جامعة أم القرى
UMM AL-QURA UNIVERSITY

College of
Engineering and Architecture

Department of
Architecture

Architecture and Planning Programme

Module Handbook
(Plan 47)

2025

Architecture and Planning Programme

Module Handbook

(Plan 47)

2025

Contents

Year	Level	Code	Course title	Type	Prereq 1	Prereq 2	Activity						15 weeks			
							Credit H.	Lecture	Practical	Studio	Research Pro.	Training	Contact	Self study	Total	ECTS
General Architecture																
1	1	ARC 1101	Architectural Formation Principles Studio	Major Core	None		5	0	0	10	0	0	150	120	270	9
1	1	ARC 1102	Architectural Drawing	Major Core	None		2	1	3	0	0	0	60	60	120	4
1	1	ARC 1000	Design Process and Methods	Major Core	None		2	2	0	0	0	0	30	45	75	2.5
1	1	ARC 1201	Ancient Civilizations and Medieval Architecture	Major Core	None		2	2	0	0	0	0	30	45	75	2.5
1	1	IND1101	Design Thinking	University Core	None		2	2	0	0	0	0	30	30	60	2
1	1	ELIN1301	English Language 1	Supporting Course	None		3	10	0	0	0	0	150	30	180	6
1	1	QR1101	The Holy Quran Tajweed	University Core	None		2	2	0	0	0	0	30	30	60	2
1	2	ARC 1001	Fundamental Design Principles Studio	Major Core	Architectural Formation Principles Studio	Architectural Drawing	5	0	0	10	0	0	150	120	270	9
1	2	ARC 1103	Visual Studies	Major Core	Architectural Drawing		3	2	3	0	0	0	75	60	135	4.5
1	2	ARC 1104	Vector-based Drawing	Major Core	None		2	1	3	0	0	0	60	45	105	3.5
1	2	ARC 1105	Architectural Models Studio	Major Core	Architectural Drawing		3	0	0	6	0	0	90	60	150	5
1	2	ELIN1302	English Language 2	Supporting Course	English Language 1		3	10	0	0	0	0	150	30	180	6
1	2	CUR1101	University Skills	University Core	None		0	2	0	0	0	0	150	30	180	2
1	2	QR2102	The Holy Quran Memorization 1	University Core	The Holy Quran Tajweed		2	2	0	0	0	0	30	30	60	2
2	3	ARC 2002	Small Public Buildings Design Studio	Major Core	Fundamental Design Principles Studio		5	0	0	10	0	0	150	210	360	12
2	3	ARC 2301	Building Construction Studio 1	Major Core	Fundamental Design Principles Studio		2	0	0	4	0	0	60	75	135	4.5
2	3	ARC 2106	3D Modeling	Major Core	Vector-based Drawing		3	2	3	0	0	0	75	60	135	4.5
2	3	ARC 2010	Buildings Design Standards 1	Major Core	Fundamental Design Principles Studio		2	2	0	0	0	0	30	45	75	2.5
2	3	ARC 2307	Environmental Control Systems	Major Core	Fundamental Design Principles Studio		2	2	0	0	0	0	30	45	75	2.5
2	3	AI2001	Introduction to Artificial Intelligence	University Core	None		2	2	0	0	0	0	150	30	180	2
2	3	QR2103	The Holy Quran Memorization 2	University Core	The Holy Quran Memorization 1		2	2	0	0	0	0	30	30	60	2
2	4	ARC 2003	Vernacular Architecture Design Studio	Major Core	Small Public Buildings Design Studio		5	0	0	10	0	0	150	210	360	12
2	4	ARC 2302	Building Construction Studio 2	Major Core	Building Construction Studio 1		2	0	0	4	0	0	60	75	135	4.5
2	4	ARC 2401	Principles of Urban Design	Major Core	Small Public Buildings Design Studio		2	2	0	0	0	0	30	45	75	2.5
2	4	ARC 2202	Architecture of Islamic Civilization	Major Core	Ancient Civilizations and Medieval Architecture		2	2	0	0	0	0	30	45	75	2.5
2	4	ARC 2402	Principles of Landscape Architecture	Major Core	Small Public Buildings Design Studio		3	2	3	0	0	0	75	60	135	4.5
2	4	ICC1201	Values and Ethics	University Core	None		2	2	0	0	0	0	30	30	60	2
2	4	QR3104	Completion of the Holy Quran	University Core	The Holy Quran Memorization 2		2	2	0	0	0	0	30	30	60	2
3	5	ARC 3004	Sustainable Design Studio	Major Core	Vernacular Architecture Design Studio		5	0	0	10	0	0	150	180	330	11
3	5	ARC 3303	Building Construction Studio 3	Major Core	Building Construction Studio 2		2	0	0	4	0	0	60	60	120	4
3	5	ARC 3403	Introduction to Urban Design Studio	Major Core	Principles of Urban Design		3	0	0	6	0	0	90	75	165	5.5
3	5	ARC 3203	Renaissance and Pre-modern Architecture	Major Core	Architecture of Islamic Civilization		2	2	0	0	0	0	30	45	75	2.5
3	5	ARC 3404	Principles of Urban Planning	Major Core	Vernacular Architecture Design Studio		2	2	0	0	0	0	30	45	75	2.5
3	5	ARC 3405	Housing	Major Core	Vernacular Architecture Design Studio		2	2	0	0	0	0	30	45	75	2.5
3	5	x	General Elective	University Elective	None		2	2	0	0	0	0	30	30	60	2

Year	Level	Code	Course title	Type	Prereq 1	Prereq 2	Activity						15 weeks			
							Credit H.	Lecture	Practical	Studio	Research Pro.	Training	Contact	Self study	Total	ECTS
3	6	ARC 3005	Long-Span Buildings Design Studio	Major Core	Sustainable Design Studio		5	0	0	10	0	0	150	180	330	11
3	6	ARC 3304	Building Construction Studio 4	Major Core	Building Construction Studio 3		2	0	0	4	0	0	60	60	120	4
3	6	ARC 3206	Architectural Research Methods	Major Core	None		2	2	0	0	0	0	30	45	75	2.5
3	6	ARC 3204	20th Century and Contemporary Architecture	Major Core	Renaissance and Pre-modern Architecture		2	2	0	0	0	0	30	45	75	2.5
3	6	ARC 3406	Introduction to Urban Planning Studio	Major Core	Principles of Urban Planning		3	0	0	6	0	0	90	75	165	5.5
3	6	ARC 3305	Advanced Technologies in Building Construction	Major Core	Building Construction Studio 3		2	2	0	0	0	0	30	45	75	2.5
3	6	MTH1183	Mathematics for Architects	Supporting Course	None		2	2	0	0	0	0	30	30	60	2

Year	Level	Code	Course title	Type	Prereq 1	Prereq 2	Activity						15 weeks			
							Credit H.	Lecture	Practical	Studio	Research Pro.	Training	Contact	Self study	Total	ECTS
Architecture Track																
4	7	ARC 4006	Heritage Buildings Conservation Studio	Track Core	Long-Span Buildings Design Studio		5	0	0	10	0	0	150	180	330	11
4	7	ARC 4306	Working Drawings Studio 1	Track Core	Building Construction Studio 4		3	0	0	6	0	0	90	75	165	5.5
4	7	ARC 4107	Creative Generative-Design	Track Core	3D Modeling		2	1	3	0	0	0	60	45	105	3.5
4	7	ARC 4011	Buildings Design Standards 2	Track Core	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	45	75	2.5
4	7	ARC 421#	Elective Course 1	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ICC4202	The Family in Islam	University Core	Values and Ethics		2	2	0	0	0	0	30	30	60	2
4	7	MTH1681	Principles of Statistics for Architects	Supporting Course	None		2	2	0	0	0	0	30	30	60	2
4	8	ARC 4007	Professional Practice Studio	Track Core	Heritage Buildings Conservation Studio		5	0	0	10	0	0	150	180	330	11
4	8	ARC 4307	Working Drawings Studio 2	Track Core	Working Drawings Studio 1		3	0	0	6	0	0	90	75	165	5.5
4	8	ARC 4008	Integrated Architectural Design Studio 1	Track Core	Heritage Buildings Conservation Studio	Buildings Design Standards 2	2	0	0	4	0	0	60	90	150	5
4	8	ARC 4503	Architectural Project Management 1	Track Core	Heritage Buildings Conservation Studio		2	2	0	0	0	0	30	45	75	2.5
4	8	ARC 411#	Elective Course 2	Track Elective	Heritage Buildings Conservation Studio		2	1	3	0	0	0	60	30	90	3
4	8	ARC 4309	Applications of Building Code in Architecture	Track Core	Heritage Buildings Conservation Studio		2	2	0	0	0	0	30	45	75	2.5
4	8	BUS1099	Professional Development Skills	University Core	None		2	2	0	0	0	0	30	30	60	2
5	9	ARC 4500	Cooperative Training	Track Core	Professional Practice Studio		6	0	0	0	0	40	0	840	840	28
5	10	ARC 4009	Integrated Architectural Design Studio 2	Track Core	Cooperative Training	Integrated Architectural Design Studio 1	5	0	0	10	0	0	150	195	345	12
5	10	ARC 4505	Economics of Architectural Projects	Track Core	Working Drawings Studio 2		2	2	0	0	0	0	30	45	75	2.5
5	10	ARC 4501	Professional Practice for Architects	Track Core	Cooperative Training		2	2	0	0	0	0	30	45	75	2.5
5	10	ARC 4504	Architectural Project Management 2	Track Core	Architectural Project Management 1		2	2	0	0	0	0	30	45	75	2.5
5	10	ARC 441#	Elective Course 3	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4310	Universal Design Code	Track Core	Applications of Building Code in Architecture		2	2	0	0	0	0	30	45	75	2.5
5	10	ARC 4208	Graduation Project	Track Core	Cooperative Training		3	0	0	0	3	0	45	210	255	8.5
Architecture Electives																
4	7	ARC 4211	Islamic Values in Architecture	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ARC 4212	Saudi Regional Architectural Identity	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ARC 4213	Architecture of the Two Holy Mosques	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ARC 4214	Islamic Identity in Contemporary Architecture	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	8	ARC 4111	Photorealistic Rendering Techniques	Track Elective	Heritage Buildings Conservation Studio		2	1	3	0	0	0	60	30	90	2
4	8	ARC 4112	Computer Modeling in Building Construction	Track Elective	Heritage Buildings Conservation Studio		2	1	3	0	0	0	60	30	90	2
4	8	ARC 4113	AI Applications in Architecture	Track Elective	Heritage Buildings Conservation Studio		2	1	3	0	0	0	60	30	90	2
4	8	ARC 4114	Environmental Simulation	Track Elective	Heritage Buildings Conservation Studio		2	1	3	0	0	0	60	30	90	2
5	10	ARC 4411	Resilient Urban Design	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4412	Sustainable Landscape Architecture	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4413	Human and Urban Environment	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4414	Urban Wayfinding	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2

Year	Level	Code	Course title	Type	Prereq 1	Prereq 2	Activity						15 weeks			
							Credit H.	Lecture	Practical	Studio	Research Pro.	Training	Contact	Self study	Total	ECTS
Urban Design Track																
4	7	ARC 4601	New Areas Urban Design Studio	Track Core	Long-Span Buildings Design Studio	Introduction to Urban Design Studio	5	0	0	10	0	0	150	180	330	11
4	7	ARC 4602	Landscape Design Studio 1	Track Core	Long-Span Buildings Design Studio	Principles of Landscape Architecture	3	0	0	6	0	0	90	90	180	6
4	7	ARC 4603	Urban Information Systems	Track Core	Long-Span Buildings Design Studio		2	1	3	0	0	0	60	45	105	3.5
4	7	ARC 4604	Urban design methodologies and techniques	Track Core	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	45	75	2.5
4	7	ARC 462#	Elective Course 1	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ICC4202	The Family in Islam	University Core	Values and Ethics		2	2	0	0	0	0	30	30	60	2
4	7	MTH1681	Principles of Statistics for Architects	Supporting Course	None		2	2	0	0	0	0	30	30	60	2
4	8	ARC 4607	Existing Areas Urban Design Studio	Track Core	New Areas Urban Design Studio		5	0	0	10	0	0	150	180	330	11
4	8	ARC 4608	Landscape Design Studio 2	Track Core	Landscape Design Studio 1		3	0	0	6	0	0	90	90	180	6
4	8	ARC 4609	Integrated Urban Design Studio 1	Track Core	New Areas Urban Design Studio		2	0	0	4	0	0	60	90	150	5
4	8	ARC 4610	Urban Environmental Control	Track Core	New Areas Urban Design Studio		2	2	0	0	0	0	30	45	75	2.5
4	8	ARC 463#	Elective Course 2	Track Elective	New Areas Urban Design Studio		2	2	0	0	0	0	30	30	60	3
4	8	ARC 4611	Sustainable Urban Design	Track Core	New Areas Urban Design Studio		2	2	0	0	0	0	30	45	75	2.5
4	8	BUS1099	Professional Development Skills	University Core	None		2	2	0	0	0	0	30	30	60	2
5	9	ARC 4613	Cooperative Training	Track Core	Existing Areas Urban Design Studio		6	0	0	0	0	40	0	840	840	28
5	10	ARC 4614	Integrated Urban Design Studio 2	Track Core	Cooperative Training	Integrated Urban Design Studio 1	5	0	0	10	0	0	150	195	345	12
5	10	ARC 4615	Conservation of Heritage Sites	Track Core	Existing Areas Urban Design Studio		2	2	0	0	0	0	30	45	75	2.5
5	10	ARC 4616	Professional Practice of Urban Design	Track Core	Cooperative Training		2	2	0	0	0	0	30	45	75	2.5
5	10	ARC 4617	Urban Mobility	Track Core	Existing Areas Urban Design Studio		2	2	0	0	0	0	30	45	75	2.5
5	10	ARC 464#	Elective Course 3	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4618	Streetscape	Track Core	Existing Areas Urban Design Studio		2	2	0	0	0	0	30	45	75	2.5
5	10	ARC 4619	Graduation Project	Track Core	Cooperative Training		3	0	0	0	3	0	45	210	255	8.5
Urban Design Electives																
4	7	ARC 4621	Temporary Urbanism	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ARC 4622	Humanizing the Cities	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ARC 4623	Floating Cities	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ARC 4624	City Branding	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	8	ARC 4631	Advanced studies in Landscape Architecture	Track Elective	New Areas Urban Design Studio		2	2	0	0	0	0	30	30	60	2
4	8	ARC 4632	Cities Centers	Track Elective	New Areas Urban Design Studio		2	2	0	0	0	0	30	30	60	2
4	8	ARC 4633	Terminals Planning and Design	Track Elective	New Areas Urban Design Studio		2	2	0	0	0	0	30	30	60	2
4	8	ARC 4634	Selected Topics in Urban Design	Track Elective	New Areas Urban Design Studio		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4641	Fundamentals of Real Estate Development	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4642	Urban Project Management	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4643	Crowd Management	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4644	Multicriteria Assessment of Urban Development Projects	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2

Year	Level	Code	Course title	Type	Prereq 1	Prereq 2	Activity						15 weeks			
							Credit H.	Lecture	Practical	Studio	Research Pro.	Training	Contact	Self study	Total	ECTS
Urban Planning Track																
4	7	ARC 4701	New City Urban Planning Studio	Track Core	Long-Span Buildings Design Studio	Introduction to Urban Planning Studio	5	0	0	10	0	0	150	180	330	11
4	7	ARC 4702	Housing Planning Studio 1	Track Core	Long-Span Buildings Design Studio		3	0	0	6	0	0	90	90	180	6
4	7	ARC 4703	Urban Planning Information Systems	Track Core	Long-Span Buildings Design Studio		2	1	3	0	0	0	60	45	105	3.5
4	7	ARC 4704	Urban Planning Theories	Track Core	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ARC 472#	Elective Course 1	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ICC4202	The Family in Islam	University Core	Values and Ethics		2	2	0	0	0	0	30	30	60	2
4	7	MTH1681	Principles of Statistics for Architects	Supporting Course	None		2	2	0	0	0	0	30	30	60	2
4	8	ARC 4707	Existing City Development Studio	Track Core	New City Urban Planning Studio		5	0	0	10	0	0	150	180	330	11
4	8	ARC 4708	Housing Planning Studio 2	Track Core	Housing Planning Studio 1		3	0	0	6	0	0	90	90	180	6
4	8	ARC 4709	Integrated Urban Planning Studio 1	Track Core	New City Urban Planning Studio		2	0	0	4	0	0	60	90	150	5
4	8	ARC 4710	Advanced Urban Information Systems	Track Core	Urban Planning Information Systems		2	1	3	0	0	0	60	45	105	3.5
4	8	ARC 473#	Elective Course 2	Track Elective	New City Urban Planning Studio		2	2	0	0	0	0	30	30	60	3
4	8	ARC 4711	Sustainable Cities	Track Core	New City Urban Planning Studio		2	2	0	0	0	0	30	30	60	2
4	8	BUS1099	Professional Development Skills	University Core	None		2	2	0	0	0	0	30	30	60	2
5	9	ARC 4713	Cooperative Training	Track Core	Existing City Development Studio		6	0	0	0	0	40	0	840	840	28
5	10	ARC 4714	Integrated Urban Planning Studio 2	Track Core	Cooperative Training	Integrated Urban Planning Studio 1	5	0	0	10	0	0	150	195	345	12
5	10	ARC 4715	Urban Sociology and Population	Track Core	Existing City Development Studio		2	2	0	0	0	0	30	45	75	2.5
5	10	ARC 4716	Professional Practice of Urban Planning	Track Core	Cooperative Training		2	2	0	0	0	0	30	45	75	2.5
5	10	ARC 4717	Planning of Urban Mobility	Track Core	Existing City Development Studio		2	2	0	0	0	0	30	45	75	2.5
5	10	ARC 474#	Elective Course 3	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4718	Regional Planning	Track Core	Existing City Development Studio		2	2	0	0	0	0	30	45	75	2.5
5	10	ARC 4719	Graduation Project	Track Core	Cooperative Training		3	0	0	0	3	0	45	210	255	8.5
Urban Planning Electives																
4	7	ARC 4721	Cities and Climate Change	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ARC 4722	Urban Conservation and Renewal	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ARC 4723	Urban Development in Saudi Arabia	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	7	ARC 4724	Sustainable Urban Tourism	Track Elective	Long-Span Buildings Design Studio		2	2	0	0	0	0	30	30	60	2
4	8	ARC 4731	Smart Cities	Track Elective	New City Urban Planning Studio		2	2	0	0	0	0	30	30	60	2
4	8	ARC 4732	Technology and Urban Change	Track Elective	New City Urban Planning Studio		2	2	0	0	0	0	30	30	60	2
4	8	ARC 4733	Future Urbanism	Track Elective	New City Urban Planning Studio		2	2	0	0	0	0	30	30	60	2
4	8	ARC 4734	Selected Topics in Urban and Regional Planning	Track Elective	New City Urban Planning Studio		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4741	Urban Risk Management	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4742	Urban Governance	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4743	Urban Economies	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2
5	10	ARC 4744	Urban Indicators	Track Elective	Cooperative Training		2	2	0	0	0	0	30	30	60	2

Specifications of

General Architecture

Courses

جامعة أم القرى
UMM AL-QURA UNIVERSITY

Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Architectural Formation Principles Studio**
Code	ARC 1101
Prerequisite Course(s)	None
Semester Level	Year: 1 Level: 1
Course Coordinator	Abdulhafeez Ahmad Alwafi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 10 Hrs Self-study: 8 Hrs Total: 18 Hrs
ECTS Credits	9
Credit Hours	5 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This studio focuses on the fundamental elements of architectural formation. Students will explore the primary components of design—point, line, and plane—while examining the visual properties of form and space, including materials, light, texture, pattern, and color. The course also covers the concepts of proportion, scale, and ordering principles, helping students understand how these elements work together to create cohesive 3D compositions. Students will develop foundational skills in visual studies and representation through studio assignments and projects.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Explanation of drawing instruments	10
Sketch training: how to use different types of pencils and technical pens	10
Primary elements: The point	10
Primary elements: Straight and Jagged lines	10
Primary elements: Curved line	10
Primary elements: Two dimensional shapes (planes)	10
Visual properties: Materials, light, texture, pattern and colors	10
Proportion and scale: Module, proportioning systems, golden section, etc.	10
Composition: Ordering principles (Axis, symmetry, repetition, rhythm, etc.)	10
Types of composition: Two and three dimensional forms	10
Formation Principles (Composition of three dimensional forms)	10
Project: Applications of geometrical tridimensional forms	10
Composition of modular capsule form	10
Architectural drawings: plan, section and site plan	10
Architectural drawings: elevation and Isometric	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Drawings, Eval. of Portfolio) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

CHING, Francis D.K. (2023). Architecture, form, space & order. John Wiley & Sons, New York, USA.
Schrank, Brian. (2018), Principles of Visual Design, Color Theory, McGraw-Hill
CHING, Francis D.K. (2019), Design Drawing, John Wiley & Sons, New York, USA.
CHING, Francis D.K. (2019), Design Drawing, John Wiley & Sons, New York, USA.
CERVER, F. (2010). Drawing For Beginners. Konmann.
CHING, F. (2023). Architectural Graphics 7th ed., John Wiley & Sons.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Architectural Drawing**
Code	ARC 1102
Prerequisite Course(s)	None
Semester Level	Year: 1 Level: 1
Course Coordinator	Abdulhafeez Ahmad Alwafi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 4 Hrs Self-study: 4 Hrs Total: 8 Hrs
ECTS Credits	4
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This course provides a comprehensive introduction to architectural graphics, focusing on the manual skills required to convey design ideas through visual representation. Students will learn key graphic tools and drafting conventions, with an emphasis on orthographic projection and its relationship to 3D models. The course also covers essential topics such as scale and dimensioning, equipping students with the foundational skills necessary to create effective architectural drawings and presentations.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Drawing tools and supplies	4
Architectural drafting: The line	4
Architectural drawing systems: Projection drawing and Pictorial systems	4
Multiview drawings: Plans 1	4
Multiview drawings: Plans 2	4
Multiview drawings: Site plan	4
Multiview drawings: Section 1	4
Multiview drawings: Section 2	4
Multiview drawings: Elevations 1	4
Multiview drawings: Elevations 2	4
Paraline drawings: Isometric drawings 1	4
Paraline drawings: Isometric drawings 2	4
Architectural drawing systems: Communication design ideas	4
Rendering context (people, furniture, vehicles, landscaping, etc.)	4
Architectural presentation	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	15	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Drawings, Assignments & Tasks) • Mid-Term Exam (Drawing Exam) • Final Exam (Drawing Exam)			
Examination Requirements	Equipped Studio and Classroom			

8. Reading list

Ching, F. (2023). Architectural Graphics. Wiley.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Design Process and Methods**
Code	ARC 1000
Prerequisite Course(s)	None
Semester Level	Year: 1 Level: 1
Course Coordinator	Ahmed M. A. Shehata
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 2 Hrs Self-study: 3 Hrs Total: 5 Hrs
ECTS Credits	3
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This course offers an in-depth exploration of architectural design processes and methods, focusing on space program analysis, site analysis, design philosophy, and the development of human-centered design proposals. Students will apply these concepts to the design of a housing unit, learning how to make informed design decisions throughout the process. The course also emphasizes the development of diagram drawing techniques to enhance design communication and presentation.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the course and key terminology definitions	2
Site analysis: Data collection and interpretations 1	2
Site analysis: Data collection and interpretations 2	2
Site analysis: Data collection and interpretations 3	2
Site analysis: Design decisions	2
Spatial analysis according to furnishing	2
The architectural and structure module	2
Prior to the design stage: Preparing the spaces program	2
The space and spatial relationships: Specifications and components	2
The functional relationships: Adjacency Matrix	2
The functional relationships: Bubble diagram	2
Schematic plan	2
Inspiration: Nature as an architectural inspiration	2
Instruments and tools as an architectural inspiration	2
Existing buildings as an architectural inspiration	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Written & Drawing Assgs./ Exams) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Abououf, T. (2014). Site Analysis. Sky for Book.

Abououf, T. (2015). Design Concept. Sky for Book.

Karlen, M., and Fleming, R. (2018). Space Planning Basics. Hoboken (N.J.), J. Wiley.

حسن, ن. (2014). الالهام المعماري. الرياض: النشر العلمي والمطابع- جامعة الملك سعود.

White, E. (2013). Site analysis. ArchiBasX Press.

Ching, D K, & Eckler J. (2013). Introduction to Architecture. Hoboken, New Jersey, Wiley.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Ancient Civilizations and Medieval Architecture**
Code	ARC 1201
Prerequisite Course(s)	None
Semester Level	Year: 1 Level: 1
Course Coordinator	Mohamed Wahba Ibrahim Khalil
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 2 Hrs Self-study: 3 Hrs Total: 5 Hrs
ECTS Credits	3
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This course provides an overview of ancient architecture from prehistoric times to the end of the medieval period, focusing on the cultural, technological, and aesthetic developments throughout history. Key architectural traditions covered include Mesopotamian, ancient Egyptian, Greek, Roman, Byzantine, and Gothic architecture, with an additional focus on the traditional architecture of China and Japan. Students will gain a deeper understanding of how these architectural styles shaped and reflected their respective societies.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Prehistoric settlements and megalith constructions	2
Ancient Mesopotamian architecture	2
Ancient Egyptian architecture: Old kingdom	2
Ancient Egyptian architecture: Middle and new kingdom	2
The Greek architecture: Ancient period	2
The Greek architecture: Classical period	2
The Greek architecture: Hellenistic period	2
Traditional architecture of China and Japan	2
The Roman architecture 1	2
The Roman architecture 2	2
Early Christian architecture	2
Byzantine architecture	2
Early Medieval architecture	2
Romanesque architecture	2
Gothic architecture	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Portfolio) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Moffett, M. et al. (2008). A world History of Architecture. McGraw-Hill.
Fletcher, B. (2020). Sir Banister Fletcher's Global history of architecture. Bloomsbury Visual Arts.
Ching, F. et al. (2017). A global history of architecture. Wiley.
Richard, W. (2000). The Complete Temples of Ancient Egypt. Thames & Hudson.
Tomlinson, R. (1995). Greek and Roman Architecture. British Museum Press.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Fundamental Design Principles Studio**
Code	ARC 1001
Prerequisite Course(s)	ARC 1101 - Architectural Formation Principles Studio
	ARC 1102 - Architectural Drawing
Semester Level	Year: 1 Level: 2
Course Coordinator	Ahmed M. A. Shehata
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	10 Hrs	Self-study:	8 Hrs	Total: 18 Hrs
ECTS Credits	9				
Credit Hours	5 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio course introduces students to the fundamentals of architectural design, focusing on the application of design processes and methods. Students begin by exploring residential spaces furniture and analyzing the functional relationships between them. The course culminates in the design of housing units, where students apply these principles while considering the social and cultural context of Saudi society. This studio fosters critical thinking and culturally responsive design solutions.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Project 1: Introduction to architectural drawings and design fundamentals	10
Architectural drawing of plans	10
Architectural drawing of sections	10
Architectural drawing of elevations and site plan	10
Isometric drawing	10
Project 2: Principles of Saudi house design	10
Application of design process and methods - Part 1	10
Application of design process and methods - Part 2	10
Development of housing unit plans - Part 1	10
Development of housing unit plans - Part 2	10
Geometric projection and architectural design of sections	10
Architectural identity and elevations design	10
Geometric projection and architectural design of elevations, and site plan design	10
Isometric or perspective drawing of the housing unit	10
Full project development	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Project(s), Assignments & Tasks) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Neufert, E. et al. (2023). Architects' Data. Wiley-Blackwell.

De Chiara, J., Panero, J., & Zelnik, M. (2017). Time-saver standards for housing and residential development. McGraw-Hill.

Joseph D. C., et al. (2001). Time-saver standards for interior design and space planning. Mcgraw-Hill.

وزارة البلديات والإسكان. (2024). اشتراطات إنشاء المباني السكنية.

الهيئة السعودية للمهندسين. (2023). الدليل الاسترشادي للكود السعودي للمباني السكنية.

Buxton, P. (2022). Metric handbook: planning and design data. Routledge.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Visual Studies**
Code	ARC 1103
Prerequisite Course(s)	ARC 1102 - Architectural Drawing
Semester Level	Year: 1 Level: 2
Course Coordinator	Abdulhafeez Ahmad Alwafi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	5 Hrs	Self-study:	4 Hrs	Total: 9 Hrs
ECTS Credits	5				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course focuses on developing freehand sketching skills and architectural visual representation. Students will learn perspective types, including one-point and two-point perspectives, for accurately representing three-dimensional architectural forms. The course covers techniques for drawing both exterior and interior perspectives, as well as casting shades and shadows on two- and three-dimensional drawings. Various rendering techniques, such as pencils, colored pencils, markers, pens, and ink, will be explored to enhance the visual impact of architectural drawings.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Drawing from Observation: Line and Shape	5
Tone and Texture	5
Form and Structure	5
Space and Depth	5
Drawing from the imagination: Speculative Drawing	5
Colour Wheel and Colour Theory	5
Perspective Projection and Elements	5
One-point Perspective System	5
Two-point Perspective System: Measuring Point Method - Part 1	5
Two-point Perspective System: Measuring Point Method - Part 2	5
Perspective Variables	5
Inclined Lines, Stairs and Circles	5
Reflections	5
Casting Shades and Shadows: 2D Drawings	5
Casting Shades and Shadows: 3D Drawings	5

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Drawings, Assignments & Tasks) • Mid-Term Exam (Drawing Exam) • Final Exam (Drawing Exam)			
Examination Requirements	Equipped Studio and Classroom			

8. Reading list

Ching, F. (2023). Architectural Graphics. Wiley.
Koller, E. (2008). Light, Shade and Shadow. Dover Publications.
CHING, Francis D.K. (2019), Design Drawing, John Wiley & Sons, New York, USA.
Jenkins, E. et al. (2022). Drawn to Design : Analyzing Architecture through Freehand Drawing. Birkhäuser.
Willenbrink, M. (2014). The absolute beginner's big book of drawing & painting. North Light.
D'amelio, J., and Hohauser, S. (2004). Perspective Drawing Handbook. Dover Publications.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Vector-based Drawing**
Code	ARC 1104
Prerequisite Course(s)	None
Semester Level	Year: 1 Level: 2
Course Coordinator	Wajdy Sadagh A. Qattan
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 4 Hrs Self-study: 3 Hrs Total: 7 Hrs
ECTS Credits	4
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This course introduces the fundamentals of Computer-Aided Design (CAD), focusing on basic drafting commands and standard methods for creating technical 2D drawings. Students will learn to navigate CAD software, apply essential drafting techniques, and produce accurate, professional-grade architectural drawings. Students will apply their knowledge through practical exercises, focusing on the housing unit they currently design in the architectural design studio.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction and course objectives	4
Using units and managing options	4
Drawing commands - Part 1	4
Drawing commands - Part 2	4
Drawing commands - Part 3	4
Editing commands - Part 1	4
Editing commands - Part 2	4
Editing commands - Part 3	4
Editing commands - Part 3	4
Organizing the drawings using layers and inquiry commands	4
Hatching, blocks and text techniques	4
Creating and editing dimensions	4
Solids	4
Surfaces and mesh	4
Printing and creating scaled PDF files	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	15	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Computer-based Assgs./ Exams) • Mid-Term Exam (Computer-Based Exam) • Final Exam (Computer-Based Exam)			
Examination Requirements	Computer Lab.			

8. Reading list

Dix, M., et al. (2023)(. Discovering AutoCAD 2024. Peachpit Press.
Adeolu O. (2024). Essential Guide to AutoCAD for All Levels. Computer Guru Inst.
Shih, R, and Luke J. (2024). AutoCAD 2025 Tutorial First Level 2D Fundamentals. SDC Publications
Dogra, S. (2024). AutoCAD 2025: A Power Guide for Beginners and Intermediate Users. CADArtifex.
Hamad, M. (2024). AutoCAD 2025 3D Modeling. Stylus Publishing.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Architectural Models Studio**
Code	ARC 1105
Prerequisite Course(s)	ARC 1102 - Architectural Drawing
Semester Level	Year: 1 Level: 2
Course Coordinator	Abdulhafeez Ahmad Alwafi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	6 Hrs	Self-study:	4 Hrs	Total: 10 Hrs
ECTS Credits	5				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio introduces the fundamentals of architectural model-making, emphasizing its role in developing and communicating design ideas. Students will learn how to conceptualize and construct architectural models as a bridge between design concepts and their physical realization. The studio covers various model-building techniques and materials, allowing students to explore different approaches to representing architectural ideas in three-dimensional form. Studio projects help students refine their skills in crafting accurate and expressive models.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
History, model types and scale of architectural models	6
Equipment, tools and materials of model making	6
Model's net 1	6
Model's net 2	6
Cutting materials and basic assemblage	6
Generating Ideas: Additive/Subtractive drawing strategy	6
Working with plan and elevation drawings strategy	6
Working with concept drawings strategy	6
Reuse and found objects strategy	6
Oblique folding	6
Exploration of material behavior	6
Project development 1	6
Project development 2	6
Project development 3	6
Project development 4	6

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	90	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Project(s), Assignments & Tasks) • Mid-Term Exam (Practical Exam) • Final Submission of the Project			
Examination Requirements	Fab Lab			

8. Reading list

MILLS, C. (2011). Designing with models: A Studio Guide to Arch. Process Models. John Wiley & Sons.
Trudeau, N. (1995). Professional Model Making. Watson.
Oswald, A. (2008). Architectural Models. Dom Publishers.
Jackson, P. (2011). Folding Techniques for Designers: From Sheet to Form. Laurence King.
Lund, D. (2024). Model Britain. Taylor & Francis.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Small Public Buildings Design Studio**
Code	ARC 2002
Prerequisite Course(s)	ARC 1001 - Fundamental Design Principles Studio
Semester Level	Year: 2 Level: 3
Course Coordinator	Ahmed M. A. Shehata
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 10 Hrs Self-study: 14 Hrs Total: 24 Hrs
ECTS Credits	12
Credit Hours	5 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This studio course focuses on the design of small-scale public buildings such as kindergartens, restaurants, post offices, bank branches, and fire stations. It builds on values, knowledge, and skills acquired in previous courses, applying them creatively to project development. Students engage in all design phases, from concept to detailed planning, while honing their CAD software skills. The studio fosters comprehensive architectural problem-solving to develop sound design decisions and creative architectural solutions.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Course identification and introduction to the project	10
Analysis of similar projects, site analysis and building code	10
Preliminary study of the project and its components	10
Development of plans and structure system -Part 1	10
Development of plans and structure system -Part 2	10
Development of plans and structure system -Part 3	10
Development of plans and structure system -Part 4	10
Development of sections and elevations -Part 1	10
Development of sections and elevations -Part 2	10
Development of sections and elevations -Part 3	10
Development of sections and elevations -Part 4	10
Full project development -Part 1	10
Full project development -Part 2	10
Full project development -Part 3	10
Full project development -Part 4	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research, Eval. of Project(s), Assignments & Tasks) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Neufert, E. et al. (2023). Architects' Data. Wiley-Blackwell.
Watson, D., & Crosbie, M. (2005). Time-saver standards for architectural design. McGraw-Hill.
De Chiara, J., & De Chiara, J. (2001). Time-saver standards for building types. McGraw-Hill.
Baker, G. (2006). Design strategies in architecture. Routledge.
Buxton, P. (2022). Metric handbook: planning and design data. Routledge.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Building Construction Studio 1**
Code	ARC 2301
Prerequisite Course(s)	ARC 1001 - Fundamental Design Principles Studio
Semester Level	Year: 2 Level: 3
Course Coordinator	Mohamed Atef Elhamy Kamel
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 4 Hrs Self-study: 5 Hrs Total: 9 Hrs
ECTS Credits	5
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This studio illustrates fundamental properties of building materials. It also emphasizes the crucial first phase of construction: site preparation, safety, foundations, and bearing-walls working drawings. Students will apply their knowledge through practical exercises, focusing on the preparation of construction sites, foundations, and bearing-walls working drawings for the housing unit they have previously designed in Fundamental Design Principles Studio.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Building materials and building material science	4
Building site: Receiving and preparation	4
Building site: Safety considerations	4
Site planning, temporary constructions and earthwork	4
Slope protection and retaining walls	4
Equipment for site works and transportation construction	4
Soils: Types and properties.	4
Soils: Mechanics and testing	4
Foundations: Shallow foundations	4
Foundations: Deep foundations	4
Load-bearing walls: Brickwork	4
Project development: Shallow foundation of the housing unit	4
Project development: Plans (Load-bearing wall working drawings) - P1	4
Project development: Plans (Load-bearing wall working drawings) - P2	4
Project development: Section and elevations (Load-bearing wall working drawings)	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	60	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	60%	Midterm Exam (7th week)	20%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Written Assgs./ Exams, Eval. of Project(s), Assignments & Tasks) • Mid-Term Exam (Written and Drawing Exam) • Final Submission of the Project			
Examination Requirements	Equipped Studio			

8. Reading list

Peurifoy, R. L. (2023). Construction planning, equipment, and methods. Mcgraw-Hill.
Levy, S. (2010). Construction Databook. McGraw-Hill.
Kultermann, E., & Spence, W. (2021). Construction materials, methods and techniques. Cengage.
McMorrough, J. (2018). The Architecture Reference & Specification Book updated & revised. Rockport Pub.
Ching, D.K. (2020). Building construction illustrated. Van Nostrad Reinhold.
McKay, W. B. (2005). McKay's Building Construction. Routledge.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**3D Modeling**
Code	ARC 2106
Prerequisite Course(s)	ARC 1104 - Vector-based Drawing
Semester Level	Year: 2 Level: 3
Course Coordinator	Wajdy Sadagh A. Qattan
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	5 Hrs	Self-study:	4 Hrs	Total: 9 Hrs
ECTS Credits	5				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course introduces students to 3D modeling for architectural design, a crucial tool for visualizing exterior and interior projects. Students will learn to use computer modeling software efficiently, covering detailed procedures such as texture mapping, navigation, lighting, rendering, and animation. The course emphasizes practical application, with students applying their skills to the housing unit they previously designed in the architectural design studio, enhancing their ability to create highly appealing visualizations.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to 3D modeling	5
3D surface modeling - Part 1	5
3D surface modeling - Part 2	5
3D surface modeling - Part 3	5
3D solid modeling - Part 1	5
3D solid modeling - Part 2	5
3D solid modeling - Part 3	5
Edit tools 1	5
Edit tools 2	5
Applying and creating materials and texturing	5
Lighting	5
Rendering	5
Basics of animation - Part 1	5
Basics of animation - Part 2	5
Project follow-up	5

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Computer-based Assgs./ Exams) • Mid-Term Exam (Computer-Based Exam) • Final Exam (Computer-Based Exam)			
Examination Requirements	Computer Lab.			

8. Reading list

Coward, C. (2019). A beginner's guide to 3D modeling. No Starch Press.
Mortenson, M. (2019). 3D Modeling, Animation, and Rendering. CreateSpace.
Chong, S. (2019). Rhinoceros Visualisation & Rendering.
Chong, S. (2021). Rhinoceros Organic Modelling.
Hamad, M. (2024). AutoCAD 2025 3D Modeling. Stylus Publishing.
Willis, J. & Dogra, S. (2023). Autodesk Inventor Exercises - Learn by Practicing. Independently Pub.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Buildings Design Standards 1**
Code	ARC 2010
Prerequisite Course(s)	ARC 1001 - Fundamental Design Principles Studio
Semester Level	Year: 2 Level: 3
Course Coordinator	Ahmed M. A. Shehata
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course provides foundational knowledge and skills for analyzing building elements and understanding design standards for various types of simple buildings. Students will explore considerations for different building types, including small libraries, schools, restaurants, clinics, banks, art galleries, malls, cinemas, exhibitions, office buildings, and mosques. The course emphasizes practical analysis of design requirements and standards, preparing students to approach diverse architectural projects with a comprehensive understanding of functional and regulatory considerations.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction	2
Design standards for houses and residential buildings - part 1	2
Houses and residential buildings - part 2	2
Educational buildings: Child daycare centers	2
Educational buildings: Small Libraries	2
Educational buildings: Schools	2
Hospitality building: Cafeterias and Restaurants	2
Hospitality building: Motel	2
Healthcare building: Clinics	2
Commercial building: Small Bank Branch	2
Commercial building: Small Malls	2
Cultural building: Art galleries and Exhibitions	2
Cultural building: Cinemas	2
Religious building: Mosques	2
Outdoor Parkings	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Neufert, E. et al. (2023). Architects' Data. Wiley-Blackwell.
De Chiara, J., & De Chiara, J. (2001). Time-saver standards for building types. McGraw-Hill.
Perkins, L. (2010). Building type basics for elementary and secondary schools. John Wiley & Sons.
Kobus, R., et al. (2008). Building type basics for healthcare facilities. Wiley.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Environmental Control Systems**
Code	ARC 2307
Prerequisite Course(s)	ARC 1001 - Fundamental Design Principles Studio
Semester Level	Year: 2 Level: 3
Course Coordinator	Mohamed Atef Elhamy Kamel
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course explores the interaction between buildings and climate, focusing on creating comfortable and controlled environments for occupants. It examines both natural and man-made effects on building performance and comfort. Students will study examples of passive design strategies tailored to hot-humid and hot-arid climates, learning techniques to enhance building efficiency and user comfort through climate-responsive design approaches.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Macro and micro climate, and climatic zones characteristics	2
Climatic factors and thermal comfort	2
Sun path diagram and solar control	2
Temperature and thermal transfer	2
Thermal transfer control	2
Wind rose, wind effects and air flow patterns	2
Wind control methods	2
Air pollution and purification	2
Precipitation and humidity	2
Daylight: Definition, components and factors	2
Daylight design	2
Acoustic control systems	2
Passive design in hot-humid climate	2
Passive design in hot-arid climate	2
Introduction to active design systems	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Bainbridge, D., & Haggard, K. (2011). Passive Solar Architecture. Chelsea Green Publishing.
Grondzik, W. & Kwok, A. (2019). Mechanical and Electrical Equipment for Buildings. John Wiley & Sons.
Olgyay, V. (1992). Design with Climate: Bioclimatic Approach to the Architectural Regionalism, Willy.
Pelsmakers, S. (2019). The Environmental Design Pocketbook. London, Riba Publishing
Phillips, D. (2004). Daylighting: Natural Light in Architecture. Architectural Press.
كفاءة. (2021). الدليل الإرشادي لأنظمة ومواد العزل الحراري وفق متطلبات كود البناء السعودي.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Vernacular Architecture Design Studio**
Code	ARC 2003
Prerequisite Course(s)	ARC 2002 - Small Public Buildings Design Studio
Semester Level	Year: 2 Level: 4
Course Coordinator	Ahmed M. A. Shehata
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 10 Hrs Self-study: 14 Hrs Total: 24 Hrs
ECTS Credits	12
Credit Hours	5 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This studio course highlights the significance of architectural heritage and its impact on contemporary design. Students will review traditional design and construction methods from various regions of Saudi Arabia and explore how these can be revived and adapted for modern projects. The course emphasizes integrating historical techniques with contemporary design practices, encouraging students to innovate while respecting and preserving architectural heritage.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Course identification and introduction to the project	10
Introduction to architectural heritage	10
Architectural heritage in the Western (Hijaz) region	10
Architectural heritage in the Central and northern (Najd) region	10
Architectural heritage in the Eastern region	10
Architectural heritage in the Southern (Asir) region	10
Efforts to revive traditional design and construction methods in Saudi Arabia	10
Analysis of similar projects, site analysis and building code	10
Preliminary study of the project and its components	10
Development of plans and Identity -Part 1	10
Development of plans and Identity -Part 2	10
Development of plans and Identity -Part 3	10
Development of sections and elevations	10
Full project development -Part 1	10
Full project development -Part 2	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Project(s), Written Assgs./ Exams) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Mortada, H. (2020). Traditional Built Environment of Saudi Arabia. Benton heights LLC.
Development Authorities Support Center. (2022). Architecture Identities of KSA.
Hariri, W., & Hariri, M. (1990). The heritage of the Kingdom of Saudi Arabia. GDG Publications.
Facey, W. (1999). Back to earth: Adobe Building in Saudi Arabia. Arabian Publishing Ltd.
Watson, D., & Crosbie, M. (2005). Time-saver standards for architectural design. McGraw-Hill.
De Chiara, J., & De Chiara, J. (2001). Time-saver standards for building types. McGraw-Hill.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Building Construction Studio 2**
Code	ARC 2302
Prerequisite Course(s)	ARC 2301 - Building Construction Studio 1
Semester Level	Year: 2 Level: 4
Course Coordinator	Mohamed Atef Elhamy Kamel
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study:	5 Hrs	Total: 9 Hrs
ECTS Credits	5				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio explores the conventional construction systems. Moreover, it illustrates various types of insulation and building joints, as well as the details of doors and windows and vertical movement elements (stairs and ramps). Through hands-on projects, students will apply their knowledge to the housing units they previously designed in the architectural design studio.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Concrete: Formwork and shoring	4
Reinforced concrete columns, beams and frames	4
Reinforced concrete slabs - part 1	4
Reinforced concrete slabs - part 2	4
Advanced construction systems: Precast concrete, lift-slab and tunnel formwork systems	4
Basics of timber construction	4
Basics of steel construction: Foundations, steel columns, beams am=nd frames	4
Insulation: Moisture, thermal and sound	4
Joints in buildings: Settlement, contraction and expansion joints	4
Types of stairs and ramps: Design, details and implementation	4
Doors: Types, used materials, manufacturing and details	4
Windows: Types, used materials, manufacturing and details	4
Project development: Isolated footings and Plans (Skelton working drawings)	4
Project development: Section and elevations (Skelton working drawings)	4
Project development: Details (Doors, windows and stairs)	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	60	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	60%	Midterm Exam (7th week)	20%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Written Assgs./ Exams, Eval. of Project(s), Assignments & Tasks) • Mid-Term Exam (Written and Drawing Exam) • Final Submission of the Project			
Examination Requirements	Equipped Studio			

8. Reading list

Ching, D.K. (2020). Building Construction Illustrated. Van Nostrad Reinhold.
Kultermann, E., & Spence, W. (2021). Construction Materials, Methods and Techniques. Cengage.
McMorrough, J. (2018). The Architecture Reference & Specification Book updated & revised. Rockport Pub.
Mehta, M. (2017). Building Construction: Principles, Materials, and Systems. Pearson.
McKay, W. B. (2005). McKay's Building Construction. Routledge.
Engel H. (2007). Structure Systems. Praeger.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Principles of Urban Design**
Code	ARC 2401
Prerequisite Course(s)	ARC 2002 - Small Public Buildings Design Studio
Semester Level	Year: 2 Level: 4
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course introduces students to essential concepts and principles of urban design, focusing on methodologies that effectively shape urban environments. Through lectures, students will develop foundational urban design skills, preparing them for active participation in subsequent urban design studio and specialized studios of urban design track.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Definition and emergence of urban design	2
Visual dimension in urban design	2
Functional and social dimension in urban design	2
The neighborhood	2
The neighborhood center	2
Introduction to housing: Types of residential buildings	2
Urban spaces: Squares and street squares	2
Urban spaces: Green and open spaces	2
Grid design principle	2
Analysis techniques: Projections and demand analysis	2
Analysis techniques: Mapping	2
Analysis techniques: Impact Assessment	2
Analysis techniques: Visualization	2
Examples of best practices	2
Urban design spaces in Saudi Arabia	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Cuesta, R., et al. (2012). Urban Design: Method and Techniques. Routledge.
Sendich E., and APA. (2007). Planning and Urban Design Standards. Hoboken. Wiley
Lynch, K. (1960). The Image of the City. London, The MIT Press.
Towers, G. (2015). An introduction to urban housing design. Routledge.
Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.
Schenk, L. (2023). Designing Cities: Basics, Principles, Projects. Birkhäuser.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Architecture of Islamic Civilization**
Code	ARC 2202
Prerequisite Course(s)	ARC 1201 - Ancient Civilizations and Medieval Architecture
Semester Level	Year: 2 Level: 4
Course Coordinator	Mohamed Wahba Ibrahim Khalil
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 2 Hrs Self-study: 3 Hrs Total: 5 Hrs
ECTS Credits	3
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This course surveys the architectural developments across various Islamic regions and dynasties, highlighting the evolution of Islamic urbanism and its cultural context. Students will explore the relationship between Islamic values and architectural principles, deepening their understanding of the artistic and urban characteristics of Islamic culture. The course enhances appreciation of the architecture of Islamic civilization and familiarizes students with its key vocabulary, encouraging the use and development of Islamic architectural elements in contemporary design.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to cities in Islamic civilization	2
Early Islamic Architecture: Umayyad Architecture	2
Abbasiad Architecture	2
Fatimid Architecture 1	2
Fatimid Architecture 2	2
Ayyubid Architecture 1	2
Ayyubid Architecture 2	2
Bahrid - Mamluk Architecture 1	2
Bahrid - Mamluk Architecture 2	2
Suljuq - Mamluk Architecture 1	2
Suljuq - Mamluk Architecture 2	2
Ottoman Period 1	2
Ottoman Period 2	2
Islamic House Principles	2
Islamic Public Buildings	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Portfolio) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Grube, E. et al. (1995). Architecture of the Islamic World. Thames and Hudson.
Fletcher, B. (2020). Sir Banister Fletcher's Global history of architecture. Bloomsbury Visual Arts.
Hakim, B. (2013). Arabic-Islamic cities. Routledge.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Principles of Landscape Architecture**
Code	ARC 2402
Prerequisite Course(s)	ARC 2002 - Small Public Buildings Design Studio
Semester Level	Year: 2 Level: 4
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	5 Hrs	Self-study:	4 Hrs	Total: 9 Hrs
ECTS Credits	5				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course introduces students to the fundamentals of landscape architecture, covering key elements such as softscape (planting, water features) and hardscape materials. It addresses landscape design determinants and considerations, providing students with the skills to create functional and aesthetic landscapes in urban settings. Through a combination of lectures and hands-on application on a small project, students will develop the ability to create a conceptual landscape design for outdoor spaces.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Landform: Types and Functions	5
Sofrscape: Plants and Planting	5
Water: General and Visual Uses	5
Hardscape: Site Furniture, Structures and Features	5
Recreational and Athletic Facilities	5
Outdoor Lighting	5
Foundational Concepts: Landscape Form and Space	5
Orthogonal Forms	5
Angular Forms	5
Circular Forms	5
Organic Forms	5
Bioclimate Fundamentals of Llandscape design	5
Outdoor Accessibility Standards	5
Roof and Deck, and Interior Landscapes	5
Course Portfolio Review	5

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Project(s), Eval. of Research) • Mid-Term Exam (Drawing Exam) • Final Exam (Drawing Exam)			
Examination Requirements	Equipped Studio and Classroom			

8. Reading list

Booth, N. (2011). Foundations of Landscape Architecture. Wiley.
Booth, N. (1990). Basic Elements of Landscape Architectural Design. Waveland Pr. Inc.
Dines, N., & Brown, K. (2023). Time-Saver Standards for Landscape Architecture. McGraw-Hill.
Bertauski, T. (2018). Plan graphics for the landscape designer. Waveland Press.
Shehata, A. (2021). Design of Outdoor Spaces. Universal Publishing Ltd.
Booth, N. (2018). Residential Landscape Architecture: Design Process for the Private Residence. Pearson.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Sustainable Design Studio**
Code	ARC 3004
Prerequisite Course(s)	ARC 2003 - Vernacular Architecture Design Studio
Semester Level	Year: 3 Level: 5
Course Coordinator	Ahmed M. A. Shehata
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	10 Hrs	Self-study:	12 Hrs	Total: 22 Hrs
ECTS Credits	11				
Credit Hours	5 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course focuses on integrating environmental sustainability into architectural design through passive and active design principles. It introduces a sustainable framework for creating healthy, efficient, and green buildings. Students will build upon this knowledge by applying sustainable strategies and technologies to a medium-sized design project. By the end of the course, students will be equipped to select and implement appropriate solutions to enhance a building's environmental performance and sustainability.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Sustainable location and transportation	10
Sustainable site	10
Water efficiency	10
Energy and atmosphere	10
Materials and resources	10
Indoor air quality and thermal comfort	10
Indoor efficient lighting and view	10
Analysis of similar projects and site analysis	10
Preliminary study of the project and its components	10
Development of plans and sustainable applications	10
Development of plans and sustainable applications	10
Development of plans and sustainable applications	10
Development of sections and elevations	10
Full project development: Part-1	10
Full project development: Part-2	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research, Written Assgs./ Exams, Eval. of Project(s)) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Kubba, S. (2017). Handbook of Green Building Design and Construction. Elsevier Science.
U.S. Green Building Council. (2010). Green building design and construction.
Kibert, C. (2016). Sustainable Construction, 4th Edition. John Wiley & Sons.
Saudi building code National committee (2018). Green Construction Code 1001.
Saudi building code National committee (2018). Energy conservation- residential 602.
Saudi building code National committee (2018). Energy conservation- nonresidential 601.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Building Construction Studio 3**
Code	ARC 3303
Prerequisite Course(s)	ARC 2302 - Building Construction Studio 2
Semester Level	Year: 3 Level: 5
Course Coordinator	Mohamed Atef Elhamy Kamel
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study:	4 Hrs	Total: 8 Hrs
ECTS Credits	4				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio focuses on producing detailed technical drawings of building installations. It covers mechanical, plumbing, and electrical systems, along with acoustical and illumination systems. Additionally, students explore smart technologies such as IoT and computer-based systems. Using their previously designed housing units, students will execute detailed drawings of water supply, drainage, electrical, and mechanical systems, as well as lighting treatments, ensuring a comprehensive understanding of building technical installations.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to technical systems in buildings	4
Plumbing systems	4
Technical drawings of sanitary drainage systems	4
Technical drawings of water supply systems in the housing unit	4
Illumination systems	4
Technical drawings of illumination systems	4
Electrical systems	4
Technical drawings of normal electrical systems	4
Mechanical systems	4
Technical drawings of ventilation and air conditioning (HVAC) systems	4
Technical drawings of central cooling systems	4
Acoustical systems	4
Technical drawings of acoustical systems	4
Other related systems and tech. (Fire protection, smart systems, IoT, computer-based systems, etc.)	4
Technical drawings of other related systems (smart systems, IoT, computer-based systems, etc.)	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	60	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	60%	Midterm Exam (7th week)	20%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Written Assgs./ Exams, Eval. of Project(s)) • Mid-Term Exam (Written and Drawing Exam) • Final Submission of the Project			
Examination Requirements	Equipped Studio			

8. Reading list

Ching, D.K. (2020). Building Construction Illustrated. Van Nostrad Reinhold.
International Code Council. (2021). International Plumbing Code. ICC.
Bradshaw, V. (2010). The Building Environment : Active and Passive Control Systems. John Wiley & Sons.
Hurt, S. (2017). Building systems in interior design. Routledge.
Saudi building code National committee. (2018). Saudi Electrical Code: SBC 401.
Saudi building code National committee. (2018). Saudi Mechanical Code: SBC 501.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Introduction to Urban Design Studio**
Code	ARC 3403
Prerequisite Course(s)	ARC 2401 - Principles of Urban Design
Semester Level	Year: 3 Level: 5
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	6 Hrs	Self-study:	5 Hrs	Total: 11 Hrs
ECTS Credits	6				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio introduces students to the practical application of key concepts and principles in urban design, focusing on understanding the urban environment. Through small-scale urban design assignments, students will build upon their previously acquired skills, applying them to real-world scenarios. The course emphasizes hands-on learning and encourages the development of foundational urban design techniques, preparing students for more advanced studios in the urban design track.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the studio	6
Data collection	6
Analyzing the collected data to reach the main objectives: Part 1	6
Analyzing the collected data to reach the main objectives: Part 2	6
Generating and developing urban design concepts: Part 1	6
Generating and developing urban design concepts: Part 2	6
Evaluating the alternatives based on assessment criteria	6
Site plan development	6
Plans development: Part 1	6
Plans development: Part 2	6
Plans and sections development	6
Elevations development	6
Presentation techniques	6
Full project follow-up: Part 1	6
Full project follow-up: Part 2	6

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	90	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Project(s)) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Watson, D. (2011). Time-Saver Standards for Urban Design. McGraw-Hill.
Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.
Krier, R. (1993). Urban Space. Rizzoli.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Renaissance and Pre-modern Architecture**
Code	ARC 3203
Prerequisite Course(s)	ARC 2202 - Architecture of Islamic Civilization
Semester Level	Year: 3 Level: 5
Course Coordinator	Mohamed Wahba Ibrahim Khalil
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course introduces students to world architecture from the Renaissance through the 18th and 19th centuries, leading up to the pre-modern period. It explores the cultural, technological, and aesthetic developments that shaped architectural history during these eras. Emphasis is placed on the works and trends of architects and movements, helping students understand the evolution of architectural styles and their impact on the built environment through time.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Characters of Renaissance Architecture	2
Italian Renaissance - Part 1	2
Italian Renaissance - Part 2	2
Italian Renaissance - Part 3	2
French Renaissance - Part 1	2
French Renaissance - Part 2	2
English Renaissance - Part 1	2
English Renaissance - Part 2	2
Baroque Architecture - Part 1	2
Baroque Architecture - Part 2	2
Industrial revolution	2
Pre-modern architecture - Part 1	2
Pre-modern architecture - Part 2	2
Pre-modern architecture - Part 3	2
Architectural applications of iron and steel construction	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Portfolio) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Moffett, M. et al. (2008). A world History of Architecture. McGraw-Hill.
Fletcher, B. (2020). Sir Banister Fletcher's Global history of architecture. Bloomsbury Visual Arts.
Ching, F. et al. (2017). A global history of architecture. Wiley.
Bussagli, M. (2019). Italian Renaissance Architecture. Koenemann.
Riseberro, B. (2012). The Story of Western Architecture. The MIT Press.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Principles of Urban Planning**
Code	ARC 3404
Prerequisite Course(s)	ARC 2003 - Vernacular Architecture Design Studio
Semester Level	Year: 3 Level: 5
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study: 3 Hrs	Total:	5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course provides a foundational introduction to urban planning, serving as a prelude to the "Introduction to Urban Planning Studio" and other studios in the urban planning track. It explores the history of cities, land use, urban services and infrastructure, essential studies required, and data collection and analysis. Students will cover topics such as urban planning studies, demographic and economic studies, environmental studies, SWOT analysis, and vision and objective determination. This comprehensive understanding equips students with the tools necessary for effective urban planning.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Definition of urban planning and planning levels and types	2
History of cities: Aancient civilizations and medieval times	2
Cities in Arab Islamic civilization	2
Cities of the Industrial Revolution	2
Urban morphology	2
Land use planning	2
Housing policy and planning	2
Services planning standards	2
Transportation planning	2
Urban roads and infrastructure planning	2
Urban sprawl	2
Introduction to sustainable urban development	2
Required studies for urban planning 1	2
Required studies for urban planning 2	2
Data analysis techniques	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Norwich, J. (2016). The Great Cities in History. Thames & Hudson.
Carl Abbott. (2020). City Planning: A Very Short Introduction. Oxford University Press.
Couch, C. (2016). Urban Planning: an Introduction. Macmillan.
Berke, P. and Godschalk, D. (2006). Urban Land Use Planning. University of Illinois Press.
Oliveira, V. (2016). Urban Morphology: An Introduction. Springer.
Butler, K. (2012). Planning and Urban Design Standards. Wiley.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Housing**
Code	ARC 3405
Prerequisite Course(s)	ARC 2003 - Vernacular Architecture Design Studio
Semester Level	Year: 3 Level: 5
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course explores key definitions and concepts related to housing, including shelter, population, and area density. Students will examine different housing types, factors influencing housing design, and criteria for addressing design considerations. The course also tackles common housing problems and solutions, with a focus on sustainable and livable communities. In its final phase, the course emphasizes neighborhood planning, providing students with the skills to design functional and cohesive residential areas.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
The importance of housing	2
Housing history	2
History of housing in Saudi Arabia	2
Types of contemporary Saudi housing and their characteristics	2
Housing information sources and their importance	2
Social housing requirements	2
Economic housing requirements	2
Environmental housing requirements	2
Legal factors affecting housing and stakeholders	2
Housing for poor and needy	2
Urban design inside residential areas	2
Housing site selection and analysis	2
Density calculations and housing form	2
The neighborhood housing	2
Neighborhood services and its road network	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Towers, G. (2015). Introduction to Urban Housing Design: At Home in the City. Routledge.
Firley, E. and Deupi, V. (2023). The Urban Housing Handbook. John Wiley & Sons.
باهمام، ع. (2018). الإســـــكان. الجمعية السعودية لعلوم العمران. دار دكة. (متوفر بمكتبة الجامعة)
Butler, K. (2012). Planning and Urban Design Standards. Wiley.
Kliment, S., & Chandler, R. (2010). Building type basics for housing. John Wiley & Sons.
Clark. W. (2021). Advanced Introduction to Housing Studies. Edward Elgar Publishing.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Long-Span Buildings Design Studio**
Code	ARC 3005
Prerequisite Course(s)	ARC 3004 - Sustainable Design Studio
Semester Level	Year: 3 Level: 6
Course Coordinator	Ahmed M. A. Shehata
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	10 Hrs	Self-study:	12 Hrs	Total: 22 Hrs
ECTS Credits	11				
Credit Hours	5 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course provides an in-depth understanding of various long-span structural systems essential for architectural design. Students will explore various long-span structural systems, including folded plates, shells, tents, cables, trusses, space trusses, and space frames. The course aims to equip students with the knowledge to select and apply appropriate construction materials and structure systems for projects involving large spans.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Trusses structure system	10
Cables structure system	10
Tent structure system	10
Folded plates structure system	10
Shell structure system	10
Pneumatic structure system	10
Analysis of structure systems examples	10
Site analysis and building code	10
Preliminary study of the project and its components	10
Development of plans and structure system -Part 1	10
Development of plans and structure system -Part 2	10
Development of plans and structure system -Part 3	10
Development of sections and elevations	10
Full project development -Part 1	10
Full project development -Part 2	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Written Assgs./ Exams, Eval. of Project(s), Eval. of Research) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Neufert, E. et al. (2023). Architects' Data. Wiley-Blackwell.
Engel H. (2007). Structure systems. Praeger.
Watson, D., & Crosbie, M. (2005). Time-saver standards for architectural design. McGraw-Hill.
Baker, G. (2006). Design strategies in architecture. Routledge.
Ching, F. (2014). Building Structures illustrated. Wiley.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Building Construction Studio 4**
Code	ARC 3304
Prerequisite Course(s)	ARC 3303 - Building Construction Studio 3
Semester Level	Year: 3 Level: 6
Course Coordinator	Mohamed Atef Elhamy Kamel
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 4 Hrs Self-study: 4 Hrs Total: 8 Hrs
ECTS Credits	4
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This course provides a comprehensive overview of exterior and interior finishing materials and techniques. it covers the key materials and methods for finishing building facades, including curtain walls, glass blocks, aluminum cladding, brickwork, and stucco. It also introduces interior wall finishes such as wood paneling and paints, as well as ceiling finishes like false ceilings and gypsum boards. Additionally, the course explores floor surface finishes, including tiles, hardwood, vinyl, and marble. Using previously designed housing unit, students will apply gained knowledge

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to finish materials	4
Types of woodworking and metal Joints	4
Ceiling finishes: Mineral fiber ceiling tiles	4
Ceiling finishes: Gypsum board	4
Wall finishes: Paintings and coatings	4
Wall finishes: Wood paneling	4
Floor finishes: Wood flooring installation 1	4
Floor finishes: Wood flooring installation 2	4
Floor finishes: Ceramic, porcelain, marble and granite tiles	4
Exterior finishes: Metal clading	4
Exterior finishes: Marble and granite	4
Exterior finishes: Masonry finishes	4
Project development: Interior finishes of the housing unit - Part 1	4
Project development: Interior finishes of the housing unit - Part 2	4
Project development: Exterior finishes of the housing unit	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	60	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	60%	Midterm Exam (7th week)	20%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Project(s), Eval. of Research, Assignments & Tasks) • Mid-Term Exam (Written and Drawing Exam) • Final Submission of the Project			
Examination Requirements	Equipped Studio			

8. Reading list

Ching, D.K. (2020). Building Construction Illustrated. Van Nostrad Reinhold.
Kultermann, E., & Spence, W. (2021). Construction materials, methods and techniques. Cengage.
Bernold, L. (2015). Construction Equipment and Methods: Planning, Innovation, Safety. Wiley.
Mehta, M. (2017). Building Construction: Principles, Materials, and Systems. Pearson.
ARCOM. (2003). The Graphic Standards Guide to Architectural Finishes. John Wiley & Sons.
McKay, W. B. (2005). McKay's Building Construction. Routledge.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Architectural Research Methods**
Code	ARC 3206
Prerequisite Course(s)	None
Semester Level	Year: 3 Level: 6
Course Coordinator	Mohamed Wahba Ibrahim Khalil
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course provides students with a comprehensive understanding of research methods in the field of architecture. It equips students with the skills to identify research problems and questions, collect and analyze relevant data, and effectively communicate their research findings. Emphasizing both qualitative and quantitative approaches, the course prepares students to conduct independent research, contributing to academic knowledge and addressing challenges in the field of architectural and uranism.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to Scientific Research Methods	2
The Nature and Tools of Research	2
The Problem: The Heart of the Research Process	2
Review of the Related Literature	2
Planning Your Research Project	2
Writing the Research Proposal	2
Quantitative Research - Descriptive Research	2
Quantitative Research – Experimental, Quasi Experimental, and Ex Post Facto Designs	2
Quantitative Research – Analyzing Quantitative Data	2
Qualitative Research – Methods	2
Qualitative Research – Analyzing Quantitative Data	2
Mixed Methods Research	2
Research Reports	2
How to Read a Research Paper	2
Time Management of Research	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Deetjen, T. (2020). Published: a Gide. Productive Academic.
Paul, D. (2016). Practical Research Planning and Design (11th Edition).
Salkind, J. (2018). Exploring research. Pearson.
Leedy, P., & Ormrod, J. (2018). Practical research. Pearson.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**20th Century and Contemporary Architecture**
Code	ARC 3204
Prerequisite Course(s)	ARC 3203 - Renaissance and Pre-modern Architecture
Semester Level	Year: 3 Level: 6
Course Coordinator	Mohamed Wahba Ibrahim Khalil
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course introduces students to twentieth-century architecture, focusing on the pioneers and movements of modernism and their impact on architectural design. It examines the interaction between philosophical, cultural, ethical, and socio-economic concepts with architectural form and expression. Through case studies and discussions, students will explore how modernism shaped contemporary architecture.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to global architecture in the twentieth century	2
Modern Architecture: First generations of pioneers	2
Modern Architecture: Second generations of pioneers	2
Late-Modern Architecture: Sculptural Form and Slick Tech	2
Twenties Revivalism and Structuralism	2
Machine Simulation	2
High Tech	2
Neo and Monumental Expressionism	2
Deconstruction	2
Post-Modern Architecture	2
Sustainable and Green Architecture	2
Biomimicry Architecture	2
Smart Buildings and Technology Integration	2
Biophilic and Biomimicry Design	2
Parametric and Computational Design	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Portfolio) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Moffett, M. Et al. (2008). A world History of Architecture. McGraw-Hill.
Jencks, C. (1991). The language of post-modern architecture. Academy Editions.
Doordan, D. (2002). Twentieth century architecture. Abrams.
Frampton, K. (2007). Modern Architecture, a Critical History. Thames and Hudson.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Introduction to Urban Planning Studio**
Code	ARC 3406
Prerequisite Course(s)	ARC 3404 - Principles of Urban Planning
Semester Level	Year: 3 Level: 6
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	6 Hrs	Self-study:	5 Hrs	Total: 11 Hrs
ECTS Credits	6				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio introduces students to the practical application of key concepts and principles in urban planning. Focusing on essential studies required for urban planning projects, students will build upon knowledge from the "Introduction to Urban Planning" course. Through assignments addressing specific urban issues, students will collect and analyze data related to urban planning aspects of an existing small town, gaining hands-on experience in real-world urban planning challenges.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the studio	6
Collecting data to understand and specify problems	6
Analyzing the collected data to reach the main objectives	6
Regional introduction of the project	6
Environmental analysis of the city	6
Infrastructure analysis	6
Services	6
Residential communities	6
Socio-economic studies	6
SWOT analysis of the city	6
Presentation techniques	6
Full project development -Part 1	6
Full project development -Part 2	6
Full project development -Part 3	6
Full project development -Part 4	6

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	90	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research, Eval. of Project(s)) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Butler, K. (2012). Planning and Urban Design Standards. Wiley.
ELWakil, S. (2006). Urban Planning: Principles, Basics and Applications.
Levy, J. (2016). Contemporary urban planning. Routledge.
Weber, R. & Randal, C. (2015). The oxford handbook of urban planning. 2015.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Advanced Technologies in Building Construction**
Code	ARC 3305
Prerequisite Course(s)	ARC 3303 - Building Construction Studio 3
Semester Level	Year: 3 Level: 6
Course Coordinator	Mohamed Atef Elhamy Kamel
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 2 Hrs Self-study: 3 Hrs Total: 5 Hrs
ECTS Credits	3
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This course explores the impact of emerging technologies and materials on building construction and operation, emphasizing energy efficiency, environmental sustainability, and health and safety. Topics include the future of construction, nanotechnology, smart materials, advanced renewable energy systems, and the role of robotics. Students will also investigate AI, VR/AR/MR applications, 3D printing, and various dimensions of Building Information Modeling (BIM). The course provides a comprehensive overview of how these innovations integrate to enhance construction practices.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
The future of construction in light of technical developments	2
Nanotechnology in building and construction	2
Artificial Intelligence (AI) and Machine Learning (ML) in building construction	2
Artificial intelligence in urban planning	2
Robotics in construction	2
Advanced renewable energy systems	2
Smart building materials	2
Virtual Reality (VR), Augmented Reality (AR) & Mixed Reality (MR)	2
3D Printing in construction	2
3D laser scanning in building and construction	2
Building Information Modeling (BIM) – An introduction	2
Building Information Modeling - 3D	2
Building Information Modeling - 4D	2
Building Information Modeling - 5D	2
Building Information Modeling - 6D	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Eastman, C., et al. (2025). BIM handbook : A guide to building information modeling. Wiley.
Baker, N. $ Steemer, K. (2000). Energy and Environment in Architecture: a Technical design guide. E&FN Spon.
Hyde,R. (2008). Bioclimatic Housing Innovative Design for Urban Climates, Earthscan.
Ghaffar, S. (2022). Innovation in construction: a practical guide to transforming the. Springer Nature.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Mathematics for Architects**
Code	MTH1183
Prerequisite Course(s)	None
Semester Level	Year: 3 Level: 6
Course Coordinator	
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 2 Hrs Self-study: 2 Hrs Total: 4 Hrs
ECTS Credits	2
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This course introduces essential mathematical concepts needed for architectural studies, focusing on geometry and calculus. Topics include a review of trigonometry, calculations of areas and volumes for basic geometric figures, and the analytic geometry of lines, planes, and vectors in two and three dimensions. The course also covers differential and integral calculus, emphasizing practical applications such as optimization problems and determining areas and volumes through integration. These foundational skills will enable students to approach architectural challenges with confidence and precision.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction	2
Differentiation: Linear equations, Slope formula, Measuring gradients	2
Rules for differentiation- part1	2
Rules for differentiation- part2	2
Derivatives of Trigonometric Functions	2
Derivative Rules and Curve Sketching	2
Integration: Definite and indefinite integrals - Part1	2
Integration: Definite and indefinite integrals - Part2	2
Integration of trigonometric functions - Part1	2
Integration of trigonometric functions - Part2	2
Finding the area under curve and between curves	2
Trapezoidal and Simpson's rule	2
Analytic Geometry: Circles and the Parabola	2
The Ellipse and the Hyperbola	2
Revision	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Written Assgs./ Exams) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Strang, G. (2017). Calculus. Wellesley.
Serdarushich, V. (2014). Analytic Geometry. Nabla Ltd.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Specifications of

Architecture

Courses

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Heritage Buildings Conservation Studio**
Code	ARC 4006
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Ahmed M. A. Shehata
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 10 Hrs Self-study: 12 Hrs Total: 22 Hrs
ECTS Credits	11
Credit Hours	5 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This studio emphasizes the significance of architectural heritage, introducing students to the criteria for identification, classification, documentation, and various levels of conservation. It addresses threats to heritage buildings, including neglect, lack of maintenance, and deterioration. Through hands-on project, students will apply their knowledge by engaging in the conservation and adaptive reuse of a significant heritage building in Saudi Arabia, demonstrating practical approaches to preserving architectural heritage while maintaining its relevance for contemporary use.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction and definitions	10
Threats facing architectural heritage	10
Classification and documentation of architectural heritage	10
Levels of conservation: Preservation	10
Levels of conservation: Rehabilitation	10
Levels of conservation: Restoration	10
Levels of conservation: Reconstruction	10
Analysis of similar projects and site analysis	10
Preliminary study of the project and its components	10
Development of reused plans -Part 1	10
Development of reused plans -Part 2	10
Development of reused plans -Part 3	10
Development of sections and elevations	10
Full project development -Part 1	10
Full project development -Part 2	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Written Assgs./ Exams, Eval. of Project(s), Eval. of Research) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Alalouch, C., (2019). Conservation of Architectural Heritage. Springer
Versaci, A. and Bougdah, H. (2022). Conservation of Architectural Heritage. Springer.
Pickard, R. (2012). Policy and law in heritage conservation. Taylor & Francis.
Watson, D., & Crosbie, M. (2005). Time-saver standards for architectural design. McGraw-Hill.
De Chiara, J., & De Chiara, J. (2001). Time-saver standards for building types. McGraw-Hill.
Development Authorities Support Center. (2022). Architecture Identities of KSA.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Working Drawings Studio 1**
Code	ARC 4306
Prerequisite Course(s)	ARC 3304 - Building Construction Studio 4
Semester Level	Year: 4 Level: 7
Course Coordinator	Mohamed Atef Elhamy Kamel
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	6 Hrs	Self-study:	5 Hrs	Total: 11 Hrs
ECTS Credits	6				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course introduces students to the professional working drawings, building on knowledge from previous construction studios. Students will apply this knowledge to a previously designed small-scale public building, focusing on dimensioning, coordination, annotation, and coding systems. The course emphasizes the coordination of architectural, structural, and electromechanical requirements, as well as detailed blow-up drawings.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to execution design drawings	6
An overview of the selected projects	6
Execution design drawings of floor plans - Part 1	6
Execution design drawings of floor plans - Part 2	6
Execution design drawings of longitudinal section	6
Execution design drawings of elevations	6
Execution design drawings the site plan	6
Water supply and drainage systems	6
Electrical drawings	6
Air conditioning drawings	6
Curtain walls	6
Suspended ceilings	6
Skylight	6
Special stairs construction	6
Internal fountains and water features	6

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	90	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	60%	Midterm Exam (7th week)	20%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Written Assgs./ Exams, Eval. of Project(s), Assignments & Tasks) • Mid-Term Exam (Written and Drawing Exam) • Final Submission of the Project			
Examination Requirements	Equipped Studio			

8. Reading list

Styles, K., & Bichard, A. (2012). Working Drawings Handbook. Taylor and Francis.
Spence, W. (1992). Architectural Working drawing. John Wiley & sons.
Bernold, L. (2015). Construction Equipment and Methods: Planning, Innovation, Safety. Wiley.
Mehta, M. (2017). Building Construction: Principles, Materials, and Systems. Pearson.
Levy, S. (2010). Construction databook. McGraw-Hill.
Dawson, S. (2002). Architect's working details. Emap Architecture.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Creative Generative-Design**
Code	ARC 4107
Prerequisite Course(s)	ARC 2106 - 3D Modeling
Semester Level	Year: 4 Level: 7
Course Coordinator	Wajdy Sadagh A. Qattan
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study:	3 Hrs	Total: 7 Hrs
ECTS Credits	4				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course introduces students to generative design technologies, providing computational tools and algorithms that act as a copilot in the design process. It explores the potential of parametric modeling, scripting, and generative systems in architectural design. Students will experiment with form generation, evaluation, and optimization methods, building on an extensive palette of parametric and analytical tools. The course encourages creative exploration, leveraging computation to enhance and optimize architectural design outcomes.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to Generative Design - part 1	4
Introduction to Generative Design - part 2	4
Introduction to Generative Design - part 3	4
Genetic/ Evolutional Solvers - part 1	4
Genetic/ Evolutional Solvers - part 2	4
Genetic/ Evolutional Solvers - part 3	4
Physics Solver - part 1	4
Physics Solver - part 2	4
Physics Solver - part 3	4
Introduction to Machine Learning Solver	4
Applying Generative Design - part 1	4
Applying Generative Design - part 2	4
Applying Generative Design - part 3	4
Full Project Development: Part-1	4
Full Project Development: Part-2	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	15	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Computer-based Assgs./ Exams) • Mid-Term Exam (Computer-Based Exam) • Final Exam (Computer-Based Exam)			
Examination Requirements	Computer Lab.			

8. Reading list

Agkathidis, A. (2016). Generative Design. Laurence King Publishing.
Rhee, J. (2020). Digital media series: Grasshopper. Independently published.
Zesk, W. (2019). Grasshopper: Generative Design for Architecture. linkedin.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Buildings Design Standards 2**
Code	ARC 4011
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Ahmed M. A. Shehata
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course provides students with the knowledge and skills to analyze building elements and identify design standards for various complex building types, including hotels, hospitals, museums, theaters, and cultural centers. It also covers design considerations for specialized structures like airports, stadiums, public libraries, city halls, and courthouses. Students will learn to apply these standards in the design process, addressing the unique functional and spatial requirements of each building type.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Design standards for hotels	2
Healthcare buildings - Part 1	2
Healthcare buildings - Part 2	2
Healthcare buildings - Part 3	2
Healthcare buildings - Part 4	2
Design standards for office buildings	2
Design standards for museums	2
Design standards for theaters and concert halls	2
Design standards for aquariums and zoos	2
Design standards for research centers	2
Design standards for stadiums	2
Design standards for city halls and courthouses	2
Design standards for terminals: Introduction to airports	2
Design standards for technical services	2
Design standards for multistory parking	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Neufert, E. et al. (2023). Architects' Data. Wiley-Blackwell.
De Chiara, J., & De Chiara, J. (2001). Time-saver standards for building types. McGraw-Hill.
Mcdonough, B. (2001). Building Type Basics for Hospitality Facilities. New York, Wiley.
Rosenblatt, A. (2001). Building type basics for museums. J. Wiley & Sons.
Watch, D. (2008). Building Type Basics for Research Laboratories. Hoboken, N.J., Wiley.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Principles of Statistics for Architects**
Code	MTH1681
Prerequisite Course(s)	None
Semester Level	Year: 4 Level: 7
Course Coordinator	
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 2 Hrs Self-study: 2 Hrs Total: 4 Hrs
ECTS Credits	2
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This course introduces architects to fundamental concepts and techniques in statistics, providing essential tools for data analysis and interpretation in architectural and urban practice. Focusing on descriptive statistics and basic probability theory, the course equips students with the skills to analyze data, identify trends, and make informed, evidence-based decisions.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Definition and general view of statistics	2
Organization and presentation of statistical data	2
Measures of central tendency (Mean, Median, Mode) of the simple data and the frequency distribution	2
Measures of dispersion (The Range – The Variance and the standard deviation) of the simple data and the frequ	2
Measures of dispersion (Coefficient of variation) of the simple data and the frequency distribution	2
Moments and Measure of Skewness and Kurtosis	2
Correlation measures	2
Simple Linear regression 1	2
Simple Linear regression 2	2
Sample space and Events	2
Counting Techniques (Fundamental basics, Addition Rule)	2
Counting Techniques (Multiplication Rule- Permutation and Combinations)	2
Definition of the probability and its applications	2
Conditional probability - Independence of events and Bayes theorem and its applications 1	2
Conditional probability - Independence of events and Bayes theorem and its applications 2	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Written Assgs./ Exams, Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Bluman, A. G. (2010). Elementary Statistics. A Brief Version : [a Step by Step Approach]. Boston, Ma, Mcgraw-Hill.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Professional Practice Studio**
Code	ARC 4007
Prerequisite Course(s)	ARC 4006 - Heritage Buildings Conservation Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Ahmed M. A. Shehata
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	10 Hrs	Self-study:	12 Hrs	Total: 22 Hrs
ECTS Credits	11				
Credit Hours	5 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio focuses on designing a real project, reinforcing the fundamentals of architectural professional practice. Students will build upon the values, knowledge, and skills acquired in previous courses, applying them creatively to various development phases of the project. The project's location will be determined in coordination with relevant public or private sector authorities or by the studio coordinator, ensuring a practical and contextually relevant design experience.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Defining project program and identify the relevant laws, rules and legislations	10
Analysis of similar projects; and site analysis	10
Preliminary study of the project and its components	10
Development of plans and structure system -Part 1	10
Development of plans and structure system -Part 2	10
Development of plans and structure system -Part 3	10
Development of plans and structure system -Part 4	10
Development of sections and elevations -Part 1	10
Development of sections and elevations -Part 2	10
Development of sections and elevations -Part 3	10
Perspectives	10
Full project development -Part 1	10
Full project development -Part 2	10
Full project development -Part 3	10
Full project development -Part 4	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research, Eval. of Project(s), Assignments & Tasks) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Neufert, E. et al. (2023). Architects' Data. Wiley-Blackwell.
Watson, D., & Crosbie, M. (2005). Time-saver standards for architectural design. McGraw-Hill.
De Chiara, J., & De Chiara, J. (2001). Time-saver standards for building types. McGraw-Hill.
Baker, G. (2006). Design strategies in architecture. Routledge.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Working Drawings Studio 2**
Code	ARC 4307
Prerequisite Course(s)	ARC 4306 - Working Drawings Studio 1
Semester Level	Year: 4 Level: 8
Course Coordinator	Mohamed Atef Elhamy Kamel
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	6 Hrs	Self-study:	5 Hrs	Total: 11 Hrs
ECTS Credits	6				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio focuses on the preparation of quantities and specifications for architectural projects. Students will learn methods for writing construction specifications, with an emphasis on using industry standards and master guides, particularly Saudi Building Code. The studio also covers techniques for calculating material quantities. Students will apply these concepts to a small administrative building project previously developed in "Execution Design Studio 1" reinforcing practical skills in construction documentation.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Project contracting documents and methodologies of quantity surveying	6
Review of the project previously developed in "Execution Design Studio 1"	6
Excavation and Backfilling Works	6
Plain Concrete Works	6
Reinforced Concrete Works (Foundations and Columns)	6
Reinforced Concrete Works (Slabs and Beams)	6
Staircase Works	6
Masonry Works	6
Insulation Works	6
Carpentry Works	6
Plastering and Painting Works	6
Cladding and Flooring Works	6
Electromichanical Works	6
Plumbing and Sanitary Works	6
Landscape Works	6

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	90	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	60%	Midterm Exam (7th week)	20%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research, Eval. of Report) • Mid-Term Exam (Written and Drawing Exam) • Final Submission of the Project			
Examination Requirements	Equipped Studio			

8. Reading list

Kalin, M., and Rosen, H.. (2010). Construction Specifications Writing. John Wiley & Sons

المؤسسة العامة للتدريب التقني والمهني. (2008). تخصص التقنية المعمارية، كميات ومواصفات.

Dutta, B.N. (2021). Estimating and Costing in Civil Engineering. CBS Publishers & Distributors Pvt Limited.

CSI. (2021). Construction Specifications. The Csi Construction Specifications Practice Guide. Wiley,

Cartlidge, D. (2022). Quantity Surveyor's Pocket Book. Routledge.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Integrated Architectural Design Studio 1**
Code	ARC 4008
Prerequisite Course(s)	ARC 4006 - Heritage Buildings Conservation Studio
	ARC 4011 - Buildings Design Standards 2
Semester Level	Year: 4 Level: 8
Course Coordinator	Ahmed M. A. Shehata
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study:	6 Hrs	Total: 10 Hrs
ECTS Credits	5				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio serves as an introduction to the "Integrated Architectural Design Studio 2", guiding students in selecting a project title that aligns with their design approach. The course enables students to choose and analyze the appropriate site, create a detailed space program, and define planning and design standards for the selected project. Moreover, students will learn to develop a project methodology by analyzing similar local, regional, and international projects. A comprehensive and well-written report on the cited studies and the main design concept are required as the primary deliverables for this course.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Criteria of selecting the graduation project	4
Analyses of previous similar projects - Part 1	4
Analyses of previous similar projects - Part 2	4
Specifying and selecting the appropriate site	4
Site analysis 1	4
Site analysis 2	4
Defining the project program	4
Development of the project program details	4
Defining planning and design standards, laws, rules and legislations	4
Developing the first concept	4
Developing the second concept	4
Developing the third concept	4
Evaluating the concepts based on assessment criteria	4
Conceptual design project development - Part 1	4
Conceptual design project development - Part 2	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	60	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Report , Eval. of Project(s)) • Mid-Term Exam (Eval. of Report) • Final Submission of the Project and Report			
Examination Requirements	Equipped Studio			

8. Reading list

Neufert, E. et al. (2023). Architects' Data. Wiley-Blackwell.
Watson, D., & Crosbie, M. (2005). Time-saver standards for architectural design. McGraw-Hill.
De Chiara, J., & De Chiara, J. (2001). Time-saver standards for building types. McGraw-Hill.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Architectural Project Management 1**
Code	ARC 4503
Prerequisite Course(s)	ARC 4006 - Heritage Buildings Conservation Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Mohammad Abdullah Almahdi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course is designed for undergraduate architecture students and introduces key concepts in construction management. It covers terminology, types of construction projects, and the roles and responsibilities of construction managers. The course provides an overview of contract documents, various construction contracts, and project delivery methods, with a focus on critical path analysis for project planning. Additionally, students will be introduced to computer-based applications used in construction management, enhancing their practical skills in the field.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to Construction Project Management	2
Construction Projects: A Magnificent Creativity	2
Construction Projects: Types and Participants	2
Construction Management Process and Tools	2
Life Cycle Stages of Projects	2
Project Contract Strategy: Objectives and Constraints	2
Contractual Relationships and Legal Framework	2
Project Delivery Methods: Overview and Selection Criteria	2
Design/Construction Interaction	2
Planning in Construction Projects: A Challenge	2
Planning in Construction Projects: Concepts and Steps	2
Critical-Path Analysis for Network Scheduling: Introduction	2
Critical-Path Analysis for Network Scheduling: CPM & PDM	2
Critical-Path Analysis for Network Scheduling: Manually Solved Examples	2
Criticisms to Network Techniques	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Hegazy, T. (2001). Computer-based construction project management. Pearson.
Sears, K. (2015). Construction Project Management. 6th Edition. John Wiley and Sons.
Liebing, W. (2007). Construction of Architecture: from Design to Built. John Wiley and Sons.
Oberlender, G. (2022). Project Management for Engineering and Construction. McGraw-Hill.
Jackson, B. (2020). Construction management jumpstart (3rd ed.). Wiley.
Project Management Institute. (2021). A Guide to the Project Management Body of Knowledge. PMI.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Applications of Building Code in Architecture**
Code	ARC 4309
Prerequisite Course(s)	ARC 4006 - Heritage Buildings Conservation Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Mohamed Atef Elhamy Kamel
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course provides an overview of both local and international building codes and regulations, with a focus on the Saudi Building Code (SBC 201). Students will explore essential topics, gaining an understanding of the regulations and standards required for safe and efficient practices. The course emphasizes the importance of adhering to both local and international guidelines in professional architectural practice in Saudi Arabia.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Definition and importance of the International Building Code (IBC)	2
The scope of the Saudi Building Code and its applicability	2
Classification of establishments according to use and occupancy	2
Special detailed requirements based on usage and occupancy - part 1	2
Special detailed requirements based on usage and occupancy - part 2	2
Fire and smoke protection features	2
Fire protection and life safety systems 1	2
Fire protection and life safety systems 1	2
Means of egress 1	2
Means of egress 2	2
Plumbing systems	2
Electrical and Mechanical systems	2
Elevators and conveying systems	2
Interior environment 1	2
Interior environment 2	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Saudi building code, National committee. (2018). Saudi Building Code: SBC 201.

International Code Council. (2024). International Building Code. Country Club Hills, Il, International Code Council, Inc.

Ching, D K. (2021). Building Codes Illustrated : A Guide to Understanding the 2021 International Building Code. John Wiley.

Ching, D.K. & Winkel, S. R. (2022). Building Codes Illustrated: The Basics. John Wiley & Sons.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Integrated Architectural Design Studio 2**
Code	ARC 4009
Prerequisite Course(s)	ARC 4500 - Cooperative Training
	ARC 4008 - Integrated Architectural Design Studio 1
Semester Level	Year: 5 Level: 10
Course Coordinator	Ahmed M. A. Shehata
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	10 Hrs	Self-study:	13 Hrs	Total: 23 Hrs
ECTS Credits	12				
Credit Hours	5 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio serves as the final graduation project where students are expected to apply the skills and knowledge gained throughout their academic journey. Each student will independently work on a project approved in the previous semester through the "Graduation Project Research" course. The course emphasizes the project's practical viability, constructability, and socio-cultural adaptability within Saudi Arabia. Students will explore design alternatives, evaluate them based on criteria, and develop a comprehensive final design proposal.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Review of "Integrated Architectural Design Studio 1" outcomes	10
Development of plans -Part 1	10
Development of plans -Part 2	10
Development of plans -Part 3	10
Development of plans -Part 4	10
Development of plans -Part 5	10
Development of sections and elevations -Part 1	10
Development of sections and elevations -Part 2	10
Development of sections and elevations -Part 3	10
Development of sections and elevations -Part 4	10
Perspectives	10
Full project development -Part 1	10
Full project development -Part 2	10
Full project development -Part 3	10
Full project development -Part 4	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Project(s)) • Mid-Term Exam (Eval. of One of the Project Stages) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Neufert, E. et al. (2023). Architects' Data. Wiley-Blackwell.
Watson, D., & Crosbie, M. (2005). Time-saver standards for architectural design. McGraw-Hill.
De Chiara, J., & De Chiara, J. (2001). Time-saver standards for building types. McGraw-Hill.
Baker, G. (2006). Design strategies in architecture. Routledge.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

جامعة أم القرى
UMM AL-QURA UNIVERSITY

Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Economics of Architectural Projects**
Code	ARC 4505
Prerequisite Course(s)	ARC 4307 - Working Drawings Studio 2
Semester Level	Year: 5 Level: 10
Course Coordinator	Mohammad Abdullah Almahdi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course introduces students to the fundamentals of economics and its influence on construction, preparing them to make informed economic decisions in architectural projects. Key topics include the time value of money, cash flow analysis, and factors affecting building costs. The course covers the principles of bill-of-quantity (BOQ), cost estimation, and value engineering. Advanced concepts in building economics and the impact of technical specifications on operation costs are also explored.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Economics of Construction Projects	2
Factors Affecting Building Costs	2
Lifecycle Cost Analysis (LCCA)	2
Time Value of Money: Financial Concepts	2
Time Value of Money: Examples - Part 1	2
Time Value of Money: Examples - Part 2	2
Cost Estimation Principles and Techniques	2
Detailed Cost Estimation	2
Bill-of-Quantity (BOQ) and Cost Control	2
Computer-Based Cost Estimation - Part 1	2
Computer-Based Cost Estimation - Part 2	2
Value Engineering of Architectural Projects	2
Energy and Environmental Impact on Building Costs	2
Economic Impact of Technological Advancements in Construction	2
Economic and Market Trends in Architecture	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Dell'Isola, D. (2002). Architect's Essentials of Cost Management. John Wiley & Sons.
Gould, E. (2010). Managing the Construction Process. Prentice - Hall.
Franser, M. (2008). Global Engineering Economics. Pearson Education.
Liebing, W. (2008). Construction of Architecture. John Wiley and Sons.
Jackson J. (2010). Construction Management Jump Start. Wiley Publishing.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Professional Practice for Architects**
Code	ARC 4501
Prerequisite Course(s)	ARC 4500 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Mohammad Abdullah Almahdi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course provides a comprehensive overview of the principles of professional architectural practice in Saudi Arabia. It covers ethical standards, the Code of Conduct, and the legal frameworks governing the profession. Additionally, the course explores the architect's role and responsibilities, as well as essential professional skills such as resume preparation, portfolio development, interview techniques, and hiring processes. Students will be well-prepared for a responsible, competent, and effective career in architecture.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
History of practicing architecture globally and in the Kingdom	2
The professional role and competencies of architects and ethics in architectural profession	2
Regulations and rules that govern the professional practice	2
Saudi council of engineers: Professional accreditation for architects	2
Types of architectural drawings and docunments	2
Partners involved in the construction process	2
Preparing project bidding within regulations and legal measures	2
how architectural firms are formed and organized	2
Principles for administering architectural or consulting offices	2
Governance, Risk, and Compliance, GRC	2
Construction documents preparation	2
Interviewing skills	2
Writing of curriculum vitae (CV)	2
Portfolio preparation	2
Review of students' Curricula Vitae and Portfolios	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Presentation, Eval. of Portfolio, Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Saudi building code National committee (2018). The Saudi building code general 201.

AIA. (2017). The architecture student's handbook of professional practice. Wiley.

Piven, P. et al. (2008). Essentials of starting, assessing, & transitioning a design firm. Wiley.

غسان الدوسري. (2018). ملاحظات على إدارة مشاريع الهندسة والإنشاء

صالح العشيش. (1996). إدارة تنفيذ المشروعات الهندسية. مكتبة العبيكان

GRCP website and its material: https://www.oceg.org/grc-standards/

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Architectural Project Management 2**
Code	ARC 4504
Prerequisite Course(s)	ARC 4503 - Architectural Project Management 1
Semester Level	Year: 5 Level: 10
Course Coordinator	Mohammad Abdullah Almahdi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course builds upon the foundational knowledge gained in Architectural Project Management I. It delves deeper into advanced project management techniques, including scheduling, resource allocation, leveling, project control, and construction supervision. Students will also explore more advanced applications of computer-based tools and software in construction management.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Critical-Path Analysis for Network Scheduling: Revision	2
Smoothing Resource Profile (Resource Leveling)	2
Scheduling with Limited Resources (Resource Allocation): Heuristic Solution - Part 1	2
Scheduling with Limited Resources (Resource Allocation): Heuristic Solution - Part 2	2
Scheduling with Limited Resources (Resource Allocation): Heuristic Solution - Part 3	2
Optimization of Resource Allocation and Leveling on Excel - Part 1	2
Optimization of Resource Allocation and Leveling on Excel - Part 2	2
Project Time-Cost Relationship	2
Time-Cost Tradeoff: Existing Techniques	2
Time-Cost Tradeoff: Cost-Slope Method	2
Building Information Modeling (BIM) and Construction Project Management	2
Integrated Project Scheduling with Building Information Modeling (BIM)	2
Computer Applications in Construction Project Management (Part 1)	2
Computer Applications in Construction Project Management (Part 2)	2
Computer Applications in Construction Project Management (Part 3)	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Hegazy, T. (2001). Computer-based construction project management. Pearson.
Sears, K. (2015). Construction Project Management. 6th Edition. John Wiley and Sons.
Liebing, W. (2007). Construction of Architecture: from Design to Built. John Wiley and Sons.
Oberlender, G. (2022). Project Management for Engineering and Construction. McGraw-Hill.
Jackson, B. (2020). Construction management jumpstart (3rd ed.). Wiley.
Project Management Institute. (2021). A Guide to the Project Management Body of Knowledge. PMI.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Universal Design Code**
Code	ARC 4310
Prerequisite Course(s)	ARC 4309 - Applications of Building Code in Architecture
Semester Level	Year: 5 Level: 10
Course Coordinator	Mohamed Atef Elhamy Kamel
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course explores the principles and practices of universal design, a design philosophy that aims to create inclusive environments accessible to people of all abilities. Students will learn about the benefits of universal design and how it can enhance the quality of life for individuals with disabilities. The course will delve into strategies for designing accessible and equitable built environments, focusing on architectural solutions that address the needs of diverse user groups.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Background about disability, diversity issues and origins of universal design	2
Accessible, inclusive and universal design concepts; and Anthropometrical dimensions	2
Floor surfaces, ramps, stairs and handrails	2
Elevators, escalators, doors and windows	2
Accessible toilets, showers and ablution areas	2
Furniture and other equipment	2
Entrances, internal corridors	2
Required accessibility in public buildings, Part 1	2
Required accessibility in public buildings, Part 2	2
Accessible hotel rooms	2
Garage and parking buildings	2
Accessibility of public spaces, Part 1	2
Accessibility of public spaces, Part 2	2
Wayfinding assistance, Part 1	2
Wayfinding assistance, Part 2	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Goldsmith, S. (2015). Universal design: a manual of practical guidance for architects. Architectural Press.
PSCDR. (2010). Universal Accessibility: Built Environment Guidelines for KSA.
Saudi building code, National committee. (2018). Saudi Building Code: SBC 201.
U.A.E, Dubai and Kuwait Universal Design Codes
Kent, J. (2023). ADA in Details. Wiley.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

جامعة أم القرى
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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Graduation Project**
Code	ARC 4208
Prerequisite Course(s)	ARC 4500 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Mohamed Wahba Ibrahim Khalil
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	3 Hrs	Self-study:	14 Hrs	Total: 17 Hrs
ECTS Credits	9				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This capstone course explores architectural challenges related to Hajj, Umrah, and visit, focusing on heritage buildings in Makkah, Madinah, and the holy sites. Topics include the documentation and architectural survey of these sites, housing for pilgrims, and strategies for increasing capacity in areas like Mina through vertical and horizontal expansion. Students will engage in individual research, applying architectural principles to real-world challenges related to these sacred sites.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the course	3
Research title selection	3
Analyze relevant research papers - Part 1	3
Analyze relevant research papers - Part 2	3
Problem statement and methodology selection	3
Literature review - Part 1	3
Literature review - Part 2	3
Literature review - Part 3	3
Applying the methodology - part 1	3
Applying the methodology - part 2	3
Applying the methodology - part 3	3
The conclusion and recommendations	3
Research refining - Part 1	3
Research refining - Part 2	3
Research refining - Part 3	3

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	0	Training	0
	Practical	0	Research Project	45	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research) • Mid-Term Exam (Eval. of Research) • Final Capstone Submission			
Examination Requirements	Equipped Classroom			

8. Reading list

معهد خادم الحرمين الشريفين لأبحاث الحج والعمرة. الملتقيات العلمية لأبحاث الحج والعمرة والزيارة.
Uqu.edu.sa. (2022). from https://uqu.edu.sa/hajj/107535.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Specifications of

Architecture

Elective Courses

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Islamic Values in Architecture**
Code	ARC 4211
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Mohamed Wahba Ibrahim Khalil
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 2 Hrs Self-study: 2 Hrs Total: 4 Hrs
ECTS Credits	2
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

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

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to Urban Legislation	2
Islamic Values in City Planning and Design	2
Aspects of Applying Islamic Legislation in City Planning and Design 1	2
Aspects of Applying Islamic Legislation in City Planning and Design 2	2
Aspects of Applying Islamic legislation in the Design of Mosques 1	2
Aspects of Applying Islamic legislation in the Design of Mosques 2	2
Aspects of Applying Islamic legislation in the Design of Houses 1	2
Aspects of Applying Islamic legislation in the Design of Houses 2	2
Aspects of Applying Islamic legislation in the Design of Markets 1	2
Aspects of Applying Islamic legislation in the Design of Markets 2	2
Aspects of Applying Islamic legislation in the Design of Schools and Hospitals	2
Contemporary urban legislation in the Kingdom	2
Evaluation of the impact of legislation on contemporary Saudi urbanism 1	2
Evaluation of the impact of legislation on contemporary Saudi urbanism 2	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

الهذلول، ص. (2010). المدينة العربية الإسلامية- أثر التشريع في تكوين البيئة العمرانية. سلسلة علوم العمران.

عثمان، م. (2020). المدينة الإسلامية. دار الآفاق العربية.

إبراهيم، عبد الباقى. أسس التصميم المعمارى والتخطيط الحضرى فى العصور الإسلامية. مرآز الدراسات التخطيطية والمعمارية .

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Saudi Regional Architectural Identity**
Code	ARC 4212
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Mohamed Wahba Ibrahim Khalil
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to King Salman Charter for Architecture and Urbanism	2
The Charter's Activation Strategy	2
Physical and Natural Design	2
Society and Culture-Friendly Design	2
Sensory and Experiential Design	2
Implementation stages	2
Examples of Contemporary Projects adopting the Charter Values	2
Architectural Identities: Northern, Eastern and Central Najdi	2
Architectural Identities: Madinah Rural and Inner Madinah, and Tabuk Coast	2
Architectural Identities: Hejazi Coast and Taif Highland	2
Architectural Identities: Sarawat Mountains and Aseer Escarpment	2
Architectural Identities: Tuhama Foothills and Coast, and Farasan Islands	2
Architectural Identities: Abha Highland, Bisha Desert and Najran	2
Architectural Identities: Al Qatif and Al Ahsa Oasis, and East Coast	2
Research Presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Architecture and Design Commision. (2022). King Salman Charter for Architecture & Urbanism.

Development Authorities Support Center. (2022). Architecture Identities of KSA.

الهيئة الملكية لمدينة مكة المكرمة والمشاعر المقدسة. (2023). الهوية المعمارية لمدينة مكة المكرمة.

Hernandez, S. (2022). Islamic Heritage Architecture IV. WIT Press

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Architecture of the Two Holy Mosques**
Code	ARC 4213
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Mohamed Wahba Ibrahim Khalil
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
The Planning and Design Criteria of Mosque Architecture	2
Establishment of Al Masjid Al Haram	2
Effect of Al Masjid Al Haram on urban surrounding before the Saudi Extensions	2
The Saudi Expansions for Al Masjid Al Haram	2
The Architectural and Aesthetic Features of the Last Expansion	2
The Technical and Environmental Aspects of the Last Expansion	2
Security, Safety and Crowd Management in Al Masjid Al Haram	2
Establishment of the Prophet Mosque in Madina	2
Effect of the Prophet Mosque on Urban Surrounding Before the Saudi Extensions	2
The Saudi Expansions of the Prophet Mosque	2
The Architectural and Aesthetic Features of the Last Expansion	2
The Technical and Environmental Aspects of the Last Expansion	2
Security, Safety and Crowd Management	2
Proposals to Facilitate Worshipping in the Two Holy Mosques	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

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.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Islamic Identity in Contemporary Architecture**
Code	ARC 4214
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Mohamed Wahba Ibrahim Khalil
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to Islamic identity	2
Design principles of Islamic architecture 1	2
Design principles of Islamic architecture 2	2
Challenges in reflecting Islamic identity in contemporary buildings	2
Sustainability in Islamic architecture (Environmental)	2
Sustainability in Islamic architecture (Social)	2
Sustainability in Islamic architecture (Economic)	2
Examples of Islamic identity in modern architecture 1	2
Examples of Islamic identity in modern architecture 2	2
Examples of Islamic identity in modern architecture 3	2
Examples of Islamic identity in modern architecture 4	2
Innovations in Islamic architecture 1	2
Innovations in Islamic architecture 2	2
Innovations in Islamic architecture 3	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

الهذلول، ص (2010). المدينة العربية الإسلامية. الجمعية السعودية لعلوم العمران.

Waziri, Y. (2024). The influence of Islamic Heritage on contemporary Architecture. Scholars' Press.

فريد، أ. (1986). القيم الاسلامية في العمران المعاصر.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Photorealistic Rendering Techniques**
Code	ARC 4111
Prerequisite Course(s)	ARC 4006 - Heritage Buildings Conservation Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Wajdy Sadagh A. Qattan
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study:	2 Hrs	Total: 6 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to Photorealistic Rendering	4
Global Illumination	4
Volume Rendering and Participating Media - Part 1	4
Volume Rendering and Participating Media - Part 2	4
Subsurface Scattering	4
Image-based Rendering	4
High Dynamic Range Imaging	4
Image-based Lighting	4
Reconstruction of Reflectance	4
Bidirectional Texture Function	4
Radiance Transfer - Part 1	4
Radiance Transfer - Part 2	4
Project Development - Part 1	4
Project Development - Part 2	4
Project Development - Part 3	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	15	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Computer-based Assgs./ Exams) • Mid-Term Exam (Computer-Based Exam) • Final Exam (Computer-Based Exam)			
Examination Requirements	Computer Lab.			

8. Reading list

Kurachi, N. (2020). The magic of computer graphics. A K Peters/CRC Press.
Sakas, G. (2012). Photorealistic Rendering Techniques. Springer.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Computer Modeling in Building Construction**
Code	ARC 4112
Prerequisite Course(s)	ARC 4006 - Heritage Buildings Conservation Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Wajdy Sadagh A. Qattan
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study:	2 Hrs	Total: 6 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
BIM systems: Definition, emergence and development	4
Importance of BIM systems for owners, designers and contractors	4
BIM programs: Design and analysis programs, and interoperability	4
Efficiency of using BIM during construction process	4
BIM Solutions - Part 1	4
BIM Solutions - Part 2	4
Comparing traditional methods of calculating quantities with BIM system	4
Computer Modeling in Building Construction - Part 1	4
Computer Modeling in Building Construction - Part 2	4
Computer Modeling in Building Construction - Part 3	4
Computer Modeling in Building Construction - Part 3	4
Computer Modeling in Building Construction - Part 4	4
Project Development - Part 1	4
Project Development - Part 2	4
Project Development - Part 3	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	15	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Computer-based Assgs./ Exams) • Mid-Term Exam (Computer-Based Exam) • Final Exam (Computer-Based Exam)			
Examination Requirements	Computer Lab.			

8. Reading list

Crotty, R. (2016). Impact of building information modelling. Routledge.
Borrmann, A., et al. (2022). Building Information Modeling. Springer.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**AI Applications in Architecture**
Code	ARC 4113
Prerequisite Course(s)	ARC 4006 - Heritage Buildings Conservation Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Wajdy Sadagh A. Qattan
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study:	2 Hrs	Total: 6 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to AI in Architecture	4
Ethical and Social Implications of AI in Architecture	4
Generative Design in Architecture	4
AI in Collaborative Design Workflows	4
AI in Education and Training for Architects	4
AI in Building Information Modeling (BIM)	4
AI in Concept Development	4
AI and Parametric Design	4
AI for Sustainable Building Design	4
Climate-Responsive Design with AI	4
Adaptive Facade Design	4
AI in Smart Building Design	4
AI in Digital Reconstruction and Preservation	4
AI and User-Centric Design	4
Exploring New AI Applications	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	15	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Computer-based Assgs./ Exams) • Mid-Term Exam (Computer-Based Exam) • Final Exam (Computer-Based Exam)			
Examination Requirements	Computer Lab.			

8. Reading list

Current AI apps related to architecture

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Environmental Simulation**
Code	ARC 4114
Prerequisite Course(s)	ARC 4006 - Heritage Buildings Conservation Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Wajdy Sadagh A. Qattan
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study:	2 Hrs	Total: 6 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to environmental simulation	4
Basic concept of simulation	4
Shadows and radiation analysis tools	4
Energy and thermal simulation - Part 1	4
Energy and thermal simulation - Part 2	4
Energy and thermal simulation - Part 3	4
Energy and thermal simulation - Part 4	4
Daylighting simulation - Part 1	4
Daylighting simulation - Part 2	4
Computational fluid dynamic simulation - Part 1	4
Computational fluid dynamic simulation - Part 2	4
Computational fluid dynamic simulation - Part 3	4
Computational fluid dynamic simulation - Part 4	4
Project development - Part 1	4
Project development - Part 2	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	15	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Computer-based Assgs./ Exams) • Mid-Term Exam (Computer-Based Exam) • Final Exam (Computer-Based Exam)			
Examination Requirements	Computer Lab.			

8. Reading list

Peters, T., & Peters, B. (2018). Computing the Environment. John Wiley & Sons, Incorporated.
Amani, N. (2021). Building Energy Management with ECOTECT Analysis. Lap Lambert.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Resilient Urban Design**
Code	ARC 4411
Prerequisite Course(s)	ARC 4500 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to Cities and Climate Change	2
Climate Change Impacts on Cities	2
Urban Strategies for Climate Change: Mitigation	2
Urban Heat Island Mitigation Through Public Space Design	2
Designing Walkable Spaces for Climate and Social Resilience	2
Urban Strategies for Climate Change: Adaptation	2
Designing Flood-Resilient Streetscapes	2
Designing Stormwater-Resilient Urban Parks	2
Net-Zero Neighborhood Design	2
Circular Economy in Urban Design	2
Urban Design for Resource-Efficient Neighborhoods	2
Temporary Urban Interventions for Resilience	2
Urban Design for Pandemic-Ready Cities	2
Smart Urban Design for Resilience	2
Research Presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Dodman, D. (2012). Adapting Cities to Climate Change. Routledge.
Allam, Z., Jones, D., & Thondoo, M. (2020). Cities and climate change. Palgrave MacMillan.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Sustainable Landscape Architecture**
Code	ARC 4412
Prerequisite Course(s)	ARC 4500 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 2 Hrs Self-study: 2 Hrs Total: 4 Hrs
ECTS Credits	2
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to sustainable landscape	2
Human health and well-being for sustainable sites	2
The sun and the sustainable landscape	2
The wind and energy conservation	2
Water issues and conservation	2
Predesign: Site selection, assessment and planning	2
Sustainable landscape design: Water	2
Sustainable landscape design: Vegetation and Xeriscaping	2
Sustainable landscape design: Soils	2
Sustainable landscape design: Materials and resources	2
Operations, maintenance, monitoring and stewardship	2
Green roofs and vertical landscapes	2
Case study analysis Part 1	2
Case study analysis Part 2	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Calkins, M. (2013). The sustainable sites handbook. Wiley.
Marietta Loehrlein, M. (2020). Sustainable Landscaping: Principles and Practices. CRC press.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Human and Urban Environment**
Code	ARC 4413
Prerequisite Course(s)	ARC 4500 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
The Distinguished Vision of Islam Towards the Environment	2
Urbanization and Land Use: Urban Sprawl, Deforestation and Land Degradation, and Land Use Conflicts	2
Environmental Degradation: Air and Water Pollution	2
Environmental Degradation: Waste Generation and Management	2
Climate Change Impacts: Urban Heat Island Effect and Carbon Emissions	2
Biodiversity and Habitat Loss	2
Resource Consumption	2
Public Health and Well-Being: Noise and Light Pollution	2
Technological and Energy Impacts	2
Innovations to Mitigate Impacts: Biophilic Urban Design	2
Innovations to Mitigate Impacts: Vertical Gardens	2
Innovations to Mitigate Impacts: Net-Zero Carbon Urban Projects	2
Innovations to Mitigate Impacts: Circular Economy in Cities	2
Innovations to Mitigate Impacts: Human-Centric Cities	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Smith, K. (2013). Environmental hazards. Routledge.
Agarwal, P. (2021). Environment and We in 21st Century. Scholars World.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Architecture)
Module Name	**Urban Wayfinding**
Code	ARC 4414
Prerequisite Course(s)	ARC 4500 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Definitions of wayfinding and Wayfinders	2
Movement perceptual system	2
Cognitive map	2
Wayfinding elements (Design, operational and behavioral systems) - Part 1	2
Wayfinding elements (Design, operational and behavioral systems) - Part 2	2
Auditory information needed for wayfinding process	2
Optical information needed for wayfinding process	2
Urban information needed for wayfinding process	2
Urban design foundations for good wayfinding - Part 1	2
Urban design foundations for good wayfinding - Part 2	2
Urban design foundations for good wayfinding - Part 3	2
Case study analysis- Part 1	2
Case study analysis- Part 2	2
Research development	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Passini, R. (1992). Wayfinding in architecture. Van Nostrand Reinhold.
Gibson, D., & Pullman, C. (2009). The wayfinding handbook. Princeton Architectural Press.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Specifications of

Urban Design

Courses

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**New Areas Urban Design Studio**
Code	ARC 4601
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
	ARC 3403 - Introduction to Urban Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	10 Hrs	Self-study:	12 Hrs	Total: 22 Hrs
ECTS Credits	11				
Credit Hours	5 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio course focuses on the planning and design of large-scale urban projects such as international exhibitions (EXPO), entertainment parks, airport cities, financial centers, heritage tourism centers, and sustainable tourism hubs. Students start by identifying project objectives and problems, studying similar examples, and conducting site analyses. They will develop and evaluate urban design alternatives, selecting and refining the most suitable option to create a comprehensive final layout.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the project and a general review about neighborhood	10
Data collection to understand problems	10
Analyzing the collected data to reach the main objectives	10
Developing alternatives - Part 1	10
Developing alternatives - Part 2	10
Evaluating the alternatives based on assessment criteria	10
Development of various aspects of the selected alternative - Part 1	10
Development of various aspects of the selected alternative - Part 2	10
Development of various aspects of the selected alternative - Part 3	10
Development of various aspects of the selected alternative - Part 4	10
Detailed urban design - Part 1	10
Detailed urban design - Part 2	10
Project development - Part 1	10
Project development - Part 2	10
Project development - Part 3	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research, Eval. of Project(s)) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Watson, D. (2011). Time-Saver Standards for Urban Design. McGraw-Hill.
Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.
Krier, R. (1993). Urban Space. Rizzoli.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Landscape Design Studio 1**
Code	ARC 4602
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio ARC 2402 - Principles of Landscape Architecture
Semester Level	Year: 4 Level: 7
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	6 Hrs	Self-study:	6 Hrs	Total: 12 Hrs
ECTS Credits	6				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course emphasizes the development of large-scale urban landscape projects, where students apply their skills to create both functional and innovative designs. The studio covers the execution of hardscape and softscape elements across different design phases. Additionally, students will learn to write detailed landscape specifications and calculate quantities, gaining a foundation in professional project documentation essential for the effective implementation of their designs.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the studio	6
Existing condition analysis	6
Layout and materials plan - Part 1	6
Layout and materials plan - Part 2	6
Grading and drainage plan	6
Road profiles and sections	6
Plan enlargements	6
Site sections	6
Landscape details	6
Written landscape specifications - Part 1	6
Written landscape specifications - Part 2	6
Written landscape specifications - Part 3	6
Project development - Part 1	6
Project development - Part 2	6
Project development - Part 3	6

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	90	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Project(s), Eval. of Report , Eval. of Research) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Dines, N., & Brown, K. (2023). Time-saver standards for landscape architecture. McGraw-Hill.
Allen, E., Ryan, T., & Rand, P. (2013). Detailing for landscape architects. Wiley.
Shehata, A. (2021). Design of Outdoor Spaces. Universal Publishing Ltd.
Littlewood, M. (2012). Landscape Detailing Volume 1,2 and 3. Taylor and Francis.
Dines, N., & Brown, D. (1999). Time-saver standards: site construction details manual. Mcgraw-Hill.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Urban Information Systems**
Code	ARC 4603
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Wajdy Sadagh A. Qattan
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study:	3 Hrs	Total: 7 Hrs
ECTS Credits	4				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course introduces the fundamental principles of Geographic Information Systems (GIS), emphasizing its application in urban design. Students will gain an understanding of GIS technology and its practical uses, including data entry, editing, and simple analysis. The course also covers data visualization techniques and map layout preparation, providing both theoretical knowledge and hands-on experience to support urban design tasks in the profession.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
GIS software interface	4
Geospatial data, Georeferenced and Geo Databases	4
Data entry in GIS - Vector Data	4
Data entry in GIS - Raster Data	4
Editing with aerial photo	4
Editing geographic data - Part 1	4
Editing geographic data - Part 2	4
Editing geographic data - Part 3	4
Visualization data and Symbology - Part 1	4
Visualization data and Symbology - Part 2	4
Visualization data and Symbology - Part 3	4
Visualization data and Symbology - Part 3	4
Preparation of map layouts	4
Project development - Part 1	4
Project development - Part 2	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	15	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Computer-based Assgs./ Exams) • Mid-Term Exam (Computer-Based Exam) • Final Exam (Computer-Based Exam)			
Examination Requirements	Computer Lab.			

8. Reading list

Gorr, W. L., & Kurland, K. S. (2023). GIS Tutorial for ArcGIS Pro 3. 1. ESRI Press.

ESRI. (2025). A to Z GIS: An Illustrated Dictionary of Geographic Information Systems. Esri Press.

Sutton, T. (2024). A Gentle Introduction to GIS. QGIS Project.

McHaffie, P., Hwang, S., & Follett, C. (2023). GIS: An Introduction to Mapping Technologies. CRC Press.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

جامعة أم القرى
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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Urban design methodologies and techniques**
Code	ARC 4604
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course explores urban design methodologies and techniques. In addition, it illustrates theories of urban design, focusing on how urban physical form interacts with economic, cultural, social, aesthetic, and natural forces. The course emphasizes a critical analysis of how these theories influence the design and development of public spaces in urban environments.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Definitions	2
Urban Design Process	2
The Urban Programme	2
Survey Techniques	2
Urban Design Analysis 1	2
Urban Design Analysis 2	2
Generating Alternatives 1	2
Generating Alternatives 2	2
Project Evaluation	2
Presentation Techniques 1	2
Presentation Techniques 2	2
Introduction to Project Management	2
The Image of the City (Kevin Lynch)	2
The Theory of Good City Form (Kevin Lynch)	2
Human-Centered Urbanism (Jan Gehl)	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Cuesta, R., et al. (2012). Urban Design: Method and Techniques. Routledge,
Lynch, K. (1960). The Image of the City. London, The MIT Press.
Lynch, Kevin. (1981). Good City Form. Cambridge, Ma, Mit Press.
Gehl, Jan. (2012). Life between Buildings: Using Public Space. Washington, DC, Island Press.
Gehl, Jan. (2010). Cities for People. Washington, Dc, Island Press.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Existing Areas Urban Design Studio**
Code	ARC 4607
Prerequisite Course(s)	ARC 4601 - New Areas Urban Design Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 10 Hrs Self-study: 12 Hrs Total: 22 Hrs
ECTS Credits	11
Credit Hours	5 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This studio course centers on the redevelopment of existing urban areas, including historic districts, city entrances, waterfronts, and city centers. Students will begin by defining project objectives and challenges, reviewing comparable projects, and conducting site analyses. They will then develop and assess urban design alternatives, selecting and refining the most effective solutions to produce a detailed final layout aimed at revitalizing and enhancing the chosen urban area.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the project	10
Data collection to understand existing problems	10
Analyzing the collected data to reach the main objectives	10
Developing alternatives - Part 1	10
Developing alternatives - Part 2	10
Evaluating the alternatives based on assessment criteria	10
Development of various aspects of the selected alternative - Part 1	10
Development of various aspects of the selected alternative - Part 2	10
Development of various aspects of the selected alternative - Part 3	10
Development of various aspects of the selected alternative - Part 4	10
Detailed urban design - Partr 1	10
Detailed urban design - Partr 2	10
Project Development - Part 1	10
Project Development - Part 2	10
Project Development - Part 3	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research, Eval. of Project(s)) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Watson, D. (2011). Time-Saver Standards for Urban Design. McGraw-Hill.
Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.
Krier, R. (1993). Urban Space. Rizzoli.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Landscape Design Studio 2**
Code	ARC 4608
Prerequisite Course(s)	ARC 4602 - Landscape Design Studio 1
Semester Level	Year: 4 Level: 8
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	6 Hrs	Self-study:	6 Hrs	Total: 12 Hrs
ECTS Credits	6				
Credit Hours	3	Cr. Hrs			
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course aims to equip students with a comprehensive understanding of how to achieve a sustainable landscape. Students will learn to make design decisions that account for user needs and environmental impacts. They will be encouraged to create innovative concepts and forms that support sustainability. The course will also focus on utilizing diverse strategies to ensure a sustainable landscape while analyzing the factors that shape and influence it. Students will effectively apply digital tools throughout the design process and actively contribute to addressing sustainability challenges in landscape design.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the studio	6
Existing condition analysis	6
Initial layout	6
Water management treatments	6
Soil and erosion control plan	6
Vegetation and planting strategies	6
Sustainable materials plan	6
Energy-efficient design details	6
Waste management and recycling plan	6
Human-centric design details	6
Habitat creation and biodiversity details	6
Project development - Part 1	6
Project development - Part 2	6
Project development - Part 3	6
Project development - Part 4	6

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	90	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research, Eval. of Project(s)) • Mid-Term Exam (Drawing Exam) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Calkins, M. (2013). The sustainable sites handbook. Wiley.
Sorvig, K., & Thompson, J. (2018). Sustainable Landscape Construction. Island Press.
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.
Marietta Loehrlein, M. (2020). Sustainable Landscaping: Principles and Practices. CRC press.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Integrated Urban Design Studio 1**
Code	ARC 4609
Prerequisite Course(s)	ARC 4601 - New Areas Urban Design Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study:	6 Hrs	Total: 10 Hrs
ECTS Credits	5				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio serves as an introduction to the "Integrated Urban Design Studio 2", guiding students in selecting a project title that aligns with their design approach. The course enables students to choose and analyze the appropriate site, create a detailed space program, and define planning and design standards for the selected project. Moreover, students will learn to develop a project methodology by analyzing similar local, regional, and international projects. A comprehensive and well-written report on the cited studies and the main design concept are required as the primary deliverables for this course

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Representation techniques of urban design	4
Selecting the graduation project	4
Analyses of previous similar projects - Part 1	4
Analyses of previous similar projects - Part 2	4
Analyses of previous similar projects - Part 3	4
Specifying and selecting the appropriate site	4
Identify the relevant laws, rules and legislations	4
Define feasible urban design problems	4
Collect information to understand the selected problems - Part 1	4
Collect information to understand the selected problems - Part 2	4
Analyzing the collected data to reach the main objectives	4
Developing three scenarios or concepts - Part 1	4
Developing three scenarios or concepts - Part 2	4
Developing three scenarios or concepts - Part 3	4
Evaluating the concepts based on assessment criteria	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	60	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Report , Eval. of Project(s)) • Mid-Term Exam (Eval. of Report) • Final Submission of the Project and Report			
Examination Requirements	Equipped Studio			

8. Reading list

Watson, D. (2011). Time-Saver Standards for Urban Design. McGraw-Hill.
Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.
Friedman, A. (2022). Designing Innovative Sustainable Neighborhoods. Routledge.
Friedman, A. (2020). Fundamentals of sustainable urban design. Springer.
Friedman, A. (2014). Fundamentals of sustainable neighbourhoods. Springer.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Urban Environmental Control**
Code	ARC 4610
Prerequisite Course(s)	ARC 4601 - New Areas Urban Design Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course explores the critical role of environmental comfort in urban design, focusing on creating successful public spaces. It examines how factors such as sunlight, shade, temperature, humidity, precipitation, wind, and noise affect the usability and experience of urban environments. This course will analyze these elements to understand their impact on comfort and design effective urban spaces that enhance public well-being and satisfaction.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
The microclimate	2
Introduction	2
Urban design in different climates: Hot, and dry and hot regions	2
Urban design in different climates: humid regions	2
Thermal comfort in outdoor environments	2
Solar radiation: Designing for sun and shade - Part 1	2
Solar radiation: Designing for sun and shade - Part 2	2
Humidity and precipitation	2
Air movement - The wind environment	2
Natural lighting	2
Noise level	2
Bioclimatic design at the site planning scale	2
Urban environmental control: Case study 1	2
Urban environmental control: Case study 2	2
Urban environmental control: Case study 3	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.
Watson, D. (2011). Time-Saver Standards for Urban Design. McGraw-Hill.
Lau, K., Tan, Z., & Ren, C. (2021). Outdoor thermal comfort in urban environment. Spriger.
ASCE. (2004). Outdoor human comfort and its assessment.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Sustainable Urban Design**
Code	ARC 4611
Prerequisite Course(s)	ARC 4601 - New Areas Urban Design Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course explores the principles and practices of sustainable urban design, focusing on creating environmentally responsible and resilient urban environments. Students will learn to integrate green infrastructure, energy-efficient systems, and sustainable resources into urban planning. The course equips students with the skills needed to design urban areas that balance ecological health, economic viability, and community well-being, preparing them to contribute to the development of sustainable and vibrant cities.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to sustainability and key sustainable urban design outcomes	2
Energy use & greenhouse gas, part 1	2
Energy use & greenhouse gas, part 2	2
Energy use & greenhouse gas, part 3	2
Water, part 1	2
Water, part 2	2
Ecology & habitat, part 1	2
Ecology & habitat, part 2	2
Energy use & production, part 1	2
Energy use & production, part 2	2
Equity & health	2
Case study analysis - Part 1	2
Case study analysis - Part 2	2
Case study analysis - Part 3	2
Case study analysis - Part 4	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Larco, N, and Kaarin K. (2024). The Sustainable Urban Design Handbook. Routledge.
Friedman, A. (2020). Fundamentals of sustainable urban design. Springer.
Friedman, A. (2022). Designing Innovative Sustainable Neighborhoods. Routledge.
U.S. Green Building Council. (2013). LEED Reference Guide for Green Neighborhood Development.
Friedman, A. (2014). Fundamentals of sustainable neighbourhoods. Springer.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Integrated Urban Design Studio 2**
Code	ARC 4614
Prerequisite Course(s)	ARC 4613 - Cooperative Training
	ARC 4609 - Integrated Urban Design Studio 1
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	10 Hrs	Self-study:	13 Hrs	Total: 23 Hrs
ECTS Credits	12				
Credit Hours	5 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio serves as the final graduation project where students are expected to apply the skills and knowledge gained throughout their academic journey. Each student will independently work on an urban project approved in the previous semester through the "Graduation Project Research" course. Students will develop and assess urban design alternatives, selecting and refining the most effective solutions to produce a detailed final layout aimed at revitalizing and enhancing the chosen urban area.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Development of various aspects of the selected alternative - Part 1	10
Development of various aspects of the selected alternative - Part 2	10
Development of various aspects of the selected alternative - Part 3	10
Development of various aspects of the selected alternative - Part 4	10
Development of various aspects of the selected alternative - Part 5	10
Development of various aspects of the selected alternative - Part 6	10
Development of various aspects of the selected alternative - Part 7	10
Development of various aspects of the selected alternative - Part 8	10
Preparing an implementation framework	10
Defining appropriate policies, actions and legal instruments- Part 1	10
Defining appropriate policies, actions and legal instruments- Part 2	10
Detailed urban design - Partr 2	10
Project Development - Part 1	10
Project Development - Part 2	10
Project Development - Part 3	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Project(s), Assignments & Tasks) • Mid-Term Exam (Eval. of One of the Project Stages) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Watson, D. (2011). Time-Saver Standards for Urban Design. McGraw-Hill.
Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.
Friedman, A. (2022). Designing Innovative Sustainable Neighborhoods. Routledge.
Friedman, A. (2020). Fundamentals of sustainable urban design. Springer.
Friedman, A. (2014). Fundamentals of sustainable neighbourhoods. Springer.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

جامعة أم القرى
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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Conservation of Heritage Sites**
Code	ARC 4615
Prerequisite Course(s)	ARC 4607 - Existing Areas Urban Design Studio
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course highlights the significance of urban heritage and provides a comprehensive overview of identification, classification, and documentation criteria for conservation. Students will learn to assess urban and environmental threats such as neglect, maintenance issues, and deterioration. The course covers principles and levels of conservation, including various restoration techniques, equipping students with the knowledge to preserve and restore valuable urban heritage effectively.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Definition and importance of conservation of urban heritage	2
Kinds, patterns and levels of urban heritage	2
Preservation techniques	2
Restoration and rehabilitation	2
Adaptive reuse	2
Conservation ethics: Integrity and authenticity	2
Conservation process: Identifying urban heritage	2
Conservation process: Implementation - Part 1	2
Conservation process: Implementation - Part 2	2
Conservation process: Evaluation	2
International experiences of protecting urban heritage	2
Regional experiences of protecting urban heritage - Part 1	2
Regional experiences of protecting urban heritage - Part 2	2
National experiences of protecting urban heritage in Saudi Arabia - Part 1	2
National experiences of protecting urban heritage in Saudi Arabia - Part 2	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

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.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Professional Practice of Urban Design**
Code	ARC 4616
Prerequisite Course(s)	ARC 4613 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Mohammad Abdullah Almahdi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course provides a comprehensive overview of the principles of professional urban practice in Saudi Arabia. It covers ethical standards, the Code of Conduct, and the legal frameworks governing the profession. Additionally, the course explores the planners' role and responsibilities, as well as essential professional skills such as resume preparation, portfolio development, interview techniques, and hiring processes. Students will be well-prepared for a responsible, competent, and effective career in urban design.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
An introduction to urban design profession	2
History of practicing urban design globally and in the Kingdom	2
The professional role of the urban designer	2
Competencies of an urban designer	2
Ethics in urban design profession	2
Regulations and rules that govern the professional practice	2
Practicing the urban design profession in Saudi Arabia	2
Saudi council of engineers: Professional accreditation	2
how urban design firms are formed and organized	2
Principles for administering an urban design office	2
Planning documents preparation	2
Interviewing skills	2
Writing of curriculum vitae (CV)	2
Portfolio preparation techniques	2
Review of students' Curricula Vitae and Portfolios	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Presentation, Eval. of Portfolio, Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Saudi building code National committee (2018). The Saudi building code general 201.
Bayer, M. & Frank, N. (2010). Becoming an Urban Planner. Wiley.
Unwin, R. (2020). Town design in practice. [publisher not identified].
Piven, P. (2008). Architect's essentials of starting, assessing, and transitioning a design firm. Wiley.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Urban Mobility**
Code	ARC 4617
Prerequisite Course(s)	ARC 4607 - Existing Areas Urban Design Studio
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 2 Hrs Self-study: 3 Hrs Total: 5 Hrs
ECTS Credits	3
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This course examines the intricate relationship between transportation, land use, and urban form, exploring how these factors influence each other. Students will analyze how urban accessibility affects human development and learn about strategies to enhance accessibility and promote low-carbon mobility. The course also evaluates the conditions that contribute to livable neighborhoods and the effectiveness of green transportation policies in urban environments, equipping students with insights into sustainable urban design.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to urban mobility	2
Urban mobility challenges	2
The state of urban passenger transport	2
Metro, Light Rail and BRT	2
Urban goods transport	2
Mobility and urban form - Part 1	2
Mobility and urban form - Part 2	2
Equitable access to urban mobility	2
Urban mobility and the environment	2
Sustainable urban mobility - Part 1	2
Sustainable urban mobility - Part 2	2
Smart urban mobility innovations - Part 1	2
Smart urban mobility innovations - Part 2	2
Case study 1	2
Case study 2	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

UN-habitat. (2013). Planning and Design for Sustainable Urban Mobility. Routledge.
Jensen, Ole B. (2022). Handbook of Urban Mobilities. Abingdon, Oxon ; New York, Ny, Routledge.
Coxon, S., Napper, R., & Richardson, M. (2018). Urban mobility design. Elsevier.
Whitelegg, J. (2016). Mobility. Createspace independent Publishing platform.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Streetscape**
Code	ARC 4618
Prerequisite Course(s)	ARC 4607 - Existing Areas Urban Design Studio
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course explores the design and development of streetscapes as essential elements of urban environments. Students will examine the role of streets in shaping public spaces, focusing on the integration of pedestrian pathways, landscaping, street furniture, and transportation infrastructure. The course emphasizes creating functional, aesthetically pleasing, and sustainable streetscapes that enhance urban life, improve mobility, and contribute to social interaction and environmental health in cities.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Street design concepts	2
Street hierarchies	2
Urban infrastructure	2
Infrastructure technologies	2
Urban ppen spaces	2
Urban qualities	2
Urban furniture	2
Bus stops and terminals	2
Material properties	2
Signage and environmental quality	2
Pedestrian circulation	2
Bicycle circulation	2
Vehicular circulation and traffic calming	2
Case study 1	2
Case study 2	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

National Association of City Transportation Officials. (2013). Urban Street Design Guide. Washington, Island Press.
Moughtin, C. (2007). Urban design: street and square. Routledge.
Department of Transportation. (2013). Street Design Manual. N.Y. City .
Dines, N., & Brown, K. (2023). Time-Saver Standards for Landscape Architecture. McGraw-Hill.
Burton, E., and Lynne M. (2006). Inclusive Urban Design: Streets for Life. Routledge.
مركز تطوير التصميم والتخطيط الحضري للمدن السعوديه. (2019). دليل تصميم البيئة العمرانية.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Graduation Project**
Code	ARC 4619
Prerequisite Course(s)	ARC 4613 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 3 Hrs Self-study: 14 Hrs Total: 17 Hrs
ECTS Credits	9
Credit Hours	3 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

This capstone course addresses urban design challenges and solutions specific to Makkah, Madinah, and the holy sites, focusing on enhancing the visual and functional aspects of these sacred spaces. Through individual research, students will apply urban design principles to address real-world issues in these significant areas. Topics include, for instance, approaches to improve open spaces, pilgrims and Umrah performers' behavior, pedestrian accessibility, and the application of solar energy solutions in the holy sites.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the course	3
Research title selection	3
Analyze relevant research papers - Part 1	3
Analyze relevant research papers - Part 2	3
Problem statement and methodology	3
Literature review - Part 1	3
Literature review - Part 2	3
Literature review - Part 3	3
Applying the methodology - part 1	3
Applying the methodology - part 2	3
Applying the methodology - part 3	3
The conclusion and recommendations	3
Research refining - Part 1	3
Research refining - Part 2	3
Research refining - Part 3	3

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	0	Training	0
	Practical	0	Research Project	45	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research) • Mid-Term Exam (Eval. of Research) • Final Capstone Submission			
Examination Requirements	Equipped Classroom			

8. Reading list

معهد خادم الحرمين الشريفين لأبحاث الحج والعمرة. الملتقيات العلمية لأبحاث الحج والعمرة والزيارة.
Uqu.edu.sa. (2022). from https://uqu.edu.sa/hajj/107535.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Specifications of

Urban Design

Elective Courses

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Temporary Urbanism**
Code	ARC 4621
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction: What is tactical and temporary urbanism?	2
Concepts of time and location	2
Inspirations and antecedents of tactical urbanism	2
Applying tactical urbanism	2
Forms of temporary urbanism - part 1	2
Forms of temporary urbanism - part 2	2
Principals of temporary and tactical urbanism	2
Benefits and problems	2
Applications of temporary urbanism- Part 1	2
Applications of temporary urbanism- Part 2	2
Applications of temporary urbanism- Part 3	2
Applications of temporary urbanism- Part 4	2
Al Mashaaer: Case study analysis - Part 1	2
Al Mashaaer: Case study analysis - Part 2	2
Research development	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Lydon, M., & Garcia, A. (2015). Tactical Urbanism. Island Press.
Stevens, Q., and Dovey, K. (2023). Temporary and Tactical Urbanism. Taylor & Francis
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Humanizing the Cities**
Code	ARC 4622
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Quality of life in urban environments	2
The human dimension in urban design process	2
Walkability and car-free city development	2
Humanizing cities: Street scape	2
Humanizing cities: Plazas	2
Humanizing cities: Mixed land use	2
Humanizing cities: Tactical urbanism	2
Humanizing cities: Human scale	2
Inclusivity and equity in urban spaces	2
Humanizing cities: Community participation	2
Case study analysis - Part 1	2
Case study analysis - Part 2	2
Research refining - Part 1	2
Research refining - Part 2	2
Research refining - Part 3	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Doheim, R., Farag, A., & Kamel, E. (2020). Humanizing cities through car-free city development and transformation. Engineeri
Watson, D. (2011). Time-Saver Standards for Urban Design. McGraw-Hill.
Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Floating Cities**
Code	ARC 4623
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Historical Concepts of Floating Communities	2
The Concept of Floating Cities	2
Addressing Climate Change with Floating Cities	2
Structural Engineering of Floating Cities	2
Environmental Impact Assessment of Floating Cities	2
Water Management Systems for Floating Cities	2
Energy Production and Distribution for Floating Cities	2
Waste Management and Recycling in Floating Cities	2
Transportation and Infrastructure for Floating Cities	2
Economic and Community Aspects of Floating Cities	2
Technological Advancements in Floating City Design	2
Contemporary Floating City Concepts 1	2
Contemporary Floating City Concepts 2	2
Imaginary Design of a Floating City 1	2
Imaginary Design of a Floating City 2	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Łukasz Piątek, et al. (2021).WCFS2020. Springer Nature, 5 Aug.
Tomoki Ikoma. (2023). Proceedings of the Third World Conference on Floating Solutions. Springer Nature.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**City Branding**
Code	ARC 4624
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
City Branding Definition and Challenges	2
Goals of City Branding: Economic Development and Tourism	2
Goals of City Branding: Global Competitiveness	2
Theoretical Perspectives on City Branding	2
City Branding Strategies: Cultural Branding	2
City Branding Strategies: Event-Based Branding	2
City Branding Strategies: Sustainability Branding	2
City Branding Strategies: Technology and Innovation	2
City Branding Processes: Place-Based Marketing	2
Measuring the Effectiveness of City Branding	2
Case Study 1	2
Case Study 2	2
Research refining - Part 1	2
Research refining - Part 2	2
Research refining - Part 3	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Dinnie, K. (2016). City Branding : Theory and Cases. Basingstoke, Palgrave Macmillan.
Deffner, A., and Mihalis K. (2024). City Branding.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Advanced studies in Landscape Architecture**
Code	ARC 4631
Prerequisite Course(s)	ARC 4601 - New Areas Urban Design Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Site analysis and assessment	2
Techniques: Site grading	2
Techniques: Stormwater management	2
Site utilities: Water supply	2
Site utilities: Sewage disposal	2
Site utilities: Recreational water bodies	2
Site utilities: Irrigation	2
Special conditions: Interior landscapes	2
Special conditions: Disturbed landscapes	2
Special conditions: Sound control	2
Special conditions: Roof and deck landscapes	2
Energy and resource conservation	2
Outdoor accessibility	2
Natural hazards: Land subsidence and expansive soils	2
Research development	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Dines, N., & Brown, K. (2023). Time-saver standards for landscape architecture. McGraw-Hill.

Shehata, A. (2021). Design of Outdoor Spaces. Universal Publishing Ltd.

Allen, E., Ryan, T., & Rand, P. (2013). Detailing for landscape architects. Wiley.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Cities Centers**
Code	ARC 4632
Prerequisite Course(s)	ARC 4601 - New Areas Urban Design Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction	2
Main problems of city centers - Part 1	2
Main problems of city centers - Part 2	2
Main elements of city centers	2
Patterns of city centers	2
Theoretical and conceptual approaches used in planning city centers - Part 1	2
Theoretical and conceptual approaches used in planning city centers - Part 2	2
Toward safer city centers	2
Strategies for solving problems of city centers - Part 1	2
Strategies for solving problems of city centers - Part 2	2
City centers in Saudi Arabia	2
Main problems of city centers in Saudi Arabia	2
Case study analysis - Part 1	2
Case study analysis - Part 2	2
Research development	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

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.
Alexander, I. (1975). The City Centre: Patterns and Problems. Intl Specialized Book Services.
Oc, T. (1997). Safer city centres. P. Chapman Publ.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Terminals Planning and Design**
Code	ARC 4633
Prerequisite Course(s)	ARC 4601 - New Areas Urban Design Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction	2
Transit oriented development - Part 1	2
Transit oriented development - Part 2	2
Seaports terminals	2
Railways terminals	2
Airports - Part 1	2
Airports - Part 2	2
Airports - Part 3	2
Bus terminals	2
Parking lots	2
Examining and improving terminal operations - Part 1	2
Examining and improving terminal operations - Part 2	2
Terminal operations through modeling - Part 1	2
Terminal operations through modeling - Part 2	2
Research development	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Blow, C. (2012). Transport Terminals and Modal Interchanges. Routledge.
Robert, S. (2024). The Evolution of Airport Design. Taylor & Francis.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Selected Topics in Urban Design**
Code	ARC 4634
Prerequisite Course(s)	ARC 4601 - New Areas Urban Design Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 2 Hrs Self-study: 2 Hrs Total: 4 Hrs
ECTS Credits	2
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the course	2
Research title selection	2
Analyze relevant research papers - Part 1	2
Analyze relevant research papers - Part 2	2
Problem statement and methodology	2
Literature review - Part 1	2
Literature review - Part 2	2
Literature review - Part 3	2
Applying the methodology - part 1	2
Applying the methodology - part 2	2
Applying the methodology - part 3	2
The conclusion and recommendations	2
Research refining - Part 1	2
Research refining - Part 2	2
Research refining - Part 3	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

References vary on yearly basis

Coaffee J., and Peter L. (2017). Urban Resilience. Bloomsbury Publishing

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Fundamentals of Real Estate Development**
Code	ARC 4641
Prerequisite Course(s)	ARC 4613 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction	2
Real estate in context	2
The diversity of real estate	2
Real estate as an asset	2
Real estate as a resource	2
Real estate people	2
The basics of real estate law	2
The landlord and tenant relationship	2
Interests in real estate	2
Real estate transactions	2
Real estate valuation concepts	2
Real estate valuation methods	2
Effective real estate management	2
Contemporary issues in real estate	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation, Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Wilcox, J., and Forsyth, J. (2022). Real Estate: The Basics. Routledge

The first Built Environment Development Symposium: Real Estate and Sustainable Housing. (2012). University of Dammam.
Brueggeman, W. and Fisher, J. (2021). Real Estate Finance and Investments. McGraw-Hill
Gaddy, Jr. and Hart, R. (2019). Real estate fundamentals. DF Institute.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Urban Project Management**
Code	ARC 4642
Prerequisite Course(s)	ARC 4613 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 2 Hrs Self-study: 2 Hrs Total: 4 Hrs
ECTS Credits	2
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to project management body of knowledge (PMBOK)	2
Initiating process: Define a project and obtain authorization	2
Planning process: Establish the project scope and objectives	2
Executing: Complete the work defined to satisfy project specifications	2
Monitoring and controlling processes	2
Closing process	2
knowledge area: Integration management	2
knowledge area: Scope management	2
knowledge area: Schedule management	2
knowledge area: Cost management	2
knowledge area: Quality management	2
knowledge area: Communications management	2
knowledge area: Resource and risk management	2
knowledge area: Procurement and Stakeholder management	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation, Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Kloppenborg, T. (2023). Contemporary Project Management. South-Western.

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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Crowd Management**
Code	ARC 4643
Prerequisite Course(s)	ARC 4613 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to crowd science and its importance	2
Crowds: Definitions, concepts and types	2
Crowd disasters: Causes and triggers	2
The stages of crowd formation	2
Space capacity and crowds	2
Perceived crowding	2
Crowd management strategies - Part 1	2
Crowd management strategies - Part 2	2
International examples analysis - Part 1	2
International examples analysis - Part 2	2
Crowd management in the event of Hajj - Part 1	2
Crowd management in the event of Hajj - Part 2	2
Research refining - Part 1	2
Research refining - Part 2	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation, Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Still, G. (2019). Introduction to Crowd Science. CRC Press

Kemp, C. & Smith, P. (2010). Case Studies in Crowd Management. Entertainment Technology Press.

Marx, B. (2018). Crowd Management Made Easy. Independent Publishing Platform

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Design)
Module Name	**Multicriteria Assessment of Urban Development Projects**
Code	ARC 4644
Prerequisite Course(s)	ARC 4613 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Adnan Yehya Alshahrani
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction	2
Role of multicriteria impact assessment in planning project	2
Multicriteria impact assessment process	2
Environmental impact assessment considerations - Part 1	2
Environmental impact assessment considerations - Part 2	2
Environmental impact assessment considerations - Part 3	2
Social impact assessment considerations	2
Introduction to fiscal impact assessment considerations	2
Data collection and analysis for impact assessment	2
Methodologies in multicriteria impact assessment	2
Tools and technologies in multicriteria impact assessment	2
Case study analysis - Part 1	2
Case study analysis - Part 2	2
Research refining	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation, Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Nijkamp, P. et al. (2013). Multicriteria evaluation in physical planning. North-Holland.
Alexander, E., & Haughton, P. (2016). Evaluation in Planning. Taylor and Francis.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Specifications of

Urban Planning

Courses

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**New City Urban Planning Studio**
Code	ARC 4701
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
	ARC 3406 - Introduction to Urban Planning Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	10 Hrs	Self-study:	12 Hrs	Total: 22 Hrs
ECTS Credits	11				
Credit Hours	5 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio focuses on the planning of a new town. Students will carry out comprehensive demographic, economic, and environmental studies within the broader context. They will perform a detailed analysis of the given site, examining key factors that influence town planning. Based on their findings and exploration of planning alternatives, students will develop a strategic plan that includes land use, service distribution, and road network design, creating a sustainable and functional urban layout.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the project	10
Regional, environmental and socio-economic studies	10
Housing, services and urban structure studies	10
Integrative structure of specialty studies	10
Generating alternatives -Part 1	10
Generating alternatives -Part 2	10
Generating alternatives -Part 3	10
Evaluating the alternatives	10
Project development - Part 1	10
Project Development - Part 2	10
Project development - Part 3	10
Project development - Part 4	10
Project development - Part 5	10
Project development - Part 6	10
Project development - Part 7	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research, Eval. of Project(s)) • Mid-Term Exam (Eval. of One of the Project Stages) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Butler, K. (2012). Planning and Urban Design Standards. Wiley.

EL Wakil, S. (2006). Urban Planning: Principles, Basics and Applications.

Levy, J. (2016). Contemporary urban planning. Routledge.

Weber, R. & Randal, C. (2015). The oxford handbook of urban planning. 2015.

وزارة الشئون البلدية والقروية. (2016). المعايير التخطيطية للخدمات العامة الإقليمية والمحلية ومستوياتها المختلفة.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Housing Planning Studio 1**
Code	ARC 4702
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	6 Hrs	Self-study:	6 Hrs	Total: 12 Hrs
ECTS Credits	6				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio introduces students to new neighborhood planning, focusing on neighborhood layout, and residential unit design. Students will analyze site conditions, including visual and environmental studies, densities, and real estate values. The project involves developing the planning concept, suggesting the neighborhood layout, and designing functional, flexible, and environmentally responsive residential units. The project includes 2-4 clusters with a population range of 3,000 to 6,000, emphasizing socio-economic and environmental aspects.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the project and a general review about neighborhood	6
Data collection to understand problems	6
Analyzing the collected data to reach the main objectives	6
Developing alternatives - Part 1	6
Developing alternatives - Part 2	6
Evaluating the alternatives based on assessment criteria	6
Development of various aspects of the selected alternative - Part 1	6
Development of various aspects of the selected alternative - Part 2	6
Development of various aspects of the selected alternative - Part 3	6
Detailed urban design of the neighboring center	6
Project development - Part 1	6
Project development - Part 2	6
Project development - Part 3	6
Project development - Part 4	6
Project development - Part 5	6

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	90	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research, Eval. of Project(s)) • Mid-Term Exam (Eval. of One of the Project Stages) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Watson, D. (2011). Time-Saver Standards for Urban Design. McGraw-Hill.

Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.

Krier, R. (1993). Urban Space. Rizzoli.

Butler, K. (2012). Planning and Urban Design Standards. Wiley.

وزارة الشئون البلدية والقروية. (2016). المعايير التخطيطية للخدمات العامة الإقليمية والمحلية ومستوياتها المختلفة.

Towers, G. (2015). An introduction to urban housing design. Routledge.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Urban Planning Information Systems**
Code	ARC 4703
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Wajdy Sadagh A. Qattan
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study:	3 Hrs	Total: 7 Hrs
ECTS Credits	4				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course introduces the fundamental principles of Geographic Information Systems (GIS), emphasizing its application in urban planning. Students will gain an understanding of GIS technology and its practical uses, including data entry, editing, and simple analysis. The course also covers data visualization techniques and map layout preparation, providing both theoretical knowledge and hands-on experience to support planning tasks in the profession.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
GIS software interface	4
Geospatial data, Georeferenced and Geo Databases	4
Data entry in GIS - Vector Data	4
Data entry in GIS - Raster Data	4
Editing with aerial photo	4
Editing geographic data - Part 1	4
Editing geographic data - Part 2	4
Editing geographic data - Part 3	4
Visualization data and Symbology - Part 1	4
Visualization data and Symbology - Part 2	4
Visualization data and Symbology - Part 3	4
Visualization data and Symbology - Part 3	4
Preparation of map layouts	4
Project development	4
Project development	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	15	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Computer-based Assgs./ Exams) • Mid-Term Exam (Computer-Based Exam) • Final Exam (Computer-Based Exam)			
Examination Requirements	Computer Lab.			

8. Reading list

Gorr, W. L., & Kurland, K. S. (2023). GIS Tutorial for ArcGIS Pro 3. 1. ESRI Press.

ESRI. (2025). A to Z GIS: An Illustrated Dictionary of Geographic Information Systems. Esri Press.

Sutton, T. (2024). A Gentle Introduction to GIS. QGIS Project.

McHaffie, P., Hwang, S., & Follett, C. (2023). GIS: An Introduction to Mapping Technologies. CRC Press.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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UMM AL-QURA UNIVERSITY

Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Urban Planning Theories**
Code	ARC 4704
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course explores the major urban planning theories that emerged in the twentieth century and continues to influence contemporary planning practices. Students will engage with key theories such as Modernism, Garden City, Rational Planning, Advocacy Planning, and New Urbanism. The course also examines postmodern critiques and the impact of global trends on urban development. Through these frameworks, students will develop a deeper understanding of the evolution and future direction of urban planning.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Movements of urban planning: City Beautiful, Practical, Social movements	2
Garden city movement	2
The Linear City	2
The Social Movement in Urban Planning	2
The City of Tomorrow	2
Regional Planning Theory	2
Broadacre City	2
The Inflation of large Cities and Metropolis of Tomorrow	2
Neighborhood Planning Theory	2
Urban Renewal Theory	2
The Metabolism Movement	2
New Urbanism	2
Smart Growth and Sustainable Urbanism	2
Smart Cities	2
Resilient Cities and Climate Urbanism	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

عارف، ح. (1991). تخطيط وتنظيم المدن بين النظرية والتطبيق. جامعة الإسكندرية.

Hall, P. (2014). Cities of Tomorrow: An Intellectual History of Urban Planning and Design since 1880. Chichester Wiley Blackw

عفيفي، أ. (2000). نظريات في تخطيط المدن. هجر للطباعة والنشر.

Taylor, N. (1998). Urban Planning Theory since 1945. Calif. Sage.

Barlow, M. and Levy-Bencheton, C. (2018). Smart Cities, Smart Future: Showcasing Tomorrow. Hoboken.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Existing City Development Studio**
Code	ARC 4707
Prerequisite Course(s)	ARC 4701 - New City Urban Planning Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	10 Hrs	Self-study:	12 Hrs	Total: 22 Hrs
ECTS Credits	11				
Credit Hours	5 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio focuses on revitalizing and redeveloping small towns, particularly within Makkah province. Students will conduct in-depth demographic, economic, and environmental studies to understand the town's current status. Through SWOT analysis, students will establish a vision and objectives for the town's future. Based on these findings, they will develop a strategic plan addressing suggested land use, services, and road networks to promote sustainable revitalization.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the project	10
Data collection and analyzing	10
Developing alternatives - Part 1	10
Developing alternatives - Part 2	10
Developing alternatives - Part 3	10
Evaluating the alternatives based on assessment criteria	10
Development of various aspects of the selected alternative - Part 1	10
Development of various aspects of the selected alternative - Part 2	10
Development of various aspects of the selected alternative - Part 3	10
Development of various aspects of the selected alternative - Part 4	10
Project development - Part 1	10
Project development - Part 2	10
Project development - Part 3	10
Project development - Part 4	10
Project development - Part 5	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research, Eval. of Project(s)) • Mid-Term Exam (Eval. of One of the Project Stages) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Butler, K. (2012). Planning and Urban Design Standards. Wiley.

ELWakil, S. (2006). Urban Planning: Principles, Basics & Applications.

Levy, J. (2016). Contemporary urban planning. Routledge.

وزارة الشئون البلدية والقروية. (2016). المعايير التخطيطية للخدمات العامة الإقليمية والمحلية ومستوياتها المختلفة

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Housing Planning Studio 2**
Code	ARC 4708
Prerequisite Course(s)	ARC 4702 - Housing Planning Studio 1
Semester Level	Year: 4 Level: 8
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	6 Hrs	Self-study:	6 Hrs	Total: 12 Hrs
ECTS Credits	6				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio fosters both team and individual work while focusing on the development of housing within an existing urban context. The project begins with a comprehensive study of the current status, covering urban studies, economic activities, and demographic characteristics. The second phase involves a detailed site analysis, including environmental, visual studies and densities . In the third phase, students develop layout based on planning decisions and alternatives. In addition, they design residential units emphasizing functionality, flexibility, economic, and environmental aspects.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the project	6
Data collection and analyzing	6
Developing alternatives - Part 1	6
Developing alternatives - Part 2	6
Developing alternatives - Part 3	6
Evaluating the alternatives based on assessment criteria	6
Development of various aspects of the selected alternative - Part 1	6
Development of various aspects of the selected alternative - Part 2	6
Development of various aspects of the selected alternative - Part 3	6
Development of various aspects of the selected alternative - Part 4	6
Project development - Part 1	6
Project development - Part 2	6
Project development - Part 3	6
Project development - Part 4	6
Project development - Part 5	6

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	90	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research, Eval. of Project(s)) • Mid-Term Exam (Eval. of One of the Project Stages) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Watson, D. (2011). Time-Saver Standards for Urban Design. McGraw-Hill.
Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.
Krier, R. (1993). Urban Space. Rizzoli.
Butler, K. (2012). Planning and Urban Design Standards. Wiley.
وزارة الشئون البلدية والقروية. (2016). المعايير التخطيطية للخدمات العامة الإقليمية والمحلية ومستوياتها المختلفة

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Integrated Urban Planning Studio 1**
Code	ARC 4709
Prerequisite Course(s)	ARC 4701 - New City Urban Planning Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study: 6 Hrs	Total:	10 Hrs
ECTS Credits	5				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course introduces students to the process of selecting and developing their graduation project in urban planning. Students will choose a project title aligned with their approach. They will compare potential locations, select the most suitable site, and analyze it. The course emphasizes the study and analysis of past experiences and case studies to extract valuable lessons. Students will also gather the necessary data for their project and submit a comprehensive report on the analyzed studies.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Selecting the graduation project	4
Analyses of previous similar projects - Part 1	4
Analyses of previous similar projects - Part 2	4
Analyses of previous similar projects - Part 3	4
Specifying and selecting the appropriate site	4
Defining required statistics, laws, rules and legislations	4
Define feasible urban planning problems	4
Collect information to understand the selected problems - Part 1	4
Collect information to understand the selected problems - Part 2	4
Analyzing the collected data to reach the main objectives - Part 1	4
Analyzing the collected data to reach the main objectives - Part 2	4
Developing three scenarios or concepts - Part 1	4
Developing three scenarios or concepts - Part 2	4
Developing three scenarios or concepts - Part 3	4
Evaluating the concepts based on assessment criteria	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	60	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Report , Eval. of Project(s)) • Mid-Term Exam (Eval. of Report) • Final Submission of the Project and Report			
Examination Requirements	Equipped Studio			

8. Reading list

Butler, K. (2012). Planning and Urban Design Standards. Wiley.

وزارة الشئون البلدية والقروية. (2016). المعايير التخطيطية للخدمات العامة الإقليمية والمحلية ومستوياتها المختلفة.

Levy, J. (2016). Contemporary urban planning. Routledge.

Weber, R. & Randal, C. (2015). The oxford handbook of urban planning. 2015.

EL Wakil, S. (2006). Urban Planning: Principles, Basics & Applications.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Advanced Urban Information Systems**
Code	ARC 4710
Prerequisite Course(s)	ARC 4703 - Urban Planning Information Systems
Semester Level	Year: 4 Level: 8
Course Coordinator	Wajdy Sadagh A. Qattan
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	4 Hrs	Self-study:	3 Hrs	Total: 7 Hrs
ECTS Credits	4				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course builds on the foundational GIS knowledge acquired in previous courses, enhancing students' ability to apply GIS in urban and regional planning. It introduces Global Positioning Systems (GPS), advanced spatial analysis tools, and techniques for solving spatial problems and modeling urban phenomena. Students will explore network analysis, interpolation methods for estimating spatial data, and the basics of 3D GIS, focusing on their application in planning contexts.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Global Positioning System	4
Spatial analysis tools - Part 1	4
Spatial analysis tools - Part 2	4
Spatial analysis tools - Part 3	4
Spatial analysis tools - Part 4	4
Network analysis - Part 1	4
Network analysis - Part 2	4
Network analysis - Part 3	4
Network analysis - Part 4	4
An overview of the Interpolation toolset	4
3D GIS - Part 1	4
3D GIS - Part 2	4
3D GIS - Part 3	4
Project development - Part 1	4
Project development - Part 2	4

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	15	Studio	0	Training	0
	Practical	45	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Computer-based Assgs./ Exams) • Mid-Term Exam (Computer-Based Exam) • Final Exam (Computer-Based Exam)			
Examination Requirements	Computer Lab.			

8. Reading list

Gorr, W. L., & Kurland, K. S. (2023). GIS Tutorial for ArcGIS Pro 3. 1. ESRI Press.
ESRI. (2025). A to Z GIS: An Illustrated Dictionary of Geographic Information Systems. Esri Press.
Kalantari, M., Clemen, C., & Mojgan Jadidi. (2024). BIM and 3D GIS Integration for Digital Twins. CRC Press.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Sustainable Cities**
Code	ARC 4711
Prerequisite Course(s)	ARC 4701 - New City Urban Planning Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course explores the principles and strategies for designing and developing sustainable cities. Students will examine urban systems that promote environmental resilience, social equity, and economic viability. Key topics include green infrastructure, renewable energy, sustainable transportation, water and waste management, and urban biodiversity. Through case studies, students will learn how to create urban environments that balance ecological health with the needs of growing populations.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to climate change	2
Quality of life	2
Sustainable city: Green buildings	2
Natural systems and ecology	2
Transportation and land use	2
Urban water efficiency	2
Energy and greenhouse gas emissions	2
Materials and resources	2
Biodiversity preservation and green areas	2
Social sustainability	2
Economic sustainability	2
Case study analysis - Part 1	2
Case study analysis - Part 2	2
Case study analysis - Part 3	2
Case study analysis - Part 4	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Cohen, S., & Dong, G. (2021). The sustainable city. Columbia University Press.

Clark, W. (2017). Sustainable cities and communities design handbook. Butterworth-Heinemann.

Alvarez-Risco, A. (2021). Building Sustainable Cities. SPRINGER.

Johnston, S., Nicholas, S., & Parzen, J. (2014). The guide to greening cities. Island Press.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Integrated Urban Planning Studio 2**
Code	ARC 4714
Prerequisite Course(s)	ARC 4500 - Cooperative Training ARC 4709 - Integrated Urban Planning Studio 1
Semester Level	Year: 5 Level: 10
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	10 Hrs	Self-study:	13 Hrs	Total: 23 Hrs
ECTS Credits	12				
Credit Hours	5 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This studio is considered a graduation project. Students will continue what was achieved in the "Graduation Project Research" course. In this phase and through SWOT analysis, students will establish a vision and objectives. Based on previous findings and planning alternatives, they will develop a strategic plan addressing suggested land use, services, and road networks to promote sustainable development.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Development of various aspects of the selected alternative - Part 1	10
Development of various aspects of the selected alternative - Part 2	10
Development of various aspects of the selected alternative - Part 3	10
Development of various aspects of the selected alternative - Part 4	10
Development of various aspects of the selected alternative - Part 5	10
Development of various aspects of the selected alternative - Part 6	10
Preparing an implementation framework- Part 1	10
Preparing an implementation framework- Part 2	10
Defining appropriate policies, actions and legal instruments- Part 1	10
Defining appropriate policies, actions and legal instruments- Part 2	10
Project Development - Part 1	10
Project Development - Part 2	10
Project Development - Part 3	10
Project Development - Part 4	10
Project Development - Part 5	10

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	150	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	70%	Midterm Exam (7th week)	10%
	Final Exam	20%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Project(s)) • Mid-Term Exam (Eval. of One of the Project Stages) • Final Submission (Final Project Oral Exam)			
Examination Requirements	Equipped Studio			

8. Reading list

Butler, K. (2012). Planning and Urban Design Standards. Wiley.
ELWakil, S. (2006). Urban Planning: Principles, Basics & Applications.
Levy, J. (2016). Contemporary urban planning. Routledge.
Weber, R. & Randal, C. (2015). The oxford handbook of urban planning. 2015.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

جامعة أم القرى
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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Urban Sociology and Population**
Code	ARC 4715
Prerequisite Course(s)	ARC 4707 - Existing City Development Studio
Semester Level	Year: 5 Level: 10
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course introduces urban sociology and population studies through the sociospatial perspective, examining how social factors like gender, lifestyle, economics, and culture influence metropolitan development. It offers a concise history of urban life and an overview of urban social theory, highlighting the impact of culture on urban growth. The course also covers population dynamics, including fertility, family structures, health, aging, and mortality, providing a comprehensive framework for understanding urban environments.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction	2
Urban sociology: Origins and development factors	2
Classical theoretical and methodological trends in urban sociology	2
Contemporary theoretical trends in the study of urbanization	2
Urbanization in developing countries: A structural-historical analysis	2
Urban growth in Arab societies: Factors and indicators	2
Contemporary urban problems: Models and interpretations	2
The city in developing countries: A future vision	2
Sources of population study: Census, sample survey, vital statistics, immigration records	2
Natural population growth: Births, fertility and deaths rates	2
Migration	2
Population distribution and densities	2
Population structure: Gender, age, population pyramids, marital and educational status	2
Labor force and the economic activities of the population	2
Population Policies	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Gottdiener, M., Hutchison, R., & Ryan, M. (2019). The new urban sociology. Westview Press.

حمد، ص. (2008). جغرافيه السكان: اسس وتطبيقات. الدار العالمية للنشر.

ناصف، س. (2014). علم الاجتماع الحضري: المفاهيم والقضايا والمشكلات. الآفاق.

Clarke, J. (2013). Population Geography. Elsevier.

Newbold, K.. (2021). Population Geography : Tools and Issues. Lanham, Maryland, Rowman & Littlefield.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Professional Practice of Urban Planning**
Code	ARC 4716
Prerequisite Course(s)	ARC 4500 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Mohammad Abdullah Almahdi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course provides a comprehensive overview of the principles of professional urban practice in Saudi Arabia. It covers ethical standards, the Code of Conduct, and the legal frameworks governing the profession. Additionally, the course explores the planners' role and responsibilities, as well as essential professional skills such as resume preparation, portfolio development, interview techniques, and hiring processes. Students will be well-prepared for a responsible, competent, and effective career in urban planning.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
An introduction to urban planning profession	2
History of practicing urban planning globally and in the Kingdom	2
The professional role of the urban planner	2
Competencies of an urban planner	2
Ethics in urban planning profession	2
Regulations and rules that govern the professional practice	2
Practicing the urban planning profession in Saudi Arabia	2
Saudi council of engineers: Professional accreditation	2
how urban planning firms are formed and organized	2
Principles for administering an urban planning office	2
Planning documents preparation	2
Interviewing skills	2
Writing of curriculum vitae (CV)	2
Portfolio preparation techniques	2
Review of students' Curricula Vitae and Portfolios	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Presentation, Eval. of Portfolio, Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Saudi building code National committee (2018). The Saudi building code general 201.
Unwin, R. (2020). Town planning in practice. [publisher not identified].
American Institute of Architects. (2017). The architecture student's handbook of prof. practice. Wiley.
Piven, P. (2008). Architect's essentials of starting, assessing, and transitioning a design firm. Wiley.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Planning of Urban Mobility**
Code	ARC 4717
Prerequisite Course(s)	ARC 4707 - Existing City Development Studio
Semester Level	Year: 5 Level: 10
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course explores the complexities of urban mobility, focusing on key challenges and solutions for modern cities. Topics include the state of urban passenger transport, metro, light rail, and BRT systems, and the relationship between mobility and urban form. The course also examines equitable access, environmental impacts, and the economics and financing of urban mobility. Additionally, students will study the institutional and governance frameworks that shape urban transportation systems.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to urban mobility	2
Urban mobility challenges	2
The state of urban passenger transport	2
Metro, Light Rail and BRT	2
Urban goods transport	2
Mobility and urban form - Part 1	2
Mobility and urban form - Part 2	2
Equitable access to urban mobility	2
Urban mobility and the environment	2
Sustainable urban mobility - Part 1	2
Sustainable urban mobility - Part 2	2
Smart urban mobility innovations - Part 1	2
Smart urban mobility innovations - Part 2	2
Case study 1	2
Case study 2	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

UN-habitat. (2013). Planning and Design for Sustainable Urban Mobility. Routledge.

Jensen, Ole B. (2022). Handbook of Urban Mobilities. Abingdon, Oxon ; New York, Ny, Routledge.
Whitelegg, J. (2016). Mobility. Createspace independent Publishing platform.
Coxon, S., Napper, R., & Richardson, M. (2018). Urban mobility design. Elsevier.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Regional Planning**
Code	ARC 4718
Prerequisite Course(s)	ARC 4707 - Existing City Development Studio
Semester Level	Year: 5 Level: 10
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	3 Hrs	Total: 5 Hrs
ECTS Credits	3				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This course explores regional planning as a key spatial planning level in Saudi Arabia. It covers the historical evolution, definitions, and scope of regional planning, highlighting its role and contributions. Students will study methods and techniques of regional planning, including the process of regionalization, defining regions, and analyzing spatial structures. The course also compares regional planning practices with international perspectives, providing a comprehensive understanding of regional planning's role in Saudi Arabia.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Definition and scope of regional planning	2
Historical evolution of regional planning	2
Alternative delimitations of regions	2
Frameworks of Regional Planning: Methodologies	2
Frameworks of Regional Planning: Practices	2
Foundations of Regional Planning: Core Concepts	2
Foundations of Regional Planning: Dynamics	2
Environmental Planning	2
Environmental Planning	2
Transportation Planning	2
Housing Planning and Policy	2
Economic Development and Revitalization Planning	2
Climate Change and Energy Planning	2
Regional planning in the international perspective	2
Regional planning in Saudi Arabia	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Glasson, J., and Marshall, T. (2007). Regional Planning. Routledge
LeGates, R.T. (2023). City and Regional Planning. Taylor & Francis.
Calthorpe, P. & Fulton, W. (2001). The Regional City. Island Press.
Hall, P. & Tewdwr, M. (2020). Urban and Regional Planning. Routledge.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Graduation Project**
Code	ARC 4719
Prerequisite Course(s)	ARC 4500 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Required Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	3 Hrs	Self-study:	14 Hrs	Total: 17 Hrs
ECTS Credits	9				
Credit Hours	3 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

This capstone course investigates urban planning challenges and solutions specific to Makkah, Madinah, and the holy sites, focusing on approaches within the integrated vision for Hajj, Umrah, and visit. Students will explore various planning strategies and alternatives, engaging in individual research on related topics.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the course	3
Research title selection	3
Analyze relevant research papers - Part 1	3
Analyze relevant research papers - Part 2	3
Problem statement and methodology	3
Literature review - Part 1	3
Literature review - Part 2	3
Literature review - Part 3	3
Applying the methodology - part 1	3
Applying the methodology - part 2	3
Applying the methodology - part 3	3
The conclusion and recommendations	3
Research refining - Part 1	3
Research refining - Part 2	3
Research refining - Part 3	3

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	0	Studio	0	Training	0
	Practical	0	Research Project	45	Other	
Media Employed	Data show projector Internet connection					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	40%	Midterm Exam (7th week)	20%
	Final Exam	40%	Total	100%
Forms of Examination	• Cont. Assess. (Eval. of Research) • Mid-Term Exam (Eval. of Research) • Final Capstone Submission			
Examination Requirements	Equipped Classroom			

8. Reading list

معهد خادم الحرمين الشريفين لأبحاث الحج والعمرة. الملتقيات العلمية لأبحاث الحج والعمرة والزيارة.
Uqu.edu.sa. (2022). from https://uqu.edu.sa/hajj/107535.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Specifications of

Urban Planning

Elective Courses

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Cities and Climate Change**
Code	ARC 4721
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to Cities and Climate Change	2
Climate change impacts on cities - Part 1	2
Climate change impacts on cities - Part 2	2
Urban planning strategies for climate change: Mitigation and Adaptation	2
Mitigation: Energy efficiency	2
Mitigation: Waste management	2
Mitigation: Water resource management	2
Mitigation: Green infrastructure	2
Mitigation: Transportation	2
Adaptation: Land use and housing	2
Adaptation: Energy resilient strategies	2
Adaptation: Flood risk management in cities	2
Adaptation: Infrastructure resilience	2
Disaster risk reduction	2
Research development	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Dodman, D. (2012). Adapting Cities to Climate Change. Routledge.
Allam, Z., Jones, D., & Thondoo, M. (2020). Cities and climate change. Palgrave MacMillan.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Urban Conservation and Renewal**
Code	ARC 4722
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Defining Urban Conservation: Concepts and Approaches	2
Historical Context of Urban Conservation Movements	2
Urban Design Principles for Conservation	2
Conservation Techniques for Buildings and Sites 1	2
Conservation Techniques for Buildings and Sites 2	2
Sustainable Urbanism and Conservation Practices	2
Community Engagement Strategies in Urban Renewal	2
Social Equity and Urban Regeneration	2
Financing and Economic Impacts of Urban Conservation Projects	2
Case Studies of Conservation Projects 1	2
Case Studies of Conservation Projects 2	2
Case Studies of Conservation Projects 3	2
Case Studies of Conservation Projects 4	2
Legal Frameworks for Conservation and Preservation	2
The Future of Urban Conservation and Renewal	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

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.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Urban Development in Saudi Arabia**
Code	ARC 4723
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction	2
Urbanization in KSA	2
History of short and medium-term country-wide plans - Part 1	2
History of short and medium-term country-wide plans - Part 2	2
Housing in KSA	2
Future Saudi cities program - Part 1	2
Future Saudi cities program - Part 2	2
Introduction to Saudi vision 2030	2
Vision 2030: Quality of life in cities program	2
Vision 2030: Doyof Al Rahman program	2
Vision 2030: Housing program	2
Case study analysis - Part 1	2
Case study analysis - Part 2	2
Case study analysis - Part 3	2
Research development	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Dept. of Housing and Urban Development. (1977). Housing and urban development in KSA.

الهذلول، ص. (1999). التنمية العمرانية في السعودية: الفرص والتحديات. دار السهن.

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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Sustainable Urban Tourism**
Code	ARC 4724
Prerequisite Course(s)	ARC 3005 - Long-Span Buildings Design Studio
Semester Level	Year: 4 Level: 7
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
What is a urban tourism?	2
Benefits of urban tourism	2
Challenges of urban tourism	2
Globalization, urban competition, and tourism	2
Tourism policies and urban growth	2
The infrastructure and finance of urban tourism	2
Urban tourism, amenities, and human capital	2
Urban tourism and the revival of neighborhoods and city centers	2
Shaping sustainable tourism	2
Instruments for more sustainable tourism	2
Tourism and sustainability	2
Policy implications of a sustainable tourism agenda	2
Structures and strategies of sustainable urban tourism	2
Case Studies - Part 2	2
Case Studies - Part 2	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

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.
Filipa, et al. Handbook of Research on the Role of Tourism in Achieving the Sustainable Develop. Goals. Business Science Re

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Smart Cities**
Code	ARC 4731
Prerequisite Course(s)	ARC 4701 - New City Urban Planning Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
What is a smart city?	2
Smart city: Advantages and benefits	2
Smart city: Challenges and risks	2
Smart cities characteristics and design principles	2
Components: Smart buildings	2
Components: Smart transportation systems	2
Components: Smart infrastructure	2
Smart city and the Internet of Things	2
Smart cities and sustainable development - Part 1	2
Smart cities and sustainable development - Part 2	2
Case study analysis -Part1	2
Case study analysis -Part2	2
Case study analysis -Part3	2
Case study analysis -Part4	2
Research development	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Komninos, N. (2018). The Age of Intelligent Cities. Routledge.
Song, H., et al. (2017). Smart Cities: Foundations, Principles, and Applications. John Wiley & Sons, Incorporated.
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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Technology and Urban Change**
Code	ARC 4732
Prerequisite Course(s)	ARC 4701 - New City Urban Planning Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the Course	2
Tech. Achievements of the Industrial Revolution: Transportation	2
Tech. Achievements of the Industrial Revolution: Communications and Telecom.	2
Tech. Achievements of the Industrial Revolution: Infrastructure, Public Health and Safety	2
Social and Economic Effects of the Technological Achievements of the Industrial Revolution	2
Impact of Technology on Urban Planning	2
Impact of Technology on the Urban System	2
Impact of Technology on the Formation of the Industrial Age City	2
Technology and Problems of the Industrial Age City	2
Applications of Artificial Intelligence (AI)	2
Virtual and Augmented Reality (VR/AR)	2
Drones and Remote Sensing, Satellite Imagery, and Digital Mapping	2
Advanced Applications of Geographic Information System (GIS)	2
Statistical Software for Data Analysis and Future Projections	2
Technology and Future Patterns of Urban Growth	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

أبو قرين، ع. (2020). المدخل إلى التخطيط الحضري. موسوعة التخطيط. مكتبة الملك فهد الوطنية.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Future Urbanism**
Code	ARC 4733
Prerequisite Course(s)	ARC 4701 - New City Urban Planning Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction: Real and imagined future cities	2
Visual history of future cities - Part 1	2
Visual history of future cities - Part 2	2
Visual history of future cities - Part 3	2
Visual history of future cities - Part 4	2
Visual history of future cities - Part 5	2
Drowned city	2
Floating city	2
Airborne city	2
Vertical city	2
Underground city	2
Future disasters	2
Ruined city: Sprawl, Disaster, Entropy	2
Salvage and waste cities	2
Research development	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Dunn, N., & Pollastri, S. (2014). A visual history of the future. Foresight.

Dobraszczyk, P. (2019). Future Cities: Architecture and the imagination. Reaktion Books.

Banham, R., & Gannon, T. (2020). Megastructure: Urban Futures of the Recent Past. The Monacelli.

Kumar, A. & Meshram, D. (2022). Future of Cities. Routledge.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Selected Topics in Urban and Regional Planning**
Code	ARC 4734
Prerequisite Course(s)	ARC 4701 - New City Urban Planning Studio
Semester Level	Year: 4 Level: 8
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2	Cr. Hrs			
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to the course	2
Research title selection	2
Analyze relevant research papers - Part 1	2
Analyze relevant research papers - Part 2	2
Problem statement and methodology	2
Literature review - Part 1	2
Literature review - Part 2	2
Literature review - Part 3	2
Applying the methodology - part 1	2
Applying the methodology - part 2	2
Applying the methodology - part 3	2
The conclusion and recommendations	2
Research refining - Part 1	2
Research refining - Part 2	2
Research refining - Part 3	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

References vary on yearly basis

Coaffee J., and Peter L. (2017). Urban Resilience. Bloomsbury Publishing

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Urban Risk Management**
Code	ARC 4741
Prerequisite Course(s)	ARC 4500 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to urban risk reduction	2
Urban disaster risk: Analysis	2
Urban disaster risk: Action planning	2
Urban disaster risk analysis: Implementation management	2
Human-induced environmental risks	2
Urban flood risk management	2
Earthquake risk management	2
Reducing urban risk through community-based approaches	2
Post-disaster reconstruction	2
Case studies on environmental risk reduction – Part 1	2
Case studies on environmental risk reduction – Part 2	2
Case studies on environment-disaster linkages – Part 1	2
Case studies on environment-disaster linkages – Part 2	2
Future perspective of urban risk reduction	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation, Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Shaw, R., et al. (2012). Urban Risk Reduction : An Asian Perspective. Bingley, Uk, Emerald Group Publishing Limited

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

* K: Knowledge S: Skills V: Values, autonomy, and responsibility

جامعة أم القرى
UMM AL-QURA UNIVERSITY

Handbook of

Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Urban Governance**
Code	ARC 4742
Prerequisite Course(s)	ARC 4500 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction to urban governance: Definition, importance and historical evolution	2
Urbanization and urban governance challenges	2
Global urban governance	2
Theories and frameworks in urban governance	2
Parameters of city management: Urban equality	2
Parameters of city management: Public participation	2
Parameters of city management: Socio-economic parameter	2
Parameters of city management: Feeling of secure	2
Legal and institutional frameworks	2
Urban finance and economics	2
Role of technology in urban governance: E-governance and smart city initiatives	2
Urban governance and management in KSA	2
Case studies and practical applications	2
Future of urban governance	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation, Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.

Habitat. (2016). Urban Governance, Capacity and Institutional Development.

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.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Urban Economies**
Code	ARC 4743
Prerequisite Course(s)	ARC 4500 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact: 2 Hrs Self-study: 2 Hrs Total: 4 Hrs
ECTS Credits	2
Credit Hours	2 Cr. Hrs
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction	2
Axioms of Urban Economics	2
Factors Driving Urban Development: From Trade and Industry to Innovation	2
Agglomeration Economies: Firms Clustering	2
Economics and City Size	2
Economics and Urban Growth	2
Economics and Urban Land Rent	2
Economics and Land-Use Patterns	2
Neighborhood Choice	2
Growth Controls	2
Autos and Highways	2
Urban Transit	2
Housing Market and Policy	2
Local governments in KSA	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation, Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

O'sullivan, A. (2019). Urban Economics. Mcgraw-Hill/Irwin.

Sieg, H. (2020). Urban Economics and Fiscal Policy. Princeton University Press.
McDonald. J.(1997). Fundamentals of Urban Economics.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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Module Specifications Plan 47

1. General Information

Programme	Bachelor of Architecture and Planning (Urban Planning)
Module Name	**Urban Indicators**
Code	ARC 4744
Prerequisite Course(s)	ARC 4500 - Cooperative Training
Semester Level	Year: 5 Level: 10
Course Coordinator	Abdulrahman Abdulaziz Majrashi
Lecturer(s)	....
	....
	....
Language	English/ Arabic
Relation to Curriculum	Elective Course

2. ECTS/ Workload

Workload Hours per Week	Contact:	2 Hrs	Self-study:	2 Hrs	Total: 4 Hrs
ECTS Credits	2				
Credit Hours	2 Cr. Hrs				
Req. according to Exam Reg.	Students should participate in at least 75% of the learning activities				

3. Module Summary

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.

4. Intended Learning Outcomes (ILOs)

K1-c Demonstrate an understanding of the basics of architectural formation.
K1-o Demonstrate an understanding of the visual arts.
S4-a Utilize manual skills to effectively develop and present projects.
S4-c Create drawings with efficiency and precision.
V1-a Demonstrate self-discipline and punctuality.
V1-b Demonstrate respect to different points of view.
V2-d Demonstrate persistence on achievement and distinction.

5. Contents

Content	Contact
Introduction	2
Sources of urban development indicators	2
The data collection process	2
The urban agglomeration's boundaries definition	2
Shelter indicators - Part 1	2
Shelter indicators - Part 2	2
Social development indicators - Part 1	2
Social development indicators - Part 2	2
Environmental management indicators - Part 1	2
Environmental management indicators - Part 2	2
Environmental management indicators - Part 3	2
Economic development indicators	2
Governance and administration indicators	2
Urban indicators in KSA	2
Research presentation	2

6- Teaching and Learning Methods

Type of teaching, contact hrs.	Lecture	30	Studio	0	Training	0
	Practical	0	Research Project	0	Other	
Media Employed	Internet connection Powerful computer/ laptop					

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	30%	Midterm Exam (7th week)	30%
	Final Exam	40%	Total	100%
Forms of Examination	• (Eval. of Research, Eval. of Presentation, Assignments & Tasks) • Mid-Term Exam (Written Exam) • Final Exam (Written Exam)			
Examination Requirements	Equipped Classroom			

8. Reading list

Habitat. (2004). Urban Indicators Guidelines. UN.

الهيئة العليا لتطوير مدينة الرياض. (2018). المؤشرات الحضرية لمدينة الرياض. المرصد الحضري لمدينة الرياض.

9. Mapping of Plan 47's CLOs, and ASIIN's Los

ASIIN LOs	a. Design competence				b. Know. & understanding				c. Social & human sciences							d.Environmental Science				e. Engineering Sciences					f. Design method.			g. Construction economics / management							h. Skills		
	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3	4	5	6	7	1	2	3
K1-c			■			■																															
K1-o						■																															
S4-a				■																																	
S4-c				■																															■	■	
V1-a																																			■		
V1-b																																			■		
V2-d																																			■		

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