse teams to lead and complete tasks responsibly and constructively within the context of urban development.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Eval. of Research
2.2	Effectively engage in communication with others. (S5-a)	**S5**	Collaborative L. (Teamwork Research)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Collaborate effectively and lead diverse teams to complete tasks responsibly and constructively. (V2-c)	**V2**	Collaborative L. (Teamwork Research)	Eval. of Research
3.2	Mange and complete tasks efficiently under pressure and within deadlines. (V3-a)	**V3**	Self–Learning	Assignments & Tasks

C. Course Content

No	List of Topics	Contact
1	Introduction	2
2	Role of multicriteria impact assessment in planning project	2
3	Multicriteria impact assessment process	2
4	Environmental impact assessment considerations - Part 1	2
5	Environmental impact assessment considerations - Part 2	2
6	Environmental impact assessment considerations - Part 3	2
7	Social impact assessment considerations	2
8	Introduction to fiscal impact assessment considerations	2
9	Data collection and analysis for impact assessment	2
10	Methodologies in multicriteria impact assessment	2
11	Tools and technologies in multicriteria impact assessment	2
12	Case study analysis - Part 1	2
13	Case study analysis - Part 2	2
14	Research refining	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation, Assignments & Tasks)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Nijkamp, P. et al. (2013). Multicriteria evaluation in physical planning. North-Holland.
	Alexander, E., & Haughton, P. (2016). Evaluation in Planning. Taylor and Francis.
Supportive References	
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Mohanad A. Saddiq Alfelali	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Urban Project Management**
Course Code:	**ARC 4642**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UD32-e ** Elective Course 3: Urban Design Courses Group: Urban Des.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 5 Level 10

4. Course general description:

This course provides students with vital skills for effective urban design project management and encourages strategic thinking. It covers two key areas: the project life cycle phases, including initiation, planning, execution, monitoring and controlling, and completion; and the essential knowledge areas of project management such as scope, time, cost, risk, and quality management.

5. Pre-requirements for this course (if any):

ARC 4613 Cooperative Training Year: 5 Level: 9

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to provide students with essential knowledge in urban project management, focusing on the complexities of the built environment. Students will develop the ability to independently seek and apply relevant knowledge, engage effectively in communication with others, and collaborate with diverse teams to lead and complete tasks responsibly and constructively.

2. Teaching mode

(Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Eval. of Research
2.2	Effectively engage in communication with others. (S5-a)	**S5**	Collaborative L. (Teamwork Research)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Collaborate effectively and lead diverse teams to complete tasks responsibly and constructively. (V2-c)	**V2**	Collaborative L. (Teamwork Research)	Eval. of Research
3.2	Mange and complete tasks efficiently under pressure and within deadlines. (V3-a)	**V3**	Self–Learning	Assignments & Tasks

C. Course Content

No	List of Topics	Contact
1	Introduction to project management body of knowledge (PMBOK)	2
2	Initiating process: Define a project and obtain authorization	2
3	Planning process: Establish the project scope and objectives	2
4	Executing: Complete the work defined to satisfy project specifications	2
5	Monitoring and controlling processes	2
6	Closing process	2
7	knowledge area: Integration management	2
8	knowledge area: Scope management	2
9	knowledge area: Schedule management	2
10	knowledge area: Cost management	2
11	knowledge area: Quality management	2
12	knowledge area: Communications management	2
13	knowledge area: Resource and risk management	2
14	knowledge area: Procurement and Stakeholder management	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation, Assignments & Tasks)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Kloppenborg, T. (2023). Contemporary Project Management. South-Western.
	0
Supportive References	PMI. (2021). Guide to the Project Management Body of Knowledge. 7th ed. Project Management Institute
	Clark, T. (2018). Project Management for Planners. Planners press book.
	Kerzner, H. (2017). Project Management Workbook to Accompany Project Management. John Wiley & Sons.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Mohanad A. Saddiq Alfelali	**Adnan Yehya Alshahrani**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

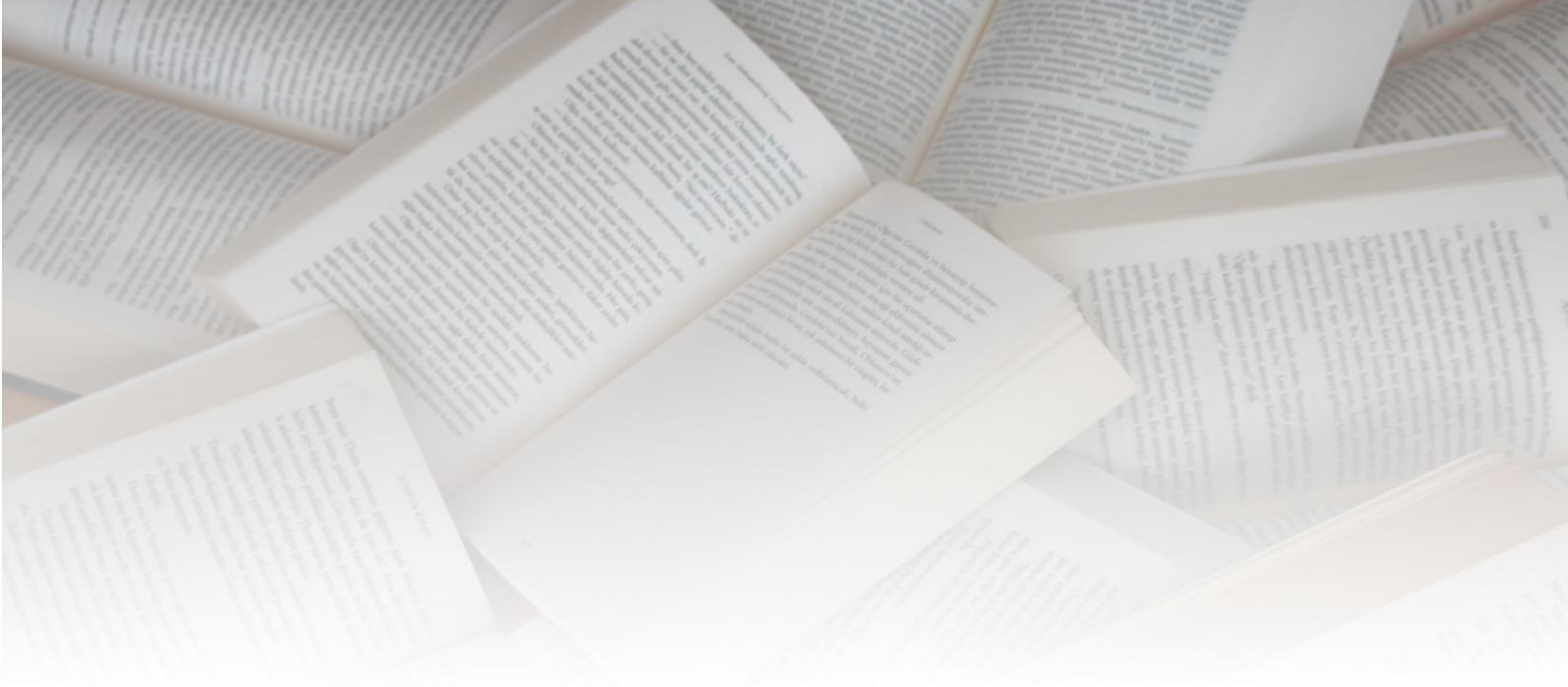
7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Electives of

Urban Planning

Track



Urban Planning Track

Electives Level 7

Course Specification
(Bachelor)

Course Title:	**Cities and Climate Change**
Course Code:	**ARC 4721**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Planning)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP23-e ** Elective Course 1: Urban Planning Courses Group: Urban Plan.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 7

4. Course general description:

This course explores the impacts of climate change on cities, examining a range of scenarios from moderate to extreme. Students will study the consequences of these impacts on urban environments and the challenges they present. The course emphasizes urban planning policy options to mitigate and adapt to climate change, with a focus on transforming urban form to enhance resilience, reduce emissions, and improve the sustainability of city structures.

5. Pre-requirements for this course (if any):

ARC 3005 Long-Span Buildings Design Studio Year: 3 Level: 6

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with advanced knowledge of the built environment, focusing on the relationship between cities and climate change. Students will analyze the various factors that shape and influence the built environment. They will also develop the ability to independently seek and apply relevant knowledge, engage effectively in communication, and actively contribute to addressing the challenges posed by climate change in urban settings.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction to Cities and Climate Change	2
2	Climate change impacts on cities - Part 1	2
3	Climate change impacts on cities - Part 2	2
4	Urban planning strategies for climate change: Mitigation and Adaptation	2
5	Mitigation: Energy efficiency	2
6	Mitigation: Waste management	2
7	Mitigation: Water resource management	2
8	Mitigation: Green infrastructure	2
9	Mitigation: Transportation	2
10	Adaptation: Land use and housing	2
11	Adaptation: Energy resilient strategies	2
12	Adaptation: Flood risk management in cities	2
13	Adaptation: Infrastructure resilience	2
14	Disaster risk reduction	2
15	Research development	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Dodman, D. (2012). Adapting Cities to Climate Change. Routledge.
	Allam, Z., Jones, D., & Thondoo, M. (2020). Cities and climate change. Palgrave MacMillan.
Supportive References	Allaoua, Z. (2011). Guide to Climate Change Adaptation in Cities. The World Bank.
	Sethi, M. (2017). Climate change and urban settlements. Routledge.
	Hamin, E. (2019). Planning for climate change. Taylor and Francs.
	Calthorpe, P. (2010). Urbanism in the Age of Climate Change. Island Press.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Fares Saad M Al-Saygh	**Abdulrahman Abdulaziz Majrashi**	**Oumr Adnan Osra**
Head of PPC	Head of C&SPC	Head of D&QC
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
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6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Sustainable Urban Tourism**
Course Code:	**ARC 4724**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Planning)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP26-e ** Elective Course 1: Urban Planning Courses Group: Urban Plan.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 7

4. Course general description:

This course explores the principles and practices of sustainable tourism in urban settings. It delves into the challenges and opportunities of balancing economic growth, social equity, and environmental protection in cities. Students will learn about sustainable tourism planning, marketing, and management. They will also gain insights into the role of technology, innovation, and community engagement in creating sustainable urban tourism destinations

5. Pre-requirements for this course (if any):

ARC 3005	Long-Span Buildings Design Studio	Year: 3	Level: 6

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with advanced knowledge of sustainable urban tourism and its relationship with the built environment. Students will analyze the factors that shape and influence urban tourism, develop the ability to independently seek and apply relevant knowledge, and enhance their communication skills. Additionally, they will actively contribute to addressing challenges related to sustainable urban tourism, focusing on balancing tourism development with environmental, social, and cultural sustainability.

2. Teaching mode

(Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	What is a urban tourism?	2
2	Benefits of urban tourism	2
3	Challenges of urban tourism	2
4	Globalization, urban competition, and tourism	2
5	Tourism policies and urban growth	2
6	The infrastructure and finance of urban tourism	2
7	Urban tourism, amenities, and human capital	2
8	Urban tourism and the revival of neighborhoods and city centers	2
9	Shaping sustainable tourism	2
10	Instruments for more sustainable tourism	2
11	Tourism and sustainability	2
12	Policy implications of a sustainable tourism agenda	2
13	Structures and strategies of sustainable urban tourism	2
14	Case Studies - Part 2	2
15	Case Studies - Part 2	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Costas S. (2011). Urban Tourism and Urban Change : Cities in a Global Economy. London, Routledge.
	UN, and WTO. (2005). Making Tourism More Sustainable : A Guide for Policy Makers. UNEP.
Supportive References	Filipa, et al. Handbook of Research on the Role of Tourism in Achieving the Sustainable Develop. Goals. Business Scienc
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Fares Saad M Al-Saygh	**Abdulrahman Abdulaziz Majrashi**	**Oumr Adnan Osra**
Head of PPC	Head of C&SPC	Head of D&QC
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Urban Conservation and Renewal**
Course Code:	**ARC 4722**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Planning)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP24-e ** Elective Course 1: Urban Planning Courses Group: Urban Plan.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 7

4. Course general description:

This course provides a comprehensive exploration of urban conservation processes and their role in contemporary urban regeneration. Students will study the integration of conservation with modern renewal practices, focusing on social and economic aspects. Key topics include conservation techniques, policies, and the importance of community participation in urban renewal projects. Students will gain insights into balancing preservation with urban development in the 21st century.

5. Pre-requirements for this course (if any):

ARC 3005	Long-Span Buildings Design Studio	Year: 3	Level: 6

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to provide students with advanced knowledge of urban conservation and renewal. Students will analyze the factors that shape and influence urban spaces, focusing on preservation and revitalization efforts. They will also develop the ability to independently seek and apply relevant knowledge, engage in effective communication, and contribute actively to addressing the challenges associated with urban conservation and renewal.

2. Teaching mode

(Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Defining Urban Conservation: Concepts and Approaches	2
2	Historical Context of Urban Conservation Movements	2
3	Urban Design Principles for Conservation	2
4	Conservation Techniques for Buildings and Sites 1	2
5	Conservation Techniques for Buildings and Sites 2	2
6	Sustainable Urbanism and Conservation Practices	2
7	Community Engagement Strategies in Urban Renewal	2
8	Social Equity and Urban Regeneration	2
9	Financing and Economic Impacts of Urban Conservation Projects	2
10	Case Studies of Conservation Projects 1	2
11	Case Studies of Conservation Projects 2	2
12	Case Studies of Conservation Projects 3	2
13	Case Studies of Conservation Projects 4	2
14	Legal Frameworks for Conservation and Preservation	2
15	The Future of Urban Conservation and Renewal	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Kalman, H., & Letourneau, M. (2014). Heritage Planning: Principles and Process. Routledge.
	Ministry of Municipalities and Village. (1426 H). Guide for the Conservation of Urban Heritage.
Supportive References	Bagader, M. (2019). The Evolution of Built Heritage Conservation Policies in KSA. LAP LAMBERT.
	Pickard, R. (2012). Policy and Law in Heritage Conservation. Taylor & Francis.
	Rodwell, D. (2009). Conservation and Sustainability in Historic Cities. Wiley.
	Germanà M. , et al. (2023). Conservation of Architectural Heritage (CAH). Springer.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Fares Saad M Al-Saygh	**Abdulrahman Abdulaziz Majrashi**	**Oumr Adnan Osra**
Head of PPC	Head of C&SPC	Head of D&QC
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد
NCAAA

2024
TP-153

Course Specification
(Bachelor)

Course Title:	**Urban Development in Saudi Arabia**
Course Code:	**ARC 4723**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Planning)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP25-e ** Elective Course 1: Urban Planning Courses Group: Urban Plan.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 7

4. Course general description:

This course examines the historical evolution of urban development in Saudi Arabia, highlighting the government's role in fostering urbanization and establishing a robust physical infrastructure. Students will explore the transformative vision under Saudi Vision 2030, focusing on how cities are becoming hubs for innovative interventions and experimentation. The course provides a comprehensive understanding of both past urban growth and contemporary strategies shaping the future of Saudi cities.

5. Pre-requirements for this course (if any):

ARC 3005	Long-Span Buildings Design Studio	Year: 3	Level: 6

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to provide students with advanced knowledge of urban development in Saudi Arabia, focusing on the unique aspects of its built environment. Students will analyze the factors shaping and influencing urban development in the region, gain the ability to independently seek and apply relevant knowledge, and engage in effective communication. Additionally, they will contribute actively to addressing the challenges related to urban development in Saudi Arabia, emphasizing sustainable and context-specific solutions.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction	2
2	Urbanization in KSA	2
3	History of short and medium-term country-wide plans - Part 1	2
4	History of short and medium-term country-wide plans - Part 2	2
5	Housing in KSA	2
6	Future Saudi cities program - Part 1	2
7	Future Saudi cities program - Part 2	2
8	Introduction to Saudi vision 2030	2
9	Vision 2030: Quality of life in cities program	2
10	Vision 2030: Doyof Al Rahman program	2
11	Vision 2030: Housing program	2
12	Case study analysis - Part 1	2
13	Case study analysis - Part 2	2
14	Case study analysis - Part 3	2
15	Research development	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Dept. of Housing and Urban Development. (1977). Housing and urban development in KSA.
	الهذلول، ص. (1999). التنمية العمرانية في السعودية: الفرص والتحديات. دار السهن.
Supportive References	Saudi Vision 2030. https://www.vision2030.gov.sa/en
	Al-Ankary, K., & Bushra, e. (1989). Urban and rural profiles in Saudi Arabia. G. Borntraeger.
	Al-Sedairy, S. (1985). Urban design and community development in Saudi Arabia. Tihama.
	SALIBA, R. (2021). Urban design in the Arab world. Routledge.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Fares Saad M Al-Saygh	**Abdulrahman Abdulaziz Majrashi**	**Oumr Adnan Osra**
Head of PPC	Head of C&SPC	Head of D&QC
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

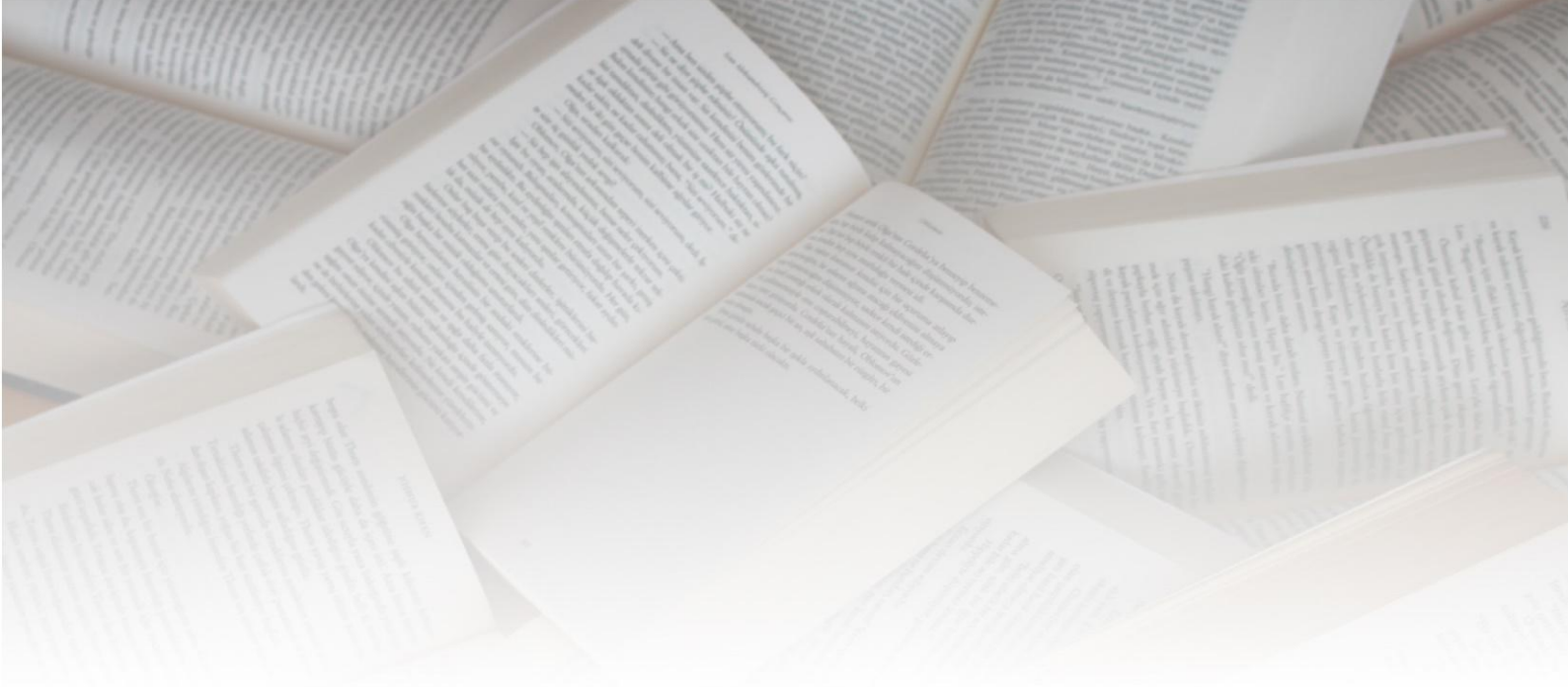
Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators



Urban Planning Track

Electives Level 8

Course Specification
(Bachelor)

Course Title:	**Future Urbanism**
Course Code:	**ARC 4733**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Planning)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP29-e ** Elective Course 2: Urban Planning Courses Group: Urban Plan.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 8

4. Course general description:

This course explores the evolving concepts of future cities in response to the growing threats facing metropolitan life. Students will investigate imagined cityscapes—submerged, floating, flying, vertical, underground, and salvaged—through the lenses of architecture, fiction, film, and visual art. The course encourages students to use imagination as a tool to bridge the gap between speculative urban visions and real-world solutions, envisioning sustainable and resilient futures for humanity in urban environments.

5. Pre-requirements for this course (if any):

ARC 4701	New City Urban Planning Studio	Year: 4	Level: 7

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to provide students with advanced knowledge on the evolving trends and future directions of urbanism. Students will analyze the factors shaping and influencing the built environment. In addition, they will develop the ability to independently seek and apply knowledge, engage in effective communication, and actively contribute to addressing the challenges and opportunities in the future of urban development.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction: Real and imagined future cities	2
2	Visual history of future cities - Part 1	2
3	Visual history of future cities - Part 2	2
4	Visual history of future cities - Part 3	2
5	Visual history of future cities - Part 4	2
6	Visual history of future cities - Part 5	2
7	Drowned city	2
8	Floating city	2
9	Airborne city	2
10	Vertical city	2
11	Underground city	2
12	Future disasters	2
13	Ruined city: Sprawl, Disaster, Entropy	2
14	Salvage and waste cities	2
15	Research development	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Dunn, N., & Pollastri, S. (2014). A visual history of the future. Foresight.
	Dobraszczyk, P. (2019). Future Cities: Architecture and the imagination. Reaktion Books.
Supportive References	Banham, R., & Gannon, T. (2020). Megastructure: Urban Futures of the Recent Past. The Monacelli.
	Kumar, A. & Meshram, D. (2022). Future of Cities. Routledge.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Fares Saad M Al-Saygh	**Abdulrahman Abdulaziz Majrashi**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Selected Topics in Urban and Regional Planning**
Course Code:	**ARC 4734**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Planning)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP30-e ** Elective Course 2: Urban Planning Courses Group: Urban Plan.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 8

4. Course general description:

This course offers a seminar-style learning environment focused on specialized topics in urban planning, tailored to senior students. The syllabus evolves yearly, reflecting contemporary issues and advancements in the field. Students will engage in in-depth discussions and research on advanced urban planning topics, complementing their prior coursework. The course encourages critical thinking, problem-solving, and the application of urban planning concepts to real-world challenges.

5. Pre-requirements for this course (if any):

ARC 4701	New City Urban Planning Studio	Year: 4	Level: 7

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to provide students with advanced knowledge in urban and regional planning, focusing on analyzing factors that shape and influence the built environment. Students will enhance their ability to independently research, communicate effectively in collaborative environments, and actively address challenges in urban and regional planning.

2. Teaching mode

(Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction to the course	2
2	Research title selection	2
3	Analyze relevant research papers - Part 1	2
4	Analyze relevant research papers - Part 2	2
5	Problem statement and methodology	2
6	Literature review - Part 1	2
7	Literature review - Part 2	2
8	Literature review - Part 3	2
9	Applying the methodology - part 1	2
10	Applying the methodology - part 2	2
11	Applying the methodology - part 3	2
12	The conclusion and recommendations	2
13	Research refining - Part 1	2
14	Research refining - Part 2	2
15	Research refining - Part 3	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	References vary on yearly basis
	0
Supportive References	Coaffee J., and Peter L. (2017). Urban Resilience. Bloomsbury Publishing
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Fares Saad M Al-Saygh	**Abdulrahman Abdulaziz Majrashi**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Smart Cities**
Course Code:	**ARC 4731**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Planning)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP27-e ** Elective Course 2: Urban Planning Courses Group: Urban Plan.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 8

4. Course general description:

This course explores the fundamentals of smart cities, focusing on how technological advancements are transforming urban life. It covers key aspects such as smart infrastructure, mobility, and buildings. Students will study current smart city projects and innovations, gaining insights into the strategies that can be used to transition existing cities into smart cities.

5. Pre-requirements for this course (if any):

ARC 4701 New City Urban Planning Studio Year: 4 Level: 7

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to provide students with advanced knowledge of smart cities. Students will analyze the factors influencing the development of smart cities. In addition, they will learn to independently seek and apply relevant knowledge, effectively communicate with others, and actively contribute to addressing the challenges of creating and maintaining smart cities, with a focus on improving urban living through innovative solutions and technologies.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	What is a smart city?	2
2	Smart city: Advantages and benefits	2
3	Smart city: Challenges and risks	2
4	Smart cities characteristics and design principles	2
5	Components: Smart buildings	2
6	Components: Smart transportation systems	2
7	Components: Smart infrastructure	2
8	Smart city and the Internet of Things	2
9	Smart cities and sustainable development - Part 1	2
10	Smart cities and sustainable development - Part 2	2
11	Case study analysis -Part1	2
12	Case study analysis -Part2	2
13	Case study analysis -Part3	2
14	Case study analysis -Part4	2
15	Research development	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Komninos, N. (2018). The Age of Intelligent Cities. Routledge.
	Song, H., et al. (2017). Smart Cities: Foundations, Principles, and Applications. John Wiley & Sons, Incorporated.
Supportive References	Gassmann, O., Bo?hm, J., & Palmie?, M. (2019). Smart cities. Emerald Publishing Limited.
	Tomar, P., & Kaur, G. (2019). Green and smart technologies for smart cities. CRC Press.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Fares Saad M Al-Saygh	**Abdulrahman Abdulaziz Majrashi**	**Oumr Adnan Osra**
Head of PPC	Head of C&SPC	Head of D&QC
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد
NCAAA

2024
TP-153

Course Specification
(Bachelor)

Course Title:	**Technology and Urban Change**
Course Code:	**ARC 4732**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Planning)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP28-e ** Elective Course 2: Urban Planning Courses Group: Urban Plan.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 4 Level 8

4. Course general description:

This course examines the impact of technological advancements during the three Industrial Revolutions on urban development. It explores technological achievements, their social and economic effects, their influence on urban planning and systems, and industrial-age cities' challenges. Students will learn how technology reshaped cities and its relevance to modern urban development

5. Pre-requirements for this course (if any):

ARC 4701	New City Urban Planning Studio	Year: 4	Level: 7

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with advanced knowledge of how technology drives urban change and its impact on the built environment. Students will analyze the factors influencing urban transformation. In addition, they will develop the ability to independently seek and apply relevant knowledge, engage effectively in communication, and actively contribute to addressing challenges related to technological advancements in urban planning.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Analyze factors shaping and influencing the built environment. (S1-l)	**S1**	Interactive L. (Dialogue & discussion)	Written Exam
2.2	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning (Research work)	Eval. of Research
2.3	Effectively engage in communication with others. (S5-a)	**S5**	Self–Learning (Research work)	Eval. of Research
	()			
	Values, autonomy, and responsibility			
3.1	Contribute actively to addressing challenges related to the built environment. (V2-a)	**V2**	Self–Learning	Eval. of Research

C. Course Content

No	List of Topics	Contact
1	Introduction to the Course	2
2	Tech. Achievements of the Industrial Revolution: Transportation	2
3	Tech. Achievements of the Industrial Revolution: Communications and Telecom.	2
4	Tech. Achievements of the Industrial Revolution: Infrastructure, Public Health and Safety	2
5	Social and Economic Effects of the Technological Achievements of the Industrial Revolution	2
6	Impact of Technology on Urban Planning	2
7	Impact of Technology on the Urban System	2
8	Impact of Technology on the Formation of the Industrial Age City	2
9	Technology and Problems of the Industrial Age City	2
10	Applications of Artificial Intelligence (AI)	2
11	Virtual and Augmented Reality (VR/AR)	2
12	Drones and Remote Sensing, Satellite Imagery, and Digital Mapping	2
13	Advanced Applications of Geographic Information System (GIS)	2
14	Statistical Software for Data Analysis and Future Projections	2
15	Technology and Future Patterns of Urban Growth	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research)	14	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	أبو قرين، ع. (2020). المدخل إلى التخطيط الحضري. موسوعة التخطيط. مكتبة الملك فهد الوطنية.
	0
Supportive References	
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Fares Saad M Al-Saygh	**Abdulrahman Abdulaziz Majrashi**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

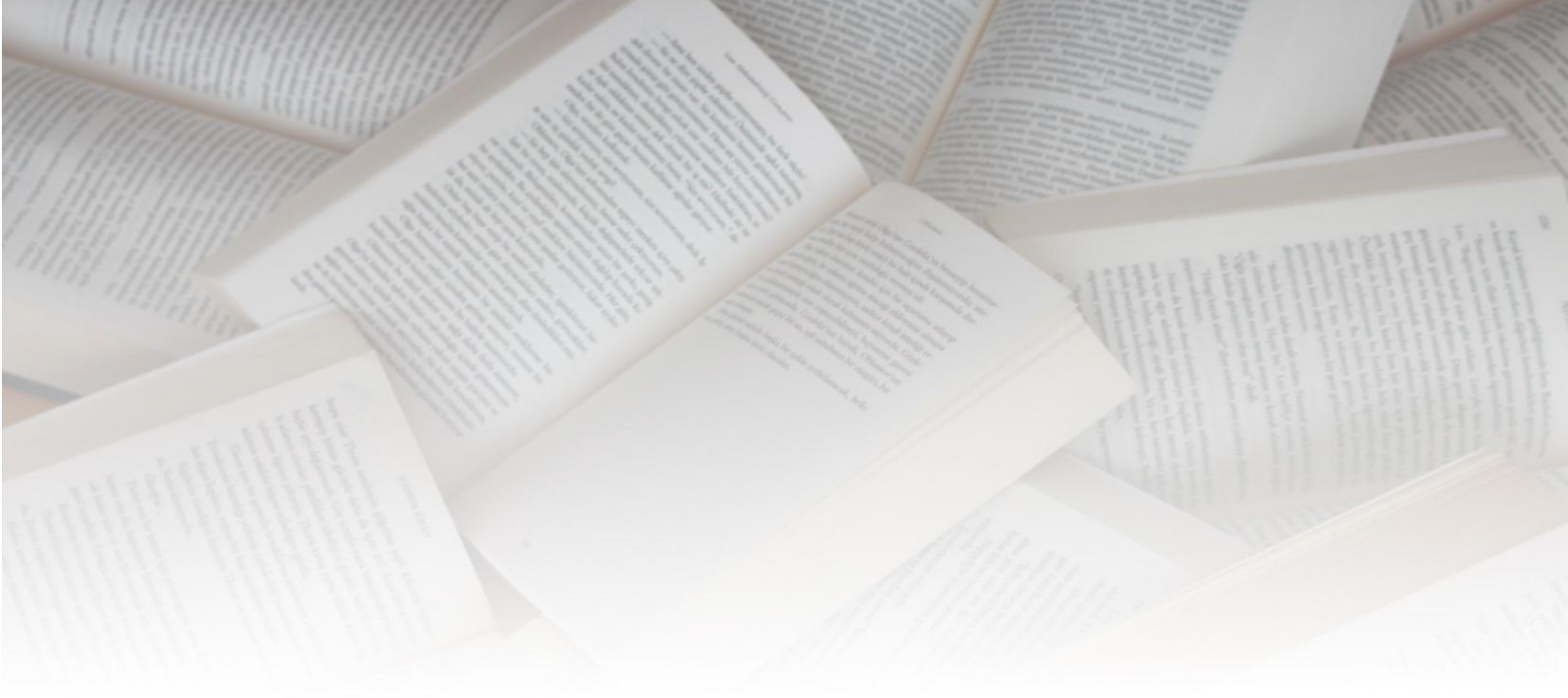
Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators



Urban Planning Track

Electives Level 10

Course Specification
(Bachelor)

Course Title:	**Urban Risk Management**
Course Code:	**ARC 4741**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Design)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP31-e ** Elective Course 3: Urban Planning Courses Group: Urban Plan.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 5 Level 10

4. Course general description:

This course equips students with strategies and tools to identify, assess, and mitigate risks in urban settings, addressing challenges from natural disasters, technological failures, etc. It covers urban resilience, disaster risk reduction, climate adaptation, and emergency planning, with topics like hazard mapping, risk assessment, crisis communication, and governance. In addition, case studies highlight global best practices

5. Pre-requirements for this course (if any):

ARC 4500	Cooperative Training	Year: 5	Level: 9

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with advanced knowledge of urban risk management, focusing on the identification, assessment, and mitigation of risks within the built environment. Students will develop the skills to independently seek and apply relevant knowledge, engage in effective communication, and collaborate with diverse teams to address urban risks responsibly and constructively.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Eval. of Research
2.2	Effectively engage in communication with others. (S5-a)	**S5**	Collaborative L. (Teamwork Research)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Collaborate effectively and lead diverse teams to complete tasks responsibly and constructively. (V2-c)	**V2**	Collaborative L. (Teamwork Research)	Eval. of Research
3.2	Mange and complete tasks efficiently under pressure and within deadlines. (V3-a)	**V3**	Self–Learning	Assignments & Tasks

C. Course Content

No	List of Topics	Contact
1	Introduction to urban risk reduction	2
2	Urban disaster risk: Analysis	2
3	Urban disaster risk: Action planning	2
4	Urban disaster risk analysis: Implementation management	2
5	Human-induced environmental risks	2
6	Urban flood risk management	2
7	Earthquake risk management	2
8	Reducing urban risk through community-based approaches	2
9	Post-disaster reconstruction	2
10	Case studies on environmental risk reduction – Part 1	2
11	Case studies on environmental risk reduction – Part 2	2
12	Case studies on environment-disaster linkages – Part 1	2
13	Case studies on environment-disaster linkages – Part 2	2
14	Future perspective of urban risk reduction	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation, Assignments & Tasks)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Shaw, R., et al. (2012). Urban Risk Reduction : An Asian Perspective. Bingley, Uk, Emerald Group Publishing Limited
	0
Supportive References	
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Fares Saad M Al-Saygh	**Abdulrahman Abdulaziz Majrashi**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Urban Governance**
Course Code:	**ARC 4742**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Planning)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP32-e ** Elective Course 3: Urban Planning Courses Group: Urban Plan.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 5 Level 10

4. Course general description:

This course explores the political, socio-economic, and administrative aspects of local government and city management. It introduces key management concepts, city government functions, and their interactions with higher levels of government. Emphasis is placed on aligning urban needs with residents' interests, addressing modern city management issues such as urban equality, public participation, socio-economic dynamics, and residents' sense of security. The course provides a comprehensive understanding of effective city management strategies.

5. Pre-requirements for this course (if any):

ARC 4500 Cooperative Training Year: 5 Level: 9

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with advanced knowledge of urban governance, focusing on the systems, structures, and processes that guide decision-making within the built environment. Students will develop the ability to independently seek and apply relevant knowledge, engage in effective communication, and collaborate with diverse teams to address urban governance challenges responsibly and constructively.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Eval. of Research
2.2	Effectively engage in communication with others. (S5-a)	**S5**	Collaborative L. (Teamwork Research)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Collaborate effectively and lead diverse teams to complete tasks responsibly and constructively. (V2-c)	**V2**	Collaborative L. (Teamwork Research)	Eval. of Research
3.2	Mange and complete tasks efficiently under pressure and within deadlines. (V3-a)	**V3**	Self–Learning	Assignments & Tasks

C. Course Content

No	List of Topics	Contact
1	Introduction to urban governance: Definition, importance and historical evolution	2
2	Urbanization and urban governance challenges	2
3	Global urban governance	2
4	Theories and frameworks in urban governance	2
5	Parameters of city management: Urban equality	2
6	Parameters of city management: Public participation	2
7	Parameters of city management: Socio-economic parameter	2
8	Parameters of city management: Feeling of secure	2
9	Legal and institutional frameworks	2
10	Urban finance and economics	2
11	Role of technology in urban governance: E-governance and smart city initiatives	2
12	Urban governance and management in KSA	2
13	Case studies and practical applications	2
14	Future of urban governance	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation, Assignments & Tasks)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.
	Habitat. (2016). Urban Governance, Capacity and Institutional Development.
Supportive References	Weith, T. (2020). Sustainable Land Management in a European Context. Intl Springer.
	الرشود، عبدالمحسن محمد. (1419هـ). الإدارة المحلية في المملكة العربية السعودية، دار الشبل للنشر و التوزيع، الرياض.
	وزارة البلديات والإسكان. الاشتراطات والضوابط واألنظمة واللوائح.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Fares Saad M Al-Saygh	**Abdulrahman Abdulaziz Majrashi**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Urban Economies**
Course Code:	**ARC 4743**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Planning)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP33-e ** Elective Course 3: Urban Planning Courses Group: Urban Plan.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 5 Level 10

4. Course general description:

This course delves into the strategies used by policymakers and planners to foster healthy urban economies. It covers the role of economic development specialists and explores a range of tools for urban economic development and redevelopment. Key topics include labor force issues, housing, transportation, and the impact of technology. The course also examines new strategies in urban economics and features international and Saudi case studies for practical insights.

5. Pre-requirements for this course (if any):

ARC 4500	Cooperative Training	Year: 5	Level: 9

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with advanced knowledge of urban economies, focusing on the economic forces that shape the built environment. Students will develop the ability to independently seek and apply relevant knowledge, engage in effective communication, and collaborate with diverse teams to address economic challenges within urban contexts.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
	Skills			
2.1	Independently seek knowledge and use it appropriately. (S3-a)	**S3**	Self–Learning	Eval. of Research
2.2	Effectively engage in communication with others. (S5-a)	**S5**	Collaborative L. (Teamwork Research)	Eval. of Presentation
	()			
	Values, autonomy, and responsibility			
3.1	Collaborate effectively and lead diverse teams to complete tasks responsibly and constructively. (V2-c)	**V2**	Collaborative L. (Teamwork Research)	Eval. of Research
3.2	Mange and complete tasks efficiently under pressure and within deadlines. (V3-a)	**V3**	Self–Learning	Assignments & Tasks

C. Course Content

No	List of Topics	Contact
1	Introduction	2
2	Axioms of Urban Economics	2
3	Factors Driving Urban Development: From Trade and Industry to Innovation	2
4	Agglomeration Economies: Firms Clustering	2
5	Economics and City Size	2
6	Economics and Urban Growth	2
7	Economics and Urban Land Rent	2
8	Economics and Land-Use Patterns	2
9	Neighborhood Choice	2
10	Growth Controls	2
11	Autos and Highways	2
12	Urban Transit	2
13	Housing Market and Policy	2
14	Local governments in KSA	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
1	(Eval. of Research, Eval. of Presentation, Assignments & Tasks)	1 to 15	30
2	Mid-Term Exam (Written Exam)	7	30
3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	O'sullivan, A. (2019). Urban Economics. Mcgraw-Hill/Irwin.
	0
Supportive References	Sieg, H. (2020). Urban Economics and Fiscal Policy. Princeton University Press.
	McDonald. J.(1997). Fundamentals of Urban Economics.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
	Equipped Classroom
Technology equipment (Projector, smart board, software)	Internet connection
	Powerful computer/ laptop
Other equipment	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategy	Students	Indirect (Questionnaire)
Effectiveness of evaluation system	Students	Indirect (Questionnaire)
Quality of learning resources	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Students	Indirect (Questionnaire)
Extent of achievement of CLOs	Faculty member	Direct (Results analysis)
Effectiveness of evaluation system	Peer reviewer	Direct (Results analysis)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Programs Preparation Committee (PPC) Curriculum and Study Plans Committee (C&SPC) Development and Quality Committee (D&QC) Department of Architecture Council
REFERENCE NO.	Department of Architecture Council, 12-1446
DATE	April, 2025

Initial Review	Course Coordinator	Head of Department
Fares Saad M Al-Saygh	**Abdulrahman Abdulaziz Majrashi**	**Oumr Adnan Osra**
Head of PPC	**Head of C&SPC**	**Head of D&QC**
Mohamed Atef Elhamy Kamel	**Mohamed Wahba Ibrahim Khalil**	**Ahmed M. A. Shehata**

Bachelor of Architecture and Planning Program

General Architecture

1	Architectural Formation Principles Studio	Architectural Drawing	Design Process and Methods	Ancient Civilizations and Medieval Architecture	Design Thinking	English Language 1	The Holy Quran Tajweed
2	Fundamental Design Principles Studio	Visual Studies	Vector-based Drawing	Architectural Models Studio	English Language 2	University Skills	The Holy Quran Memorization 1
3	Small Public Buildings Design Studio	Building Construction Studio 1	3D Modeling	Buildings Design Standards 1	Environmental Control Systems	Introduction to Artificial Intelligence	The Holy Quran Memorization 2
4	Vernacular Architecture Design Studio	Building Construction Studio 2	Principles of Urban Design	Architecture of Islamic Civilization	Principles of Landscape Architecture	Values and Ethics	Completion of the Holy Quran
5	Sustainable Design Studio	Building Construction Studio 3	Introduction to Urban Design Studio	Renaissance and Pre-modern Architecture	Principles of Urban Planning	Housing	General Elective
6	Long-Span Buildings Design Studio	Building Construction Studio 4	Architectural Research Methods	20th Century and Contemporary Architecture	Introduction to Urban Planning Studio	Advanced Technologies in Building Construction	Mathematics for Architects

Architecture Track

7	Heritage Buildings Conservation Studio	Working Drawings Studio 1	Creative Generative-Design	Buildings Design Standards 2	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Professional Practice Studio	Working Drawings Studio 2	Integrated Architectural Design Studio 1	Architectural Project Management 1	Elective Course 2	Applications of Building Code in Architecture	Professional Development Skills
9	Cooperative Training						
10	Integrated Architectural Design Studio 2	Economics of Architectural Projects	Professional Practice for Architects	Architectural Project Management 2	Elective Course 3	Universal Design Code	Graduation Project

Urban Design Track

7	New Areas Urban Design Studio	Landscape Design Studio 1	Urban Information Systems	Urban design methodologies and techniques	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing Areas Urban Design Studio	Landscape Design Studio 2	Integrated Urban Design Studio 1	Urban Environmental Control	Elective Course 2	Sustainable Urban Design	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Design Studio 2	Conservation of Heritage Sites	Professional Practice of Urban Design	Urban Mobility	Elective Course 3	Streetscape	Graduation Project

Urban Planning Track

7	New City Urban Planning Studio	Housing Planning Studio 1	Urban Planning Information Systems	Urban Planning Theories	Elective Course 1	The Family in Islam	Principles of Statistics for Architects
8	Existing City Development Studio	Housing Planning Studio 2	Integrated Urban Planning Studio 1	Advanced Urban Information Systems	Elective Course 2	Sustainable Cities	Professional Development Skills
9	Cooperative Training						
10	Integrated Urban Planning Studio 2	Urban Sociology and Population	Professional Practice of Urban Planning	Planning of Urban Mobility	Elective Course 3	Regional Planning	Graduation Project

	Elective Courses: Architecture	Elective Courses: Urban Design	Elective Courses: Urban Planning
7	Islamic Values in Architecture	Temporary Urbanism	Cities and Climate Change
	Saudi Regional Architectural Identity	Humanizing the Cities	Urban Conservation and Renewal
	Architecture of the Two Holy Mosques	Floating Cities	Urban Development in Saudi Arabia
	Islamic Identity in Contemporary Architecture	City Branding	Sustainable Urban Tourism
8	Photorealistic Rendering Techniques	Advanced studies in Landscape Architecture	Smart Cities
	Computer Modeling in Building Construction	Cities Centers	Technology and Urban Change
	AI Applications in Architecture	Terminals Planning and Design	Future Urbanism
	Environmental Simulation	Selected Topics in Urban Design	Selected Topics in Urban and Regional Planning
10	Resilient Urban Design	Fundamentals of Real Estate Development	Urban Risk Management
	Sustainable Landscape Architecture	Urban Project Management	Urban Governance
	Human and Urban Environment	Crowd Management	Urban Economies
	Urban Wayfinding	Multicriteria Assessment of Urban Development Projects	Urban Indicators

Course Specification
(Bachelor)

Course Title:	**Urban Indicators**
Course Code:	**ARC 4744**
Program:	**Bachelor of Architecture and Planning**
Track:	**(Urban Planning)**
Department:	**Architecture**
College:	**Engineering and Architecture**
Institution:	**Umm Al-Qura University**
Version:	**1**
Last Revision Date:	**Jan, 2025**

* UP34-e ** Elective Course 3: Urban Planning Courses Group: Urban Plan.

Table of Contents:

A. General information about the course:

1. Course Identification

1. Credit hours:	2 Cr. Hrs.	**Contact hours:**	2 Hrs. / week

2. Course type

a.	University		College		Department		Track	●	Supporting	
b.	Required		Elective	●						

3. Year/ level at which this course is offered: Year 5 Level 10

4. Course general description:

This course focuses on understanding and applying urban indicators, which measure various aspects of urban activities. Emphasizing the twenty key areas of the Habitat Agenda, the course covers shelter, social, environmental, and governance indicators at the city level. Students will learn to analyze and interpret quantitative and qualitative data, gaining insights into how urban indicators are used to assess and improve city performance in these critical areas.

5. Pre-requirements for this course (if any):

ARC 4500	Cooperative Training	Year: 5	Level: 9

6. Co- requirements for this course (if any):

None

7. Course main objective(s)

This course aims to equip students with advanced knowledge of urban indicators, focusing on the metrics and data used to assess and guide urban development. Students will develop the ability to independently seek and apply relevant knowledge, engage in effective communication, and collaborate with diverse teams to analyze and interpret urban indicators.

2. Teaching mode (Mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

2. Contact Hours (Based on the academic semester)

No.	Activity	Contact Hours
1	Lecture	30
2	Practical	0
3	Studio	0
4	Graduation project	0
5	Training	0
6	Others (specify)	--
	Total	**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Aligned PLO	Teaching Strategies	Assessment Methods
	Knowledge and understanding			
1.1	Demonstrate an understanding of a wide range of advanced knowledge related to the built environment. (K1-k)	**K1**	Interactive L. (Dialogue & discussion)	Written Exam
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C. Course Content

No	List of Topics	Contact
1	Introduction	2
2	Sources of urban development indicators	2
3	The data collection process	2
4	The urban agglomeration's boundaries definition	2
5	Shelter indicators - Part 1	2
6	Shelter indicators - Part 2	2
7	Social development indicators - Part 1	2
8	Social development indicators - Part 2	2
9	Environmental management indicators - Part 1	2
10	Environmental management indicators - Part 2	2
11	Environmental management indicators - Part 3	2
12	Economic development indicators	2
13	Governance and administration indicators	2
14	Urban indicators in KSA	2
15	Research presentation	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Timing (week)	% of Total
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3	Final Exam (Written Exam)	16	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Habitat. (2004). Urban Indicators Guidelines. UN.
	0
Supportive References	الهيئة العليا لتطوير مدينة الرياض. (2018). المؤشرات الحضرية لمدينة الرياض. المرصد الحضري لمدينة الرياض.
Elec. Materials	Websites on the internet that are relevant to the topics of the course.
Other Materials	Multimedia associated with the text book and the relevant websites.

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Bachelor of Architecture and Planning Program

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Architecture Track

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Urban Design Track

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Urban Planning Track

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