University of Port Said
Faculty of Engineering

Architecture & Urban Planning Department

Program Specification For Master of Science Degree in Architecture & Urban Planning Engineering

2019-2020

Program Specification
for
Master of Science Degree in
Architecture and Urban Planning
Engineering

A- Basic Information

1. **Program title:** MS.c in Architecture and Urban Planning Engineering.
2. **Program type:** **Single** ☒ **Double** ☐ **Multiple** ☐
3. **Department (s):** Architecture and Urban Planning Engineering
4. **Assistance Coordinator:**
5. **Coordinator:** The Head of the Department
6. **External evaluator(s):** NA
7. **Last date of program specifications approval:** Bylaw 2000.

B- Professional Information

1- Program aims:

This postgraduate Master program in Architecture and Urban Planning Engineering equips graduate engineers with advanced skill levels in different architectural and urban planning fields by providing advanced academic knowledge and advanced practical and problem-solving skills. The program focuses on the contemporary architecture and urban planning, and their role in the environmental control. It was designed to cover the fields of Bio-Climatic Approach in Design, Environmental Design and Energy Conservation, Influence of Human Activities on Spatial Organization, Aesthetics in Architecture ,Computer in Architecture and Environment, Building Performance and Maintenance, Reviewing The Modern Trends in Urban Design and Urban Planning, Upgrading of Environment, Planning Squatter Areas, Landscaping Studies For Urban Projects, Evolving Urban Development That Faces Developing Cities, Urban Design in Old and new Districts, Humanities and Sociology in Urban Design and Housing, Environmental Effects on Urban Settlements, Mutual Interaction Between Environment and Planning Processes . Also, this program is to produce a well-rounded and well-balanced graduate who can use Architecture and Urban Planning Engineering tools to solve real world problems.

2- Graduate Attributes :

After completing the program the graduate would able to be:

A. Proficiency in the application of the basics and the methodologies of scientific research and the use of its different tools
B. Apply the analytical approach and using it in the area of specialization
C. Application of specialized knowledge and combining it with relevant knowledge in his / her professional practice
D. Show awareness of current problems and modern visions in the area of specialization
E. Identify professional problems and find solutions for it.
F. Mastery of an appropriate range of specialized professional skills and the use of appropriate technology means to serve professional application.
G. Communicate effectively and the ability to lead a team work
H. Decision-making in different professional contexts
I. Employment of available resources to achieve and maintain the highest benefit
J. Show awareness of his / her role in community development and environmental conservation in the light of the global and regional variables
K. Act reflecting a commitment to integrity and credibility and abide by the rules of the profession
L. Developing him / her academically and being able to learn continuously.

3- Intended Learning Outcomes (ILOs) for the whole program

Architecture and Urban Planning Engineering Master Program is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs		Course ILOs
A. Knowledge and understanding			
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة**	a1-1 Demonstrate sufficient essential knowledge and a deep understanding of the concepts and theories of Architectural Engineering and Urban Planning.	A, B, C, D, E, F, G, H, I, J,K, L	**HUM 622, ARC 641,** ARC 611, UPL 622, UPL 617
	a1-2 Understand the theories, basics and specialized knowledge in the field of Architectural Engineering		ARC 633, ARC 642, UPL 615, UPL 616, **ARC 641,** UPL 623, UPL 648, UPL 663
	a1-3 Understand the theories, basics and specialized knowledge in the field of Urban Planning.		**UPL 612, UPL 613, UPL 617, UPL 618, UPL 619,** UPL 621, ARC 642

A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a2-1Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	J	**HUM 622,** ARC 611, **ARC 633**, ARC 635, **ARC 641, UPL 612, UPL 613, UPL 617, UPL 618, UPL 619**, ARC 642, UPL 615, UPL 616, UPL 620, UPL 622, UPL 623, UPL 648, UPL 663,Thesis
A3- Main scientific advances in the field of specialization. **التطورات العلمية في مجال التخصص**	a3-1 Report new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.	D, F, L	ARC 634, **ARC 633**, ARC 635, **UPL 612, UPL 618, HUM 622,** ARC 642, UPL 615, UPL 616, UPL 623, UPL 648, UPL 663, Thesis
A4- Fundamentals of ethical & legal professional practice in the field of specialization. **المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال التخصص**	a4-1 Recognize ethical and professional responsibility issues arising in the practice of the engineering profession.	K	**ARC 641,** ARC 642, **UPL 617, UPL 618**, UPL 616, Thesis
A5- Basics and principles of quality in professional practice in the field of specialization. **مبادئ و أساسيات الجودة في الممارسة المهنية في مجال التخصص**	a5-1 Explain Quality Assurance concepts of Architectural Engineering and Urban Planning.	F, H, I	ARC 634, **ARC 681**, UPL 620, Thesis
A6- Basics and ethics of scientific research **أساسيات وأخلاقيات البحث العلمي**	a6-1 Recognize Basics and ethics of scientific research.	K	ARC 635, **ARC 633, UPL 618, HUM 622,** UPL 615, UPL 616, UPL 620, UPL 648, UPL 663,Thesis

B. Intellectual skills			
B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems. **تحليل و تقييم المعلومات في مجال التخصص و القياس عليها لحل المشاكل**	b1-1 Demonstrate an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.	B, C	**HUM 622,** ARC 634, **ARC 633**, ARC 611, **ARC 641, UPL 612, UPL 613, UPL 617, UPL 619**, ARC 642, UPL616, UPL 622, UPL 623, UPL 648, UPL 663,Thesis
B2- Solve specialized problems with lack of some data and variables, (incomplete data). **حل المشاكل المتخصصة مع عدم توافر بعض المعطيات**	b2-1 Apply broad knowledge of modern computational methods and think critically to solve unstructured problems (with incomplete data) related Architectural Engineering and Urban Planning.	B, C, E	**UPL 612, UPL 613, UPL 617, UPL 618, UPL 619,** Thesis
B3- Link and integrate diverse knowledge to solve professional problems. **الربط بين المعارف المختلفة لحل المشاكل المهنية**	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	B, C, E, H, I	**HUM 622,** ARC 635, ARC 634, **ARC 633, ARC 641, UPL 612, UPL 613, UPL 618, UPL 619,** ARC 642, UPL 615, UPL 616, UPL 621, UPL 648, UPL 663, Thesis
B4- Conduct a research study and/or writing systematic scientific study about Research problem. **إجراء دراسة بحثية و /أو كتابة دراسة علمية منهجية حول مشكلة بحثية**	b4-1 Write an research plain to conduct applied research.	A, D, E, F	**ARC 641**, ARC 635, **UPL 612**, UPL 620, UPL 623, Thesis
B5- Assess risks in professional practice in the field of specialization, **تقييم المخاطر في الممارسات المهنية في مجال التخصص**	b5-1 Evaluate pros and cons of given methodologies for Architectural Engineering and Urban Planning .	J, K	**UPL 613, UPL 617, UPL 618, UPL 619,** UPL 621, Thesis

B6- Plan for performance development in the field of practice . **التخطيط لتطوير الأداء في مجال التخصص**	b6-1 Plane to guide progress in his / her professional career.	C, L	**HUM 622**, **HUM 622,** ARC 635, **ARC 633**, ARC 611, ARC 642, UPL 615, UPL 616, UPL 620, UPL 622, UPL 623, UPL 648, UPL 663, Thesis
B7- Take professional decisions in different professional practical contexts. **اتخاذ القرارات المهنية في سياقات مهنية متنوعة**	b7-1 Acquire decision making capabilities in different situation when facing problems related to Architectural Engineering and Urban Planning .	H	ARC 634, **ARC 641, UPL612, UPL 618,** UPL 616, UPL 620, UPL 621, Thesis
C. Professional and practical skills			
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	A, B, C, D, E, F	**HUM 622,** ARC 635, ARC 642, **ARC 633,** ARC 611, **ARC 641, UPL 612, UPL 613, UPL 617, UPL 618, UPL 619,** UPL 615, UPL 616, UPL 620, UPL 621, UPL 622, UPL 623, UPL 648, UPL 663, Thesis
C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.2-1 Write and evaluate a professional report on specialized related to Architectural Engineering and Urban Planning .	A, L	**HUM 622,** ARC 635, ARC 634, **ARC 633,** ARC 611, **UPL 612, UPL 613, UPL 618, UPL 619,** ARC 642, UPL 615, UPL 616, UPL 620, UPL 622, UPL 648, UPL 663, Thesis

C3- Evaluate means and tools available in the field of practice. **تقييم الطرق و الأدوات القائمة في مجال التخصص**	c3-1 Evaluate methods and tools reported in a specified published articles and researches related to Architectural Engineering and Urban Planning field.	A, E, F, H, I	**HUM 622, ARC 633, UPL 613,** ARC 642, UPL 615, UPL 616, UPL 620, UPL 623, UPL 648, UPL 663,Thesis
D. General and transferrable skills			
D1- Communicate effectively using all methods. **التواصل الفعال بأنواعه المختلفة**	d1-1Communicate effectively with the scientific community, research team and technocrats involved in multinational companies in the related fields to Architectural Engineering and Urban Planning.	G	**HUM 622, ARC 641, UPL 612, UPL 613, UPL 618, UPL 619,** ARC 642, Thesis
D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 Employ the information technology skills to serve his / her career development.	A, F, I, L	**HUM 622,** ARC 635, **ARC 633**, ARC 611, **UPL 612, UPL 618, UPL 619,** UPL 616, UPL 620, UPL 621, UPL 622, UPL 648, UPL 663, Thesis
D3- Apply self evaluation and define personal educational needs. **التقييم الذاتي وتحديد احتياجاته التعليمة الشخصية**	d3-1 Apply self evaluation and specify his educational needs related to Architectural Engineering and Urban Planning aspects.	L	**HUM 622,** ARC 634, UPL 612, Thesis
D4- Set evaluation criteria and benchmarks for others. **وضع قواعد ومؤشرات تقييم أداء الآخرين**	d4-1 Design standards to evaluate others performance.	G, K	**UPL 612, UPL 618,** Thesis
D5- Use different sources to obtain knowledge and information. **استخدام المصادر المختلفة للحصول على المعلومات و المعارف**	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	C, L	**HUM 622,** ARC 635, ARC 611, **ARC 633, ARC 641, UPL 612, UPL 613, UPL 617, UPL 618, UPL 619,** ARC

			642, UPL 615, UPL 663, UPL 616, UPL 622, UPL 623, UPL 648, Thesis
D6- Lead a team in familiar professional context **العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة**	d6-1 Practice team working, and lead teams in specified professional jobs.	G	**HUM 622,** ARC 635, **ARC 633, ARC 641, UPL 612, UPL 613, UPL 617, UPL 618, UPL 619**, ARC 642, UPL 615, UPL 621, UPL 623, UPL 648, UPL 663,Thesis
D7- Manage time effectively **إدارة الوقت بكفاءة**	d7-1 Manage time perfectly.	G, I	**UPL 618, Thesis**
D8- Learn independently and seek continuous learning. **التعلم الذاتي و المستمر**	d8-1 Seek continuous learning through continuous education, organizing and participating in seminars, workshops, national and international conferences.	L	**HUM 622,** ARC 635, **ARC 633, UPL 618,** ARC 642, UPL 615, UPL 616, UPL 623, UPL 648, UPL 663,Thesis

4- Program Academic Reference Standards (ARS)

The external references for standards considered in the development of this program were the Academic Reference Standards (ARS) for postgraduate programs prepared by the National Authority for Quality Assurance and Accreditation (NAQAAE) on 2009. These standards set out the attributes and academic characteristics that are expected to be achieved by the end of the program.

5- Program Structure and Contents:

5.1 Program Duration: a minimum of 2 years & a maximum of 5 years (including one year of preparatory courses)

5.2 Program Structure:

Awarding a Master Degree in Architecture and Urban Planning Sciences required the study of courses amounting to 18 hours weekly for one academic year. 9 hours of them are devoted to department basic requirements. The other 9 hours constitute specialized courses are selected by the supervision team and approved by the department council. These courses are chosen from among the 600 – level and are directly related to the topic of his research. Also, required for awarding the Master Degree in Architecture and

Urban Planning Sciences is the execution of scientific research that terminated by writing a thesis containing the research results and its complete analysis and defending it successfully.

5.3 Program Contents (Courses):

- **Department Basic Requirements Courses:**

Course Code	Course Title	Course Hours/Week	Marks Written Exam
HUM 622	Research Methodology (2)	3	100
ARC 633	Contemporary Architectural Thought	3	100
ARC 641	Humanistic Parameter in Architecture	3	100
UPL 612	Urban Development Economy	3	100
UPL 613	Planning Squatter Areas	3	100
	Elective Course	3	100
Elective Course**			
UPL 617	Design in Old Districts Urban	3	100
UPL 618	Urban Design in New Districts	3	100
UPL 619	Management of Urban Environment	3	100

** Select only one course.

- **Specialized Requirements Courses*****:**

Course Code	Course Title	Course Hours/Week	Marks Written Exam
HUM 622	Research Methodology (2)	3	100
ARC 611	Feasibility Studies and Project Development	3	100
ARC 633	Contemporary Architectural Thought	3	100
ARC 634	Architecture and The Future	3	100
ARC 635	Specialized Studies	3	100
ARC 641	Humanistic Parameter in Architecture	3	100
ARC 642	Socio-Culture Aspects in Space Design	3	100
ARC 671	Computer in Architecture and Environment	3	100
ARC 681	Man and Environmental Control	3	100
UPL 612	Urban Development Economy	3	100
UPL 613	Planning Squatter Area	3	100
UPL 614	Directed Research	3	100
UPL 615	Planning Residential Areas	3	100
UPL 616	Managing of Urban Development	3	100
UPL 617	Urban Design in Old Districts	3	100

UPL 618	Urban Design in New Districts	3	100
UPL 619	Management of Urban Environment	3	100
UPL 620	Comparative Analysis of Urban Applications	3	100
UPL 621	Statistics and Urban Demographic Studies	3	100
UPL 622	Urban Design and Planning in Developing Countries	3	100
UPL 623	Comparative Analysis of Urban Fabrics	3	100
UPL 648	Environmental Planning for Urban Projects (2)	3	100
UPL 663	Contemporary Trends of Urban Design (2)	3	100

***** Select only five courses related to the research topic.

6- Evaluation of program intended learning outcomes:

- Written examinations for the preparatory year after 30 weeks.
- An examiners committee is approved by the faculty council (including at least one external examiner). The evaluation of the thesis and the discussion is carried out in an open session.

7- Program Matrix:

The following table explains the ILO's (of the current program) – Course (main ILOs) matrix

Program Matrix: ILO's (of the current program) – Course (main ILOs) matrix.

Courses Codes	ARC								UPL															HUM	Thesis
	ARC 611	ARC 633	ARC 634	ARC 635	ARC 641	ARC 642	ARC 671	ARC 681	UPL 612	UPL 613	UPL 614	UPL 615	UPL 616	UPL 617	UPL 618	UPL 619	UPL 620	UPL 621	UPL 622	UPL 623	UPL 648	UPL 663	HUM 622	
ILOs																									
a1-1	**X**				X						X			X					X				X	
a1-2		X			X	X	X	X				X	X							X	X	X		
a1-3						X			X	X				X	X	X		X						
a2-1	**X**	X		X	X	X		X	X	X	X	X	X	X	X		X		X	X	X	X	X	X
a3-1		X	X	X		X		X	X			X	X		X					X	X	X	X	X
a4-1					X	X	X						X	X	X									X
a5-1			X				X	X							X	X	X							X
a6-1		X		X								X	X		X		X				X	X	X	X
b1-1	**X**	X	X		X	X	X	X	X	X	X		X	X		X			X	X	X	X	X	X
b2-1							X		X	X	X				X	X								X
b3-1		X	X	X	X	X		X	X	X		X	X		X			X			X	X	X	X
b4-1				X	X				X					X			X			X				X
b5-1										X					X			X						X
b6-1	**X**	X		X		X						X	X				X		X	X	X	X	X	X
b7-1			X		X				X				X		X		X	X						X
c1-1	**X**	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
c2-1	**X**	X	X	X		X		X	X	X	X	X	X		X	X	X		X		X	X	X	X
c3-1		X				X	X			X	X	X	X				X			X	X	X	X	X
d1-1					X	X		X	X	X					X	X							X	X
d2-1	**X**	X		X			X	X	X		X		X		X		X	X	X		X	X	X	X
d3-1			X								X												X	X
d4-1							X	X	X		X				X	X								X
d5-1	**X**	X		X	X	X			X	X		X	X	X	X	X			X	X	X	X	X	X
d6-1		X		X	X	X			X	X		X		X	X			X		X	X	X	X	X
d7-1							X	X	X						X									X
d8-1		X		X		X						X	X		X						X	X	X	

- ***Program Coordination Committee:***

Program coordinator: **Dr. Basma Nashaat El-Mowafy**

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**

Date: 2020

ARC 633

Contemporary Architectural Thought

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Contemporary Architectural Thought	**Code Symbol**: ARC 633	
Lecture	3 hours	
Tutorial / Laboratory	----	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

This course investigates the state of contemporary architecture as represented by significant practices, buildings, theories, and criticisms. Themes to be considered include globalization, the role of digital design media, the ethics and aesthetics of sustainability, contemporary urbanism, new approaches to materials and structure, and recent interests in ornament and pattern-making. Current conditions will be related historically to postwar reactions to modernism and contextually to the social and technological shifts of recent decades.

2. Course Objectives

By the end of the course the students will be able to:

- Demonstrate a full knowledge of Culture transformations of societies.
- Clarify the relation between the architectural concept and the philosophy of design and construction though different ages and the effects of geographical, climatic, social, physical, cultural, geological and religious influences on the different

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة**	a1-2 Understand the theories, basics and specialized knowledge in the field of Architectural Engineering .	a1-2-1 List some of the contemporary theories of architecture. a1-2-2 Identify different theories of architecture. a1-2-3 Define the differences between the Induction and Deduction inference methodology a1-2-4 Estimate short essays in certain topics of the course. a1-2-5 State the distinguishing features for the different periods. a1-2-6 Define theoretical concepts. a1-2-7 Identify the importance of considering the social and ethical aspects in the process of architecture design over the years. a1-2-8 State a theoretical background with various styles. a1-2-9 Recognize and appreciate architectural work of the third architectural pioneers.

A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a2-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a2-1-1 Recognize the interaction between his/her research and surrounding environment. a2-1-2 Show awareness of political and cultural issues and their implications on architecture
A3- Main scientific advances in the field of specialization. **التطورات العلمية في مجال التخصص**	a3-1 Report new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.	a3-1-1 List new advances in analysis and methodologies of Architectural Engineering and Urban Planning.
A6- Basics and ethics of scientific research **أساسيات وأخلاقيات البحث العلمي**	a6-1 Recognize Basics and ethics of scientific research.	a6-1-1 Recognize the different styles of citation
B. Intellectual skills		
B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems. **تحليل و تقييم المعلومات في مجال التخصص و القياس عليها لحل المشاكل**	b1-1 Demonstrate an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.	b1-1-1 Demonstrate algorithms and flowcharts approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning problems.
B3- Link and integrate diverse knowledge to solve professional problems. **الربط بين المعارف المختلفة لحل المشاكل المهنية**	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b3-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.
B6- Plan for performance development in the field of practice . **التخطيط لتطوير الأداء في مجال التخصص**	b6-1 Plane to guide progress in his / her professional career.	b6-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the	c1-1 Express competence skills, such as identifying, formulating, analyzing, and	c1-1-1 Improve competence skills, such as identifying, formulating, analyzing, and

field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	creating engineering solutions, using latest engineering techniques, skills, and tools.	creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.
C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.2-1 Write and evaluate a professional report on specialized related to Architectural Engineering and Urban Planning .	c2-1-1 Conduct a focused review of the relevant literature and create appropriate conceptual framework.
C3- Evaluate means and tools available in the field of practice. **تقييم الطرق و الأدوات القائمة في مجال التخصص**	c3-1 Evaluate methods and tools reported in a specified published articles and researches related to Architectural Engineering and Urban Planning field.	c3-1-1 Evaluate different architectural schools, philosophies directions and theories.
D. General and transferrable skills		
D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 Employ the information technology skills to serve his / her career development.	d2-2-1 Acquire the information technology skills to serve his / her career development.
D5- Use diferent sources to obtain knowledge and information. **استخدام المصادر المختلفة للحصول على المعلومات و المعارف**	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1 Work with different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .
D6- Lead a team in familiar professional context **العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة**	d6-1 Practice team working, and lead teams in specified professional jobs.	d6-1-1 Work in a team and Social leadership skills.
D8- Learn independently and seek continuous learning. **التعلم الذاتي و المستمر**	d8-1 Seek continuous learning through continuous education, organizing and participating in seminars, workshops, national and international conferences.	d8-1-1 Prepare text- book to collect the data that he needs. d8-1-2 Develop selected parts of the course in oral seminar using available displaying equipments.

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-3	Introduction	12	12	--	--	a1-2-1, a1-2-2, a1-2-8, a2-1-1, c1-1-1, d5-1-1, d6-1-1	1
4-6	The social ,technological and Culture transformations	12	12	--	--	a1-2-1, a1-2-2, a1-2-8, a2-1-2, c1-1-1	2
7-9	New architecture trends	12	12	--	--	a1-2-1, a1-2-2, b1-1-1, c1-1-1	3
10-13	New approaches to materials and structure	12	12	--	--	a1-2-7, a1-2-9, b1-1-1, c1-1-1	4
14-16	The ethics and aesthetics of sustainability,	6	6	--	--	a1-2-3, a1-2-7, a1-2-8, a1-2-9, a6-1-1 , b1-1-1, b6-1-1, c1-1-1, c3-1-1, d2-2-1	5
17-18	Symbolism and semiotics in architecture	6	6	--	--	a1-2-3, a1-2-4, a1-2-5, a1-2-6, a1-2-7, a1-2-9, a6-1-1, b1-1-1, c1-1-1, d2-2-1, d8-1-1	6
19-20	Expressionism in architecture	6	6	--	--	a1-2-4, a1-2-5, a1-2-6, a1-2-7, a1-2-9, b6-1-1, c1-1-1, c3-1-1	7
21- 24	Architectural design in the digital	6	6	--	--	a1-2-3, a1-2-6, a1-2-9, a6-1-1, b1-1-1, b6-1-1, c1-1-1, d2-2-1, d8-1-1	8
25-30	Discussion and presentations	18	18	--	--	a2-1-1, a3-1-1, b3-1-1, c2-1-1, d5-1-1, d6-1-1, d8-1-2	9
	Total	90	90	--	--		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contributes in achieving.	A1 (a1-2), A2 (a2-1), A3 (a3-1, A6(a6-1)	B1 (b1-1), B3 (b3-1), B6 (b6-1)	C1 (c1-1), C2 (c2-1), C3 (c3-1)	D2 (d2-1), D5 (d5-1), D6 (d6-1), D8 (d8-1)

6. Course Subject Area:

A	**B**	**C**	**D**	**E**	**F**	**G**	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
30%	---	**60%**	---	**5%**	---	**5%**	**100%**

7. Course Topics.

Topic No.	Topic	Weeks
1st	Introduction	1-3
2nd	The social ,technological and Culture transformations	4-6
3rd	New architecture trends	7-9
4th	New approaches to materials and structure	10-13
5th	The ethics and aesthetics of sustainability,	14-16
6th	Symbolism and semiotics in architecture	17-18
7th	Expressionism in architecture	19-20
8th	Architectural design in the digital	21- 24
9th	Discussion and presentations	25-30

8. ILOs Matrix Topics

Course topics	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
Course ILOs	**Knowledge & Understanding**								
a1-2-1 List some of the contemporary theories of architecture.	x	x	x						
a1-2-2 Identify different theories of architecture.	x	x	x						
a1-2-3 Define the differences between the Induction and Deduction inference methodology					x	x	x	x	
a1-2-4 Estimate short essays in certain topics of the course.						x	x		
a1-2-5 State the distinguishing features for the different periods.						x	x		
a1-2-6 Define theoretical concepts.					x	x	x	x	
a1-2-7 Identify the importance of considering the social and ethical aspects in the process of architecture design over the years.				x	x	x	x		
a1-2-8 State a theoretical background with various styles.	x	x			x				
a1-2-9 Recognize and appreciate architectural work of the third architectural pioneers.				x	x	x	x	x	
a2-1-1 Recognize the interaction between his/her research and surrounding environment.	x								x
a2-1-2 Show awareness of political and cultural issues and their implications on architecture		x							
a3-1-1 List new advances in analysis and methodologies of Architectural Engineering and Urban Planning.									x
a6-1-1 Recognize the different styles of citation					x	x	x	x	
Course ILOs	**Intellectual Skills**								
b1-1-1 Demonstrate algorithms and flowcharts approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning problems.			x	x	x	x	x	x	

b3-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.									x
b6-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.					x	x	x	x	
Course ILOs	**Professional Skill**								
c1-1-1 Improve competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.	x	x	x	x	x	x	x	x	
c2-1-1 Conduct a focused review of the relevant literature and create appropriate conceptual framework,									x
c3-1-1 Evaluate different architectural schools, philosophies directions and theories.					x	x	x	x	
Course ILOs	**General Skills**								
d2-2-1 Acquire the information technology skills to serve his / her career development.					x	x	x	x	
d5-1-1 Work with different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .	x								x
d6-1-1 Work in a team and Social leadership skills.	x								x
d8-1-1 Prepare text- book to collect the data that he needs.					x	x	x	x	x
d8-1-2 Develop selected parts of the course in oral seminar using available displaying equipments.									x

9. Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-2-1	x	x											
	a1-2-2	x	x											
	a1-2-3	x	x											
	a1-2-4	x	x											
	a1-2-5	x												
	a1-2-6	x												
	a1-2-7	x												
	a1-2-8	x												
	a1-2-9	x												
	a2-1-1		x	x										
	a3-1-1		x	x										
	a3-1-2		x	x										
	a6-1-1		x	x										
Intellectual Skills	b1-1-1	x												
	b3-1-1	x												
	b6-1-1	x	x	x										
Professional Skills	c1-1-1	x								x				
	c2-1-1	x	x							x				
	c3-1-1	x	x							x				
General Skills	d2-1-1			x										
	d5-1-1			x						x				
	d6-1-1		x	x						x				
	d8-1-1		x	x										
	d8-1-2		x	x										

10. Assessment

- **Assessment Methods**

Final Written Examination to assess students' knowledge, understanding, analysis,

creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	31
Total	100%	

11. Facilities required for teaching and learning

- **Laboratory Usage:** None.

- **Library Usage:**

Students should be encouraged to use library technical resources in the preparation of reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12. List of References:

Course Notes

Essential Books (Text Books):

1. Wahba, Sh. 2007. Value Of Architecture Today: Architecture Between Culture & Commerce A Reading In The Contemporary Architecture. Al-Azhar Engineering Ninth International Conference. April 12 - 14, 2007. Code A 06.
2. Marcuse, P. 2006. "Tradition in a Global City?" Traditional Dwellings and Settlements Review, Vol. XVII Number.
3. Mahgoub, Y. 2006 Architecture and the Expression of Cultural Identity in Kuwait, Paper presented at the 1st International Symposium on Environment, Behavior and Society, People in Place in People, February 9-11, 2006, Sydney, Australia.
4. Lutfi. S. 2006. How the Irregular Adds Value. Chicago Intemational Conference. Thinking outside the Box: Tapered, Tilted, Twisted Towers. CTBUH 2006. Council on Tall Buildings and Urban Habitat. October 25-26, 2006. Chicago, Illinois. Session 3 part 2.

Periodicals, Web Sites, etc.

1. http://www.archrecord.com/
2. http://www.worldarchitecturenews.com

13. Program Coordination Committee:

Course Coordinator: Dr. Naglaa Ali Megahed.

Program Coordinator Dr. Basma Nashaat El-Mowafy

Head of the Department: Prof. Dr. Ashraf Abd-Elfatah El-Mokadem

Date: 10-2020

ARC 641
Humanistic Parameter in Architecture

Course Specification

Program on which the course is given	Architectural Engineering and Urban Planning Major
Major or minor element of program	Architectural Engineering
Department offering the program	Architectural Engineering
Department offering the course	M.Sc.
Academic year/Level	
Date of specification approval	***2020***

A- Basic Information

Title: Humanistic Parameter in Architecture	**Code Symbol**: ARC 641	
Lecture	3 hours	
Tutorial / Laboratory	--------	
Total	3 hours	By law 2000

B- Professional Information

1- Course Aims:

This course aims at enabling the student to understand the theoretical difficulties of researching the relationship between man and the built environment. Also, the course assists the student to explore new fields and of human sciences. Then, a comprehension of current trends of theorization in Environment-behavior is introduced. The course also aims to help students to establish their research queries (and hypotheses) in architectural humanities.

2- Course objectives

By the end of the course the students will be able to:

• Enable the student to comprehend the theoretical complexities of the task of Researching the relationship between man and the built environment.

• Enable the student to explore novel fields and sub-disciplines of human

sciences Previously unknown to them.
• Enhance the student's comprehension of current trends of theorization in Environment-behavior research.
• Train students to establish their research queries (and hypotheses) in architectural humanities on the basis of solid and well-informed epistemic grounds.

3- Intended Learning Outcomes (ILOs)

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs Intended Learning Outcomes	Course ILOs
A. Knowledge and understanding المعرفة والفهم		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice.	a1-1 Demonstrate sufficient essential knowledge and a deep understanding of the concepts and theories of Architectural Engineering and Urban Planning.	a1-1-1 Recognize urban & human projects processes and techniques. a1-1-2 Recognize the analysis an urban & human studies of Architecture Urban projects.
	a1-2 Understand the theories, basics and specialized knowledge in the field of Architectural Engineering	a1-2-1 Recognize urban & human studies projects for small scale projects.
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment.	a2-1Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a2-1-1 Describe the complex relationship between cultural trends, prevailing thought, Individual behavior, social ecology and the built environment.
A4- Fundamentals of ethical & legal professional practice in the field of specialization.	a4-1 Recognize ethical and professional responsibility issues arising in the practice of the engineering profession.	a4-1-1Outline current trends of theorization in environment-behavior research. Architecture Engineering
B. Intellectual skills مهارات ذهنية		

B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems.	b1-1 Demonstrate an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.	b1-1-1 Assess the analytical studies that could affect urban & human projects. b1-1-2 Distinguish the urban & human projects.
B3- Link and integrate diverse knowledge to solve professional problems.	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b3-1-1 Maintain searching skills to collect data.
B4- Conduct a research study and/or writing systematic scientific study about Research problem.	b4-1 Write and research plain to conduct applied research.	b4-1-1 Choose the proper approach to address a given query in architectural humanities.
B7-Take professional decisions in different professional practical contexts.	b7-1 Acquire decision making capabilities in different situation when facing problems related to Architectural Engineering and Urban Planning.	b7-1-1 Judge upon the most appropriate solution to a given design problem, on the basisof specific research, and in the light of relevant psychological and sociological Knowledge.
C. Professional and practical skills مهارات تطبيقية ومهنية		
C1- Master the basic as well as the latest professional skills in the field of specialization.	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1 Design evaluation and The urban & human projects criticism. c1-1-2 Prepare the urban & human projects program.
D. General and transferrable skills مهارات عامة		
D1- Communicate effectively using all methods.	d1-1Communicate effectively with the scientific community, research team and technocrats involved in multinational companies in the related fields to Architectural Engineering and Urban Planning.	d1-1-1 Acquire social leadership skills.

D5- Use different sources to obtain knowledge and information.	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-Prepare text- book to collect the data that he needs.
D6- Lead a team in familiar professional context	d6-1 Practice team working, and lead teams in specified professional jobs.	d6-1-1work in groups to assess the ability to creatively solve problems

4- Course Contents

Topic	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*
		Lec.	**Tut.**	**Lab.**	
1. Revision on the undergraduate materials related to **Architectural Engineering**	12	12	--	--	a1-1-1, a1-1-2, 1, b1-1-1
- INTRODUCATION: 1. Introduction. 2. Objectives of the urban & human studies. 3. The need/ purpose of urban & human studies.	12	12	--	--	a4-1-1, a1-2-1, b1-1-1, b1-1-2, c1-1-1
Basic Definitions. 1.Human Needs. 2. Human Behavior.	12	12	--	--	a1-1-1, a2-1-1, a4-1-1, b1-1-2, d1-1-1
Historical roots of urban & human studies .	12	12	--	--	a1-1-1, a1-1-2, b1-1-1, d5-1-1
Analytical studies for urban & human projects. -The factors influencing the urban & human projects.	12	12	--	--	a2-1-1, a4-1-1, b3-1-1, d5-1-1
Apply urban & human studies in medium scale projects (Neighborhoods, housingdistricts, Old & Historical areas… etc.) -Seminar/ Presentation of urban & human projects exercises.	12	12	--	--	a2-1-1, a4-1-1, b4-1-1, b7-1-1, c1-1-1, c1-1-2, d1-1-1, d5-1-1, d6-1-1
Final submission of the exercise.	18	18	--	--	a4-1-1, b4-1-1, b7-1-1, c1-1-1, , d1-1-1, d5-1-1,
Total	90	90	-	--	

5- Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contribute in achieving	A1:(a1-1), (a1-2) A2:(a2-1), A4(a4-1)	B1:(b1-1),(b1-2) B3(b3-1) B4(b4-1) B7(b7-1)	C1:(c1-1),(c1-2), C3:(c3-1) (c3-2)	D1(d1-1) D5(d5-1) D6(d6-1)

6- Course Subject Area:

A	B	C	D	E	F	G	
Humanities and Social Science	**Mathematics and Basic Sciences**	**Basic Engineering Science**	**Applied Engineering And Design**	**Computer Applications and ICT**	**Projects and practice**	**Disccretionry subjects**	**Total**
70%	**---**	**---**	**----**	**20%**	**10%**		**100 %**

7- Course Topics.

Topic No.	Topic	Weeks
1st	Revision on the undergraduate materials related to Architectural Engineering	1-4
2nd	- INTRODUCATION:	5-8
3rd	Basic Definitions.	9-12
4th	Historical roots of urban & human studies .	13-16
5th	Analytical studies for urban & human projects.	17-19
6th	Apply urban & human studies in medium scale projects	20-23
7th	Final submission of the exercise.	24-30

8- ILOs Matrix Topics

Course topics	1st	2nd	3rd	4th	5th	6th	7th
Course ILOs	**Knowledge & Understanding**						
a1-1-1 Recognize urban & human projects processes and techniques.	x		x	x			
a1-1-2 Recognize the analysis an urban & human studies of Architecture Urban projects.	x			x			
a4-1-1 Outline current trends of theorization in environment-behavior research. Architecture Engineering		x	x		x	x	x
a1-2-1 Recognize urban & human studies projects for small scale projects.		x	x				
a2-1-1Describe the complex relationship between cultural trends, prevailing thought, Individual behavior, social ecology and the built environment.					x	x	
Course ILOs	**Intellectual skills**						
b1-1-1 Assess the analytical studies that could affect urban & human projects.	X	X		X			
b1-1-2 Distinguish the urban & human projects.		X	X				

b3-1-1 Maintain searching skills to collect data.					X		
b4-1-1 Choose the proper approach to address a given query in architectural humanities.						X	X
b7-1-1 Judge upon the most appropriate solution to a given design problem, on the basis of specific research, and in the light of relevant psychological and sociological Knowledge.						X	X
Course ILOs	**Professional and practical skills**						
c1-1-1 Design evaluation and The urban & human projects criticism.		X					X
c1-1-2 Prepare the urban & human projects program.						X	
Course ILOs	**General and transferrable skills**						
d1-1-1 Acquire social leadership skills.			X			X	X
d5-1-1 Prepare text- book to collect the data that he needs.				X		X	X
d6-1-1work in groups to assess the ability to creatively solve problems						X	

9- Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	**a1-1-1**	X	X	X					X					
	a1-1-2	X	X											
	a4-1-1	X		X			X				X			
	a1-2-1	X												
	a2-1-1		X						X					
Intellectual Skills	**b1-1-1**	X												
	b1-1-2	X		X			X							
	b3-1-1	X	X									X		
	b4-1-1	X				X								
	b7-1-1	X	X											
Professional Skills	**c1-1-1**		X	X					X					
	c2-1-1	X	X				X							
General Skills	**d1-1-1**	X	X	X										

	d5-1-1	X				X					X			
	d6-1-1	X	X											

10- Assessment

9.1 Assessment Methods

Final Written Examination : to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

9.2 Assessment Schedule and Grades Distribution

Assessment Method	Percentage	week
Final Examination	100	31
Total	100%	

11- Facilities required for teaching and learning

- video projector – Slide projector – data show

A. laboratory Usage:

Students are expected to prepare and conduct some computer simulation assignments using digital systems simulators on general computer labs.

B. Library Usage:

Students should be encouraged to use library technical resources in the preparation of laboratory reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12- List of references:

- Chance, Helena. "Ecological humanism and the design of corporate environments." (2017).
- Art & Build: A Humanistic Approach to Architecture, Art & Build, Images Publishing, (2009)
- Fattahi, Kaveh, and Hidetsugu Kobayashi. "City imaging after Kevin Lynch." *2009 WRI World Congress on Computer Science and Information Engineering*. Vol. 1. IEEE, 2009.
- على الحيدرى وأخرون – التصميم الحضرى – الهيكل والدراسات الميدانية – مكتبة مدبولى – 2002.

Recommended books

- هشام جلال أبوسعدة ، بدر عبد العزيز، مهنة عمارة البيئة – مطابع دار العلم العربى للطباعة– الطبعة الأولى– 2002.

13- Program Coordination Committee:

Course Coordinator: Dr. Marwa Moustafa

Program Coordinator Dr. Basma Nashaat El-Mowafy

Head of the Department: Prof. Dr. Ashraf Abd-Elfatah El-Mokadem

Date: 10-2020

HUM 622
Research Methodology (2)

Course Specification

Program on which the course is given	Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Research Methodology (2)	**Code Symbol**: HUM 622	
Lecture	3 hours	
Tutorial / Laboratory	------	
Total	3 hours	Bylaw 2000

B- Professional Information

1- Course Aims:

This course aims to Study of Research Methodology to Produce a Research Plot According to The Scientific Sequence and How to Make Its Reasoning and Teach Results Across a Group of Successive Steps, The Research Methodology of Planning and Urban Design Studies, Systems of Preparing Questionnaires and Systems of Urban Surveys, Social, Economical, Environmental, Analysis of Information With The Aim of Reaching Results That Would Help in Reaching The Correct Decision. .

2- Course Objectives

1. Enhance the student's understanding about the scientific research methodology.
2. Supply the student with information about the different data collection mechanisms.
3. Differnce between the approaches of data analysis, and different inference mechanisms.
4. Train student on conducting scientific research, preparing questionnaires and systems of urban surveys, social, economical, environmental, analysis of information

3-Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة**	a1-1 Demonstrate sufficient essential knowledge and a deep understanding of the concepts and theories of Architectural Engineering and Urban Planning.	a1-1-1 Identify the different parts of the scientific dissertation. a1-1-2 Define the differences between the Induction and Deduction inference methodology a1-1-3 Describe a mini-research based on the valid scientific research methodology. a1-1-4 Identify the most common scientific writing faults. a1-1-5 Outline short essays in certain topics of the course. a1-1-6 State inferences to confirm their validity. a1-1-7 Show the most suitable data collection mechanism according to the dissertation field. a1-1-8 Recognize necessary practical and professional skills concerning to scientific methodology. a1-1-9 Define types of questionnaires.

A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a2-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a2-1-1 Recognize the interaction between his/her research and surrounding environment.
A3- Main scientific advances in the field of specialization. **التطورات العلمية في مجال التخصص**	a3-1 Report new advances in analysis and design methodologies in Architec tural Engineering and Urban Planning and its application paradigms.	a3-1-1 Identify the Potential applications of his/her research and its value in relation to contemporary research issues. a3-1-2 Describe what the contribution of his/her thesis is and relate it to the current state-of-the-art within one or several international knowledge communities within the discipline.
A6- Basics and ethics of scientific research **أساسيات وأخلاقيات البحث العلمي**	a6-1 Recognize Basics and ethics of scientific research.	a6-1-1 Recognize the different styles of citation
B. Intellectual skills		
B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems. **تحليل و تقييم المعلومات في مجال التخصص و القياس عليها لحل المشاكل**	b1-1 Demonstrate an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.	b1-1-1 Demonstrate algorithms and flowcharts approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning problems.
B3- Link and integrate diverse knowledge to solve professional problems. **الربط بين المعارف المختلفة لحل المشاكل المهنية**	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b3-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.
B6- Plan for performance development in the field of practice . **التخطيط لتطوير الأداء في مجال التخصص**	b6-1 Plane to guide progress in his / her professional career.	b6-1-1 Demonstrate an ability to identify his/her need of further knowledge and to take responsibility for developing such knowledge through a

		plan to guide progress in his / her professional career.. b6-1-2 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1 Utilize competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.
C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.2-1 Write and evaluate a professional report on specialized related to Architectural Engineering and Urban Planning .	c2-1-1 Prepare theses and report on research projects in a scientifically sound way. c2-1-2 Conduct a focused review of the relevant literature and create appropriate conceptual framework,
C3- Evaluate means and tools available in the field of practice. **تقييم الطرق و الأدوات القائمة في مجال التخصص**	c3-1 Evaluate methods and tools reported in a specified published articles and researches related to Architectural Engineering and Urban Planning field.	c3-1-1 Utilize various methodology.
D. General and transferrable skills		
D1- Communicate effectively using all methods. التواصل الفعال بأنواعه المختلفة	d1-1Communicate effectively with the scientific community, research team and technocrats involved in multinational companies in the related fields to Architectural Engineering and Urban Planning.	d1-1-1 Communicate research ideas and their appropriate theoretical and methodological issues effectively and efficiently, d1-1-2 Acquire the ability to communicate results both verbally and in writing.

D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 Employ the information technology skills to serve his / her career development.	d2-1-1 Acquire the information technology skills to serve his / her career development.
D3- Apply self evaluation and define personal educational needs. **التقييم الذاتي وتحديد احتياجاته التعليمة الشخصية**	d3-1 Apply self evaluation and specify his educational needs related to Architectural Engineering and Urban Planning aspects.	d3-1-1 Manage own knowledge needs with respect to the planned project. d3-1-2 Acquire new knowledge in the specific field in which the MS.c thesis is to be written.
D5- Use different sources to obtain knowledge and information. **استخدام المصادر المختلفة للحصول على المعلومات و المعارف**	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1 Work with different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .
D6- Lead a team in familiar professional context **العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة**	d6-1 Practice team working, and lead teams in specified professional jobs.	d6-1-1 Work in a team and Social leadership skills.
D8- Learn independently and seek continuous learning. **التعلم الذاتي و المستمر**	d8-1 Seek continuous learning through continuous education, organizing and participating in seminars, workshops, national and international conferences.	d8-1-1 Use of text- book to collect the data that he needs. d8-1-2 Prepare selected parts of the course in oral seminar using available displaying equipments.

4- Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-2	Introduction; what is scientific research, Scientific Research fields.	6	6	--	--	a1-1-1, a1-1-2, c1-1-1, d5-1-1	1
3-4	Scientific thinking and Scientific Research**.**	6	6	--	--	a1-1-1, a1-1-2, c1-1-1	2

5-6	Scientific research phases. Conducting Thesis problem and hypothesis.	6	6	--	--	a1-1-1, a1-1-2, a1-1-3 , b1-1-1 , c1-1-1	3
7-8	Data collection mechanisms.	6	6	--	--	a1-1-3, a1-1-7. a1-1-9, a3-1-1, b1-1-1 , c1-1-1, d3-1-1,d5-1-1	4
9-10	Inferences methods.	6	6	--	--	a1-1-3, a1-1-6 , a1-1-7 . a1-1-8, a3-1-1, b1-1-1 , b6-1-2,c1-1-1, c3-1-1, d1-1-1, d2-2-1, d3-1-1, d3-1-2	5
11-12	Scientific writing rules	6	6	--	--	a1-1-4 , a1-1-5, a1-1-7 ,b6-1-2, b1-1-1 , b6-1-2,c1-1-1, c3-1-1, d1-1-1	6
13-14	Scientific writing faults	6	6	--	--	a1-1-4 , a1-1-5, a1-1-7 ,b6-1-2, b1-1-1 , b6-1-2,c1-1-1, c3-1-1, d1-1-1	7
15-16	Groups Discussion	9	9	--	--	a1-1-3, a1-1-6, a2-1-1 , a3-1-2 ,b1-1-1 , b3-1-1, b6-1-1 , c1-1-1, d2-1-1, d8-1-1	8
17-19	How to make an academic presentation	6	6	--	--	a1-1-5, a3-1-2, b1-1-1, b3-1-1, b6-1-1, c2-1-1, c2-1-2, d1-1-2, d5-1-1, d8-1-1	9
20-22	Groups Discussion	6	6	--	--	a1-1-3, a1-1-8, a3-1-2, b1-1-1, b3-1-1, b6-1-1, d6-1-1, d8-1-1, d8-1-2	10
23-24	Mini-thesis preparation	6	6	--	--	a1-1-5, a1-1-9, a6-1-1, b3-1-1, b6-1-1, c2-1-1, d2-1-1, d3-1-1, d5-1-1	11
25-26	Groups Discussion	9	9	--	--	a2-1-1, a1-1-9, a2-1-1, a6-1-1 b3-1-1, d6-1-1, d8-1-2	12
27-30	Mini- thesis Presentation	12	12	--	--	a1-1-5, a6-1-1, b3-1-1, c2-1-1	13
Total		90	90	--	--		

5- Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contributes in achieving.	A1 (a1-1), A2 (a2-1), A3 (a3-1, A6(a6-1)	B1 (b1-1), B3 (b3-1), B6 (b6-1)	C1 (c1-1), C2 (c2-1), C3 (c3-1)	D1 (d1-1), D2 (d2-1), D3 (d3-1) D5 (d5-1), D6 (d6-1), D8 (d8-1)

6- Course Subject Area:

A	B	C	D	E	F	G	
Humanities and Social Science	**Mathematics and Basic Sciences**	**Basic Engineering Science**	**Applied Engineering And Design**	**Computer Applications and ICT**	**Projects and practice**	**Disccretionry subjects**	**Total**
---	---	30%	70%	-	-		100 %

7 - Course Topics.

Topic No.	Topic	Weeks
1st	Introduction; what is scientific research, Scientific Research fields.	1-2
2nd	Scientific thinking and Scientific Research.	3-4
3rd	Scientific research phases. Conducting Thesis problem and hypothesis .	5-6
4th	Data collection mechanisms .	7-8
5th	Inferences methods .	9-10
6th	Scientific writing rules	11-12
7th	Scientific writing faults	13-14
8th	Groups Discussion	15-16
9th	How to make an academic presentation	17-19
10th	Groups Discussion	20-22

11th	Mini-thesis preparation	23-24
12th	Groups Discussion	25-26
13th	Mini- thesis Presentation	27-30

8- ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	**9th**	**10th**	**11th**	12th	13th
Course ILOs	**Knowledge & Understanding**												
a1-1-1 Identify the different parts of the scientific dissertation.	x	x	x										
a1-1-2 Define the differences between the Induction and Deduction inference methodology.	x	x	x										
a1-1-3 Describe a mini-research based on the valid scientific research methodology.			x	x	x			x		x			
a1-1-4 Identify the most common scientific writing faults.						x	x						
a1-1-5 Outline short essays in certain topics of the course.						x	x		x		x		x
a1-1-6 State inferences to confirm their validity.					x			x					
a1-1-7 Show the most suitable data collection mechanism according to the dissertation field.				x	x	x	x						
a1-1-8 Recognize necessary practical and professional skills concerning to scientific methodology.					x					x			
a1-1-9 Define types of questionnaires.				x							x	x	
a2-1-1 Recognize the interaction between his/her research and								x				x	

surrounding environment.													
a3-1-1 Identify the Potential applications of his/her research and its value in relation to contemporary research issues.				x	x								
a3-1-2 Describe what the contribution of his/her thesis is and relate it to the current state-of-the-art within one or several international knowledge communities within the discipline.								x	x	x			
a6-1-1 Recognize the different styles of citation									x		x		x
Course ILOs	**Intellectual Skills**												
b1-1-1 Demonstrate algorithms and flowcharts approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning problems.			x	x	x	x	x	x	x	x			
b3-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.								x	x	x	x	x	x

b6-1-1 Demonstrate an ability to identify his/her need of further knowledge and to take responsibility for developing such knowledge through a plan to guide progress in his / her professional career.								x	x	x	x		
b6-1-2 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.					x	x	x						
Course ILOs	**Professional Skill**												
c1-1-1 Utilize competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.	x	x	x	x	x	x	x	x					
c2-1-1 Prepare theses and report on research projects in a scientifically sound way.									x		x		x
c2-1-2 Conduct a focused review of the relevant literature and create appropriate conceptual framework,									x				

c3-1-1 Utilize among various methodology.					x	x	x						
Course ILOs	**General Skills**												
d1-1-1 Communicate research ideas and their appropriate theoretical and methodological issues effectively and efficiently,					x	x	x						
d1-1-2 Acquire the ability to communicate results both verbally and in writing.									x				
d2-1-1 Acquire the information technology skills to serve his / her career development.					x			x			x		
d3-1-1 Manage own knowledge needs with respect to the planned project.				x	x						x		
d3-1-2 Acquire new knowledge in the specific field in which the MS.c thesis is to be written.					x				x				
d5-1-1 Work wih different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .	x			x					x		x		
d6-1-1 Work in a team and Social leadership skills.										x		x	
d8-1-1 Use of text-book to collect the								x	x	x			

data that he needs.													
d8-1-2 Prepare selected parts of the course in oral seminar using available displaying equipments.										x		x	

9- Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-1-1	x				x								
	a1-1-2	x				x								
	a1-1-3	x				x								
	a1-1-4	x				x								
	a1-1-5	x				x								
	a1-1-6	x				x								
	a1-1-7	x				x								
	a1-1-8	x				x								
	a1-1-9	x				x								
	a2-1-1		x	x					x					
	a3-1-1		x	x					x					
	a3-1-2		x	x					x					
	a6-1-1		x	x					x					
Intellectual Skills	b1-1-1					x								
	b3-1-1					x								
	b6-1-1		x	x					x					
	b6-1-2		x	x					x					
Professional Skills	c1-1-1					x			x					
	c2-1-1		x	x					x					
	c2-1-2								x					
	c3-1-1								x					
General Skills	d1-1-1								x		x			

	d1-1-2								x		x			
	d2-1-1								x					
	d3-1-1								x					
	d3-1-2								x		x			
	d5-1-1								x					
	d6-1-1								x		x			
	d8-1-1								x		x			
	d8-1-2								x		x			

10- Assessment

10.1 Assessment Methods

Final Written Examination : to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

10.2 Assessment Schedule and Grades Distribution

Assessment Method	Percentage	week
Final Examination	100	31
Total	100%	

11- Facilities required for teaching and learning

- **Laboratory Usage:** None.

- **Library Usage:**

Students should be encouraged to use library technical resources in the preparation of reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12- List of References:

- **Course notes**

Presentations on research methodology and books.

- ***Essential Books (Text Books):***

- Rix, Elizabeth F., Shawn Wilson, Norm Sheehan, and Nicole Tujague. "Indigenist and decolonizing research methodology." (2019).
- Flick, Uwe. *Introducing research methodology: A beginner's guide to doing a* research *project*. Sage, 2015.
- محمود حسين الوادي, علي فلاح الزعبي ، أساليب البحث العلمي: مدخل منهجي تطبيقي المنهل، 2011
- د- أحمد الخطيب ، منهج البحث العلمي بين الإتباع والإبداع، مكتبة الأنجلو المصرية، القاهرة،2009

- ***Periodicals, Web Sites, etc.***

- *The Craft of Research, Fourth Edition (Chicago Guides to Writing, Editing, and Publishing) Fourth Edition.*. Publisher: University of Chicago Press; Fourth edition (October 19, 2016)
- *Qualitative Research: A Guide to Design and Implementation, 4th Edition 4th Edition.*. Publisher: John Wiley & Sons; 4 edition (August 24, 2015)

13- Program Coordination Committee:

Course Coordinator:	Dr. Osama Abo Alaneen
Program Coordinator:	Dr. Basma Nashaat El-Mowafy
Head of the Department:	Prof. Dr. Ashraf Abd-Elfatah El-Mokadem

Date: 10-2020

Courses Specification For Master of Science Degree in Architecture and Urban Planning

ARC 611 Feasibility Studies and Project Development

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Contemporary Architectural Thought	**Code Symbol**: ARC 611	
Lecture	3 hours	
Tutorial / Laboratory	--	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

This course aims to define concepts, methods and indicators of feasibility study and to develop the participant's capabilities in feasibility study in different areas. By end of this course, participants should be able to raise their skills in market analysis, technical and economic analysis. The course emphasizes the importance of feasibility studies making design decisions Economics of Land, Initial costs and running costs.

2. Course Objectives

By the end of the course the students will be able to:

1. Understand principles of urban management
2. Relate and connect socio-political, socio-economic issues to urbanism Handle process and document data (infer and predict)
3. Share ideas and communicate with others - Understand infrastructure networks and services.

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **المتعلقة الأساسيات و النظريات ذات المجالات في وكذا التعلم بمجال العلاقة**	a-1-1. Develop understanding the standard specifications in buildings	a1-1-1 Recognize the Legal procedures in contracts a1-1-2 Identify preliminary and final feasibility studies of project development.
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **الممارسة بين المتبادل التأثير البيئة علي وانعكاسها المهنية**	a-2-1 Develop basic knowledge on types of contracts, and types of contracting companies.	a2-1-1 Investigate the factors affecting land evaluation and Housing markets a2-1-2 Identify design decisions economics of land, initial costs and running costs.
B. Intellectual skills		
B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems. **تحليل و تقييم المعلومات في مجال التخصص و القياس عليها لحل المشاكل**	b1-1 Analyze the factors affecting land evaluation and Housing markets	b1-1-1 Analyze housing markets b1-1-2 Combine the financial structure of urban projects and the execution timetables
B6- Plan for performance development in the field of practice . **التخطيط لتطوير الأداء في مجال التخصص**	b6-1. Studying Factors affecting land evaluation and analysis of the housing market	b6-1-1 Determine the impact of the economic feasibility studies
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the	c1-1 Demonstrate basic organizational and project management skills.	c1-1-1 Identify the scopes of influence of urban projects.

field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**		
C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.2-1 Write and evaluate a professional report on specialized related to Urban Planning .	c2-1-1 Sketch appropriate conceptual framework.
D. General and transferrable skills		
D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 contracts evaluation and the economic components of urban projects.	d2-1-1 Use economic and static's tools for evaluating the projects. d-2-1-2 Use contemporary computer software in analysis.
D5- Use diferent sources to obtain knowledge and information. **استخدام المصادر المختلفة للحصول على المعلومات و المعارف**	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-3	Introduction to the concept of feasibility studies for urban projects	9	6	-	3	a1-2-1, a2-1-2, c1-1-1, d5-1-1	1
4-9	Types of contracts	18	12	-	6	a1-2-1, a2-1-2, b 6-1-1, c1-1-1	2
10-16	Standard specifications in buildings	21	14	-	7	a1-1-1, a1-1-2, b1-1-1, c2-1-1	3
17-19	Preliminary and final feasibility studies of urban projects	9	6	-	3	A2-1-1, a2-1-2, b1-1-2, b6-1-1, c2-1-1, d2-1-1	4
17-18	Factors affecting land evaluation and analysis of the housing market	9	6	-	3	a1-2-1, a2-1-2, c1-1-1,	5

						d5-1-1	
19-20	Factors affecting land evaluation and analysis of the housing market	9	6	-	3	a1-2-1, a2-1-2, b 6-1-1, d12-1-1	6
20-24	Financial structures of projects and execution timetables and cash flows	15	10	-	5	a1-1-1, a1-1-2, b1-1-1, d2-1-2	7
25-30	Case studies	18	12	-	6	A2-1-1, a2-1-2, b1-1-2, b6-1-1, c2-1-1, d5-1-1	8
	Total	90	60	-	30		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contributes in achieving.	A1 (a1-2), A2 (a2-1)	B1 (b1-1), B6 (b6-1)	C1 (c1-1), C2 (c2-1)	D2 (d2-1), D5 (d5-1)

6. Course Subject Area:

A	**B**	**C**	**D**	**E**	**F**	**G**	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
30%	---	**60%**	---	**5%**	---	**5%**	**100%**

7. Course Topics.

Topic No.	Topic	Weeks
1st	Introduction to the concept of feasibility studies for urban projects	1-3
2nd	Types of contracts	4-9
3rd	Standard specifications in buildings	10-16

4th	Preliminary and final feasibility studies of urban projects	17-19
5th	Factors affecting land evaluation and analysis of the housing market	17-18
6th	Factors affecting land evaluation and analysis of the housing market	19-20
7th	Financial structures of projects and execution timetables and cash flows	20-24
8th	Case studies	25-30

8. ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**
Course ILOs	**Knowledge & Understanding**							
a1-1-1 Recognize the Legal procedures in contracts	x	x	x					
a1-1-2 Identify preliminary and final feasibility studies of project development.	x	x	x					
a2-1-1 Investigate the factors affecting land evaluation and Housing markets					x	x	x	x
a2-1-2 Identify design decisions economics of land, initial costs and running costs.						x	x	
Course ILOs	**Intellectual Skills**							
b1-1-1 Analyze housing markets			x	x	x	x	x	x
b1-1-2 Combine the financial structure of urban projects and the execution timetables								
b6-1-1 Identify the impact of the economic feasibility studies					x	x	x	x
Course ILOs	**Professional Skill**							
c1-1-1 Identify the scopes of influence of urban projects.	x	x	x	x	x	x	x	x
c2-1-1 Sketch appropriate conceptual framework.								
Course ILOs	**General Skills**							
d2-1-1 Use economic and static's tools for evaluating the projects.					x	x	x	x
d-2-1-2 Use contemporary computer software in analysis.	x							

d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .		x	x					

9. Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method											
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-1-1	x	x											
	a1-1-2	x	x											
	a2-1-1	x	x											
	a2-1-2	x	x											
Intellectual Skills	b1-1-1	x												
	b1-1-2	x												
	b6-1-1	x	x	x										
Professional Skills	c1-1-1	x												
	c2-1-1	x	x	x										
General Skills	d2-1-1			x					x					
	d2-1-2			x					x					
	d5-1-1		x	x					x					

10. Assessment

- **Assessment Methods**

Final Written Examination — to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	32
Total	100%	

11- Facilities required for teaching and learning

1. Appropriate teaching class accommodations to monitor 2d and 3d modeling. These classes should include presentation board and data show
2. Library technical resources in the preparation of project research reports and oral presentation.

12 - List of references

6.1 Course notes

6.2 Essential books (text books)

- Mukherjee, Momin, and Sahadev Roy. "Feasibility studies and important aspect of project management." International Journal of Advanced Engineering and Management 2, no. 4 (2017): 98-100.
- Tim M. Havard, Argus Developer in Practice: Real Estate Development Modeling in the Real World,2013
- William O'Toole,Events Feasibility and Development.2010.

13.Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**

Signature :

Date:

ARC 634

Architecture and the Future

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Architecture and The Future	**Code Symbol**: ARC 634	
Lecture	3 hours	
Tutorial / Laboratory	-- hour	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

The aims of this course are to provide students with the concept of architectural beauty and the concept of architectural beauty in the postmodern approach in architecture. Also, the course aims to study the model of disintegration, the new concept of space and time and study examples and finally applied studies for future architecture.

2. Course Objectives

By the end of the course the students will be able to:

- Demonstrate a full knowledge of Culture transformations of societies.
- Clarify the relation between the architectural concept and the philosophy of design and construction though different ages
- Study the effects of geographical, climatic, social, physical, cultural, geological and religious influences on the different

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following

Intended **Learning Outcomes (ILOs)**:

Field	Programme ILOs that the course contribute in achieving	Course ILOs
Knowledge&Understanding	A3- Main scientific advances in the field of specialization. .	a3-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment. a3-2 Identify new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.
	A5- Basics and principles of quality in professional practice in the field of specialization.	a5-1 Identify Quality Assurance concepts of Architectural Engineering and Urban Planning.
Intellectual skills	B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems.	b1-1 Define an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.
	B3- Link and integrate diverse knowledge to solve professional problems.	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.
	B7- Take professional decisions in different professional practical contexts.	b7-1 Practice decision making capabilities in different situation when facing problems related to Architectural Engineering and Urban Planning .
Professional and practical skills	C2- Write and evaluate technical and professional reports.	c.2-1 Prepare a professional report on specialized related to Architectural Engineering and Urban Planning .
General skills	D3- Apply self evaluation and define personal educational needs.	d3-1 Prepare self evaluation and specify his educational needs related to Architectural Engineering and Urban Planning aspects.

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		

1-3	Introduction	9	6	3	--	a-5-1, b-7-1,	1
4-6	The social ,technological and Culture transformations	9	6	3	--	a-3-2, c-2-1.	2
7-9	New architecture trends	9	6	3	--	c-2-1, d-3-1.	3
10-13	New approaches to materials and structure	12	8	4	--	a-3-1.	4
14-16	The ethics and aesthetics of sustainability,	9	6	3	--	b-3-1, d-3-1.	5
17-18	Symbolism and semiotics in architecture	6	4	2	--	b-1-1, c-2-1.	6
19-20	Expressionism in architecture	6	4	2	--	d-3-1.	7
21- 25	Architectural design in the digital	15	10	5	--	a-3-2.	8
26-30	Discussion and presentations	15	10	5	--	a-3-1.	9
	Total	90	60	30	--		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Program Academic Standards that the course contributes in achieving.	A-3, A-5	B-1, B-3, B-7	C-2	D-3

6. Course Subject Area:

A	**B**	**C**	**D**	**E**	**F**	**G**	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
30%	---	**60%**	---	**5%**	---	**5%**	**100%**

7. Course Topics.

Topic No.	Topic	Weeks

1st	Introduction	1-3
2nd	The social ,technological and Culture transformations	4-6
3rd	New architecture trends	7-9
4th	New approaches to materials and structure	10-13
5th	The ethics and aesthetics of sustainability,	14-16
6th	Symbolism and semiotics in architecture	17-18
7th	Expressionism in architecture	19-20
8th	Architectural design in the digital	21- 25
9th	Discussion and presentations	26-30

8. ILOs Matrix Topics

Course Intended Learning Outcomes)ILOs(		Course topics								
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th
Knowledge & Understanding	a3-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment..	x								
	a3-2 Identify new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.	x			x					
	a5-1 Explain Quality Assurance concepts of Architectural Engineering and Urban Planning.	x				x	x	x		
Intellectual Skills	b1-1 Define an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.	x	x	x		x	x	x		
	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	x	x			x	x	x		
	b7-1 Practice decision making capabilities in different situation when facing problems related to Architectural Engineering and Urban Planning .		x		x			x		

Course Intended Learning Outcomes)ILOs(		Course topics								
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th
Professional Skill	c.2-1 Prepare a professional report on specialized related to Architectural Engineering and Urban Planning .		x	x			x		x	x
General Skills	d3-1 Prepare self evaluation and specify his educational needs related to Architectural Engineering and Urban Planning aspects.		x	x					x	x

9. Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a-3-1	x	x				x							
	a-3-2	x	x				x							
	a-5-1	x	x				x							
Intellectual Skills	b-1-1	x					x							
	b-3-1	x					x							
	b-7-1	x	x	x			x							
Professional Skills	c-2-1	x				x		x	x	x		x		x
General Skills	d-3-1			x		x	x		x	x	x	x		x

10. Assessment

- **Assessment Methods**

Final Written Examination — to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	31
Total	100%	

11. Facilities required for teaching and learning

- **Laboratory Usage:** None.

- **Library Usage:**

Students should be encouraged to use library technical resources in the preparation of reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12. List of References:

Course and Lab Notes:

No lectures and Labs notes.

Essential Books (Text Books):

1. Zheng, Zibin, Shaoan Xie, Hongning Dai, Xiangping Chen, and Huaimin Wang. "An overview of blockchain technology: Architecture, consensus, and future trends." In *2017 IEEE international congress on big data (BigData congress)*, pp. 557-564. IEEE, 2017.
2. AboMoslim, S & Russell, A. 2005. Evaluating Innovative Design And Construction Technologies For Super Hi-Rise Buildings On An International Basis. 6th Construction Specialty Conference, Toronto, Ontario, Canada. June 2-4, 2005.
3. Wahba, Sh. 2007. Value Of Architecture Today: Architecture Between Culture & Commerce A Reading In The Contemporary Architecture. Al-Azhar Engineering Ninth International Conference. April 12 - 14, 2007. Code A 06.
4. Mahgoub, Y. 2006 Architecture and the Expression of Cultural Identity in Kuwait, Paper presented at the 1st International Symposium on Environment, Behavior and Society, People in Place in People, February 9-11, 2006, Sydney, Australia.

Periodicals, Web Sites, etc.

1. http://www.archrecord.com/
2. http://www.worldarchitecturenews.com

13. Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah Elmokadem**

Signature :

Date:

ARC 635

Specialized Studies

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Specialized Studies	**Code Symbol**: ARC 635	
Lecture	3 hours	
Tutorial / Laboratory	-- hour	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

The main purpose of the Independent Study program is to allow students to do specific researches that do not fit within the framework of regular course offerings. It gives them the opportunity to explore in depth an area appropriate to the curriculum built around their own interests. The chosen topics should be related to any of the different fields in Architecture and Urban Planning.

2. Course Objectives

By the end of the course the students will be able to:

- Develop their knowledge in different subjects by attending numerous lectures.
- Demonstrate a full understanding of specified topics.
- Enhance their online research skills and their oral presentations.
- Work effectively in groups.

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a2-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a2-1-1 Recognize the interaction between his/her research and surrounding environment. a2-1-2 Show awareness of political and cultural issues and their implications on architecture
A3- Main scientific advances in the field of specialization. **التطورات العلمية في مجال التخصص**	a3-1 Report new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.	a3-1-1 Outline new advances in analysis and methodologies of Architectural Engineering and Urban Planning.
A6- Basics and ethics of scientific research **أساسيات وأخلاقيات البحث العلمي**	a6-1 Recognize Basics and ethics of scientific research.	a6-1-1 Recognize the different styles of citation
B. Intellectual skills		
B3- Link and integrate diverse knowledge to solve professional problems. **الربط بين المعارف المختلفة لحل المشاكل المهنية**	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b3-1-1 Analyze specific topics using defined aspects and get conclusions
B4- Conduct a research study and/or writing systematic scientific study about Research problem. **إجراء دراسة بحثيةأو كتابة دراسة علمية منهجية حول مشكلة بحثية**	b4-1 Write a research plain to conduct applied research.	b4-1-1 Practice different researches within groups
B6- Plan for performance development in the field of practice. **التخطيط لتطوير الأداء في مجال التخصص**	b6-1 Plane to guide progress in his / her professional career.	b6-1-1 Assess the relevance of the findings with regard to practical implications, and identify the need for further knowledge within

		the field.
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1 Apply competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.
C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.2-1 Write and evaluate a professional report on specialized issue related to Architectural Engineering and Urban Planning.	c2-1-1 Conduct a focused review of different architecture styles
D. General and transferrable skills		
D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 Employ the information technology skills to serve his / her career development.	d2-1-1 Use the information technology skills to deal with internships, fieldwork, and independent research
D5- Use different sources to obtain knowledge and information. **استخدام المصادر المختلفة للحصول على المعلومات و المعارف**	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .
D6- Lead a team in familiar professional context **العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة**	d6-1 Practice team working, and lead teams in specified professional jobs.	d6-1-1 Work in a team and Social leadership skills.
D8- Learn independently and seek continuous learning. **التعلم الذاتي و المستمر**	d8-1 Seek continuous learning through continuous education, organizing and participating in seminars, workshops, national and international conferences.	d8-1-1 Use of text- book to collect the data that he needs. d8-1-2 Acquire selected parts of the course in oral seminar using available displaying equipment.

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs.*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-3	Introduction	12	8	4	--	a2-1-1, a2-1-2 ,c1-1-1, d5-1-1, d6-1-1	1
4-6	Lectures of developing research skills	12	8	4	--	a2-1-2, a3-1-1,c1-1-1,d5-1-1	2
7-9	Open discussions of different topics	12	8	4	--	a3-1-1,b3-1-1, b4-1-1 ,c1-1-1	3
10-13	Individual papers of chosen topics	12	8	4	--	a2-1-1 ,b4-1-1, c2-1-1, d5-1-1	4
14-16	Presentations and discussion of chosen research topics	6	4	2	--	b4-1-1, b6-1-1, c1-1-1, c2-1-1, d2-1-1, d8-1-1	5
17-18	Group works and seminars	6	4	2	--	a6-1-1, b4-1-1, b6-1-1, c1-1-1, d2-1-1, d5-1-1,d8-1-1	6
19-20	Creating seminar group meetings to discuss leading topics and questions	6	4	2	--	a6-1-1, b6-1-1, c2-1-1, d2-1-1, d8-1-1	7
21- 24	Seminar groups to present research problem and proposed solutions	6	4	2	--	a6-1-1, b4-1-1, b6-1-1, c1-1-1, c2-1-1, d2-1-1, d8-1-1	8
25-28	Discussion and final presentations	12	8	4	--	b3-1-1, c2-1-1, d5-1-1, d6-1-1, d8-1-1, d8-1-2	9
	Total	84	52	32	--		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
An Academic Standards that the course contributes in achieving.	A2 (a2-1), A3 (a3-1), A6(a6-1)	B3 (b3-1),B4(b4-1), B6 (b6-1)	C1 (c1-1), C2 (c2-1)	D2 (d2-1), D5 (d5-1), D6 (d6-1), D8 (d8-1)

6. Course Subject Area:

A	B	C	D	E	F	G	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
30%	---	**60%**	---	**5%**	---	**5%**	**100%**

7. Course Topics.

Topic No.	Topic	Weeks
1st	Introduction	1-3
2nd	Lectures of developing research skills	4-6
3rd	Open discussions of different topics	7-9
4th	Individual papers of chosen topics	10-13
5th	Presentations and discussion of chosen research topics	14-16
6th	Group works and seminars	17-18
7th	Creating seminar group meetings to discuss leading topics and questions	19-20
8th	Seminar groups to present research problem and proposed solutions	21- 24
9th	Discussion and final presentations	25-28

8. ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	**9th**
Course ILOs	**Knowledge & Understanding**								
a2-1-1 Recognize the interaction between his/her research and surrounding environment.	x			x					
a2-1-2 Show awareness of political and cultural issues and their implications on architecture	x	x							
a3-1-1 Outline new advances in analysis and methodologies of Architectural Engineering and Urban Planning.		x	x						
a6-1-1 Recognize the different styles of citation						x	x	x	

Course ILOs	**Intellectual Skills**								
b3-1-1 Analyze specific topics using defined aspects and get conclusions			x						x
b4-1-1 Practice different researches within groups			x	x	x	x		x	
b6-1-1 Assess and argue for the relevance of the findings regarding practical implications and identify the need for further knowledge within the field.					x	x	x	x	
Course ILOs	**Professional Skill**								
c1-1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.	x	x	x		x	x		x	
c2-1-1 Conduct a focused review of different architecture styles				x	x		x	x	x
Course ILOs	**General Skills**								
d2-1-1 Use the information technology skills to serve his / her career development.					x	x	x	x	
d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .	x	x		x		x			x
d6-1-1 Work in a team and Social leadership skills.	x								x
d8-1-1 Use of text- book to collect the data that he needs.					x	x	x	x	x
d8-1-2 Acquire selected parts of the course in oral seminar using available displaying equipment									x

9. Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method											
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self-learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a2-1-1		x							x				
	a2-1-2		x							x				
	a3-1-1		x						x					
	a6-1-1		x						x					
Intellectual Skills	b3-1-1	x												
	b4-1-1	x									x			
	b6-1-1	x	x											
Professional Skills	c1-1-1	x	x						x					
	c2-1-1	x	x	x					x					
General Skills	d2-1-1		x	x										
	d5-1-1		x	x										
	d6-1-1			x							x			
	d8-1-1			x						x				
	d8-1-2			x						x				

10. Assessment

- **Assessment Methods**

Final Written Examination — to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	32
Total	100%	

11. Facilities required for teaching and learning

- **Laboratory Usage:** None.

- **Library Usage:**

Students should be encouraged to use library technical resources in the preparation of reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12. List of References:

Course and Lab Notes:

No lectures and Labs notes.

Essential Books (Text Books):

1-.Ewing and Otto Clemente (2013),Measuring Urban Design (Metrics for Livable Places), Island Press, USA

2- Abo Moslim, S & Russell, A. 2005. Evaluating Innovative Design and Construction Technologies for Super Hi-Rise Buildings on an International Basis. 6th Construction Specialty Conference, Toronto, Ontario, Canada. June 2-4, 2005.

3-Wahba, Sh. (2007). Value of Architecture Today: Architecture Between Culture & Commerce A Reading in The Contemporary Architecture. Al-Azhar Engineering Ninth International Conference. April 12 - 14, 2007. Code A 06.

4-Marcuse, P. (2006). "Tradition in a Global City?" Traditional Dwellings and Settlements Review, Vol. XVII Number.

Periodicals, Web Sites, etc.

3. http://www.archrecord.com/
4. http://www.worldarchitecturenews.com

13. Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah Elmokadem**

Signature :

Date:

ARC 642

Socio-Culture Aspects in Space Design

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Socio-Culture Aspects in Space Design	**Code Symbol**: ARC 642	
Lecture	3 hours	
Tutorial / Laboratory	-- hour	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

This course introduces to an interdisciplinary viewpoint with an emphasis on social issues, and helps in understanding how they can be addressed in architectural terms, And Allows the students to find relationships among the various disciplines and actively investigate Senior Living related issues from diverse perspectives and Critically appraise and form considered judgments about the spatial, aesthetic, technical and social qualities of a Living Environment.

2. Course Objectives

By the end of the course the students will be able to:

- Help students research and investigate Senior Living Environments both through readings and interdisciplinary lectures including architecture and sociology, as well as with direct contact with the user and its social environment.
- Examine the ways in which space is socially constructed
- Introduce students to design standards for people with disabilities
- Understand the principles for design for the elderly
- Students learn to be socially aware and to place the user to the centre of their investigation

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة**	a1-2 Understand the theories, basics and specialized knowledge in the field of Architectural Engineering	a1-2-1 Define a theoretical background with various styles in space design. a1-2-2 Identify different theories of space designs. a1-2-3 Define strong connection between the studies and the latest engineering topics
	a1-3 Understand the theories, basics and specialized knowledge in the field of Urban Planning.	a1-3-1 Outline the user cultural, environmental factors and their impact on the designing process. a1-3-2 State the foundation of the social and culture aspects in space designs
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a2-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a2-1-1 Define awareness of political and cultural issues and their implications on architecture
A3- Main scientific advances in the field of specialization. **التطورات العلمية في مجال التخصص**	a3-1 Report new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.	a3-1-1 Recognize the advantages & disadvantages of urbanization and how it is related to the development of architecture styles.
A4- Fundamentals of ethical & legal professional practice in the field of specialization. **المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال**	a4-1 Recognize ethical and professional responsibility issues arising in the practice of the engineering profession.	A4-1-1 Recognize and appreciate architectural work in space designs.

التخصص		
B. Intellectual skills		
B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems. **تحليل و تقييم المعلومات في مجال التخصص و القياس عليها لحل المشاكل**	b1-1 Demonstrate an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.	b1-1-1 Assess general aspects about the circumstances affecting architecture profession & practice.
B3- Link and integrate diverse knowledge to solve professional problems. **الربط بين المعارف المختلفة لحل المشاكل المهنية**	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b3-1-1 Analyze, interpret and Compare the distinguishing features for the different periods.
B6- Plan for performance development in the field of practice . **التخطيط لتطوير الأداء في مجال التخصص**	b6-1 Plane to guide progress in his / her professional career.	b6-1-1 Analyze of the society, its symptoms, need and the technological culture and their reflection on the architectural spaces and design components.
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1 Identify the importance of considering the social and ethical aspects in the process of architecture design over the years.
C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.2-1 Write and evaluate a professional report on specialized related to Architectural Engineering and Urban Planning .	c2-1-1 Conduct a focused review of the relevant literature and create appropriate conceptual framework.
C3- Evaluate means and tools available in the field of practice. **تقييم الطرق و الأدوات القائمة في مجال التخصص**	c3-1 Evaluate methods and tools reported in a specified published articles and researches related to Architectural Engineering and Urban Planning field.	c3-1-1 Employ comparative thinking between different architectural schools, philosophies directions and theories in space designs.
D. General and transferrable skills		

D1- Communicate effectively using all methods. **التواصل الفعال بأنواعه المختلفة**	d1-1Communicate effectively with the scientific community, research team and technocrats involved in multinational companies in the related fields to Architectural Engineering and Urban Planning.	d1-1-1 Work in a team in the research work. d1-1-2 Acquire the updated techniques of the social and culture design spaces.
D4- Set evaluation criteria and benchmarks for others. **وضع قواعد ومؤشرات تقييم**	d4-1 Design standards to evaluate others performance.	d4-1-1 Use Standards to evaluate examples.
D5- Use different sources to obtain knowledge and information. **استخدام المصادر المختلفة و المعلومات على للحصول المعارف**	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1 Use different Refences like books and theses.
D6- Lead a team in familiar professional context **العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة**	d6-1 Practice team working, and lead teams in specified professional jobs.	d6-1-1 Work in a team and Social leadership skills.
D8- Learn independently and seek continuous learning. **التعلم الذاتي و المستمر**	d8-1 Seek continuous learning through continuous education, organizing and participating in seminars, workshops, national and international conferences.	d8-1-1 Use of text- book to collect the needed data. d8-1-2 Prepare selected parts of the course in oral seminar using available displaying equipments.

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-3	Introduction	9	6	3	--	a1-2-1, a1-2-2, a4-1-1, c1-1-1, d1-1-2, d5-1-1	1
4-6	Urban development and policies.	9	6	3	--	a1-2-1, a1-2-2, a-1-3-1, a-1-3-2, a4-1-1, c1-1-1, d1-1-2, d5-1-1	2
7-9	Determination of the elements affecting the spatial design.	9	6	3	--	a1-2-1, a1-2-2, a1-3-2, b3-1-1, c1-1-1,	3

						c2-1-1	
10-12	New approaches to social values.	9	6	3	--	a3-1-1, a1-3-1, a1-3-2,b1-1-1, b3-1-1, c1-1-1, c2-1-1, d5-1-1	4
13-15	The ethics and aesthetics of urban values.	9	6	3	--	a1-2-3, a2-1-1, a3-1-1, a4-1-1, b1-1-1, b6-1-1, c3-1-1, d1-1-1, d6-1-1	5
16-18	The importance of residential practices.	9	6	3	--	a1-2-3, a1-3-1, a1-3-2, a2-1-1, b1-1-1, b6-1-1, c3-1-1, d1-1-1, d6-1-1	6
19-20	Life style choices inherent in the spatial design of the public site.	6	4	2	--	a1-2-3, a1-3-1, a1-3-2, a2-1-1, a3-1-1, b1-1-1, b6-1-1, c1-1-1, c3-1-1, d1-1-1, d6-1-1	7
21- 24	Planning and interior design of houses.	12	8	4	--	a1-2-3, a2-1-1, a3-1-1, b1-1-1, b6-1-1, c1-1-1, c3-1-1, d1-1-1, d6-1-1	8
25-28	Spaces of public buildings in the city.	12	8	4	--	b3-1-1, c2-1-1, c3-1-1, d1-1-2, d4-1-1, d7-1-1	9
29-30	Discussion and presentations	6	4	2	--	D1-1-1, d1-1-2, d5-1-1, d6-1-1, d8-1-1,d8-1-2	10
	Total	90	60	30	--		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills

Programme Academic Standards that the course contributes in achieving.	A1 (a1-2) (a1-3), A2 (a2-1), A3 (a3-1, A4(a4-1)	B1 (b1-1), B3 (b3-1), B6 (b6-1)	C1 (c1-1), C2 (c2-1), C3 (c3-1)	D1 (d1-1), D4 (d4-1), D5 (d5-1), D6 (d6-1), D8 (d8-1)

6. Course Subject Area:

A	**B**	**C**	**D**	**E**	**F**	**G**	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
30%	---	**60%**	---	**5%**	---	**5%**	**100%**

7. Course Topics.

Topic No.	Topic	Weeks
1st	Introduction	1-3
2nd	Urban development and policies.	4-6
3rd	Determination of the elements affecting the spatial design.	7-9
4th	New approaches to social values.	10-12
5th	The ethics and aesthetics of urban values.	13-15
6th	The importance of residential practices.	16-18
7th	Life style choices inherent in the spatial design of the public site.	19-20
8th	Planning and interior design of houses.	21- 24
9th	Spaces of public buildings in the city.	25-28
10th	Discussion and presentations	29-30

8. ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	9th	10th

Course ILOs	**Knowledge & Understanding**									
a1-2-1 Define a theoretical background with various styles in space design.	x	x	x							
a1-2-2 Identify different theories of space designs.	x	x	x							
a1-2-3 Define strong connection between the studies and the latest engineering topics					x	x	x	x		
a1-3-1 Outline the user cultural, environmental factors and their impact on the designing process.		x		x		x	x			
a1-3-2 Understand the foundation of the social and culture aspects in space designs		x	x	x		x	x			
a2-1-1 Show awareness of political and cultural issues and their implications on architecture					x	x	x	x		
a3-1-1 Understand the advantages & disadvantages of urbanization and how it is related to the development of architecture styles.				x	x		x	x		
A4-1-1 Recognize and appreciate architectural work in space designs.	x	x			x					
Course ILOs	**Intellectual Skills**									
b1-1-1 Assess general aspects about the circumstances affecting architecture profession & practice.				x	x	x	x			
b3-1-1 Analyze, interpret and Compare the distinguishing features for the different periods.			x	x					x	
b6-1-1 Analyze of the society, its symptoms, need and the technological culture and their reflection on the architectural spaces and design components.					x	x	x	x		
Course ILOs	**Professional Skill**									
c1-1-1 Identify the importance of considering the social and ethical aspects in the process of architecture design over the years.	x	x	x	x			x	x		
c2-1-1 Conduct a focused review of the relevant literature and create appropriate conceptual framework.			x	x					x	

c3-1-1 Employ comparative thinking between different architectural schools, philosophies directions and theories in space designs.					x	x	x	x	x		
Course ILOs	**General Skills**										
d1-1-1 Work in a team in the research work.					x	x	x	x		x	
d1-1-2 Acquire the updated techniques of the social and culture design spaces.	x	x							x	x	
d4-1-1 Use Standards to evaluate examples.	x	x		x					x	x	
d5-1-1 Use different Refences like books and theses.	x	x		x					x	x	
d6-1-1 Work in a team and Social leadership skills.					x	x	x	x		x	
d8-1-1 Use of text- book to collect the needed data.									x	x	
d8-1-2 Prepare selected parts of the course in oral seminar using available displaying equipments										x	

9. Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-2-1	x	x				x				x			
	a1-2-2	x												
	a1-2-3	x	x				x			x	x			
	a1-3-1	x												
	a1-3-2	x	x								x			

	a2-1-1	x	x						x					
	a3-1-1	x							x					
	a4-1-1	x	x				x							
Intellectual Skills	b1-1-1	x												
	b3-1-1	x												
	b6-1-1	x	x	x										
Professional Skills	c1-1-1	x												
	c2-1-1	x	x	x										
	c3-1-1	x	x	x										
General Skills	d1-1-1			x				x						
	d1-1-2			x					x					
	d4-1-1			x		x	x							
	d5-1-1			x		x	x							
	d6-1-1		x	x				x		x		x		
	d8-1-1		x	x							x			
	d8-1-2		x	x										

10.Assessment

- **Assessment Methods**

Final Written Examination — to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	31
Total	100%	

11.Facilities required for teaching and learning

- **Laboratory Usage:** None.

- **Library Usage:**

Students should be encouraged to use library technical resources in the preparation of reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12.List of References:

Course and Lab Notes:

No lectures and Labs notes.

Essential Books (Text Books):

1. Mohammedani, R. M. 2018, *SPACE STANDARDS AND SOCIO-CULTURAL ASPECTS OF HOUSING DESIGN* (Doctoral dissertation, Sudan University of Science and Technology).
2. B. Perkins, D. Hoglund, 2013, Building type basics for senior living.
3. J. W. Anderzhon, D. Hughes, Dr. Stephen Judd & Dr. E. Kiyota, 2012, Design for Aging: International Case Studies of Building and Program.

4. Victor Regnier, 2002, Design for Assisted Living: Guidelines for Housing the Physically and Mentally Frail.

13. Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**

Signature :

Date:

UPL 615

Planning Residential Areas

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Planning Residential Areas	**Code Symbol**: UPL 615	
Lecture	3 hours	
Tutorial / Laboratory	-- hour	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

This course investigates methods of planning residential areas of all types and levels, social and economic dimensions of the community, use of data and information and survey results in the development of urban plans, examples of existing residential areas, study of projects of new residential areas.

2. Course Objectives

By the end of the course the students will be able to:

1. Identify the elements of the urbanplanning.
2. Understand Urban planning standards and stages.
3. Identify urban, social, political, economic and environmental problems.
4. Compare between different urban planning projects and environmental issues.
5. Design and construct alternative solutions to urban planning project.

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة**	a1-2 Understand the theories, basics and specialized knowledge in the field of Architectural Engineering .	a1-2-1 List some of the contemporary theories of architecture. a1-2-2 Identify different theories of architecture. a1-2-3 Investigate the differences between the Induction and Deduction inference methodology a1-2-4 Investigate short essays in certain topics of the course. a1-2-5 Outline the distinguishing features for the different periods. a1-2-6 Investigate theoretical concepts.
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a2-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a2-1-1 Recognize the interaction between his/her research and surrounding environment. a2-1-2 Show awareness of political and cultural issues and their implications on architecture
A3- Main scientific advances in the field of specialization. **التطورات العلمية في مجال التخصص**	a3-1 Report new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.	a3-1-1 Estimate new advances in analysis and methodologies of Architectural Engineering and Urban Planning.
A6- Basics and ethics of scientific research **أساسيات وأخلاقيات البحث العلمي**	a6-1 Recognize Basics and ethics of scientific research.	a6-1-1 Recognize the different styles of citation
B. Intellectual skills		
B3- Link and integrate diverse knowledge to solve professional problems. **الربط بين المعارف المختلفة لحل المشاكل المهنية**	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b3-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.

B6- Plan for performance development in the field of practice . **التخطيط لتطوير الأداء في مجال التخصص**	b6-1 Plane to guide progress in his / her professional career.	b6-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1 Illustrate competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.
C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.2-1 Write and evaluate a professional report on specialized related to Architectural Engineering and Urban Planning .	c2-1-1 Conduct a focused review of the relevant literature and create appropriate conceptual framework.
C3- Evaluate means and tools available in the field of practice. **تقييم الطرق و الأدوات القائمة في مجال التخصص**	c3-1 Evaluate methods and tools reported in a specified published articles and researches related to Architectural Engineering and Urban Planning field.	c3-1-1 Apply comparative thinking between different architectural schools, philosophies directions and theories.
D. General and transferrable skills		
D5- Use diferent sources to obtain knowledge and information. **استخدام المصادر المختلفة للحصول على المعلومات و المعارف**	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .
D6- Lead a team in familiar professional context **العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة**	d6-1 Practice team working, and lead teams in specified professional jobs.	d6-1-1 Work in a team and Social leadership skills.
D8- Learn independently and seek continuous learning. **التعلم الذاتي و المستمر**	d8-1 Seek continuous learning through continuous education, organizing and participating in seminars, workshops, national and	d8-1-1 Use of text- book to collect the data that he needs. d8-1-2 Prepare selected parts of the course in oral seminar using available

	international conferences.	displaying equipments.

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-3	Introduction	12	12	--	--	a1-2-1, a1-2-2, a2-1-1, c1-1-1, d5-1-1, d6-1-1	1
4-7	-Introduction to Urban design key concepts and definitions -Urban Planning Science	12	12	--	--	a1-2-1, a1-2-2, a2-1-2, c1-1-1	2
8-10	-Basic concepts of urban planning	12	12	--	--	a1-2-1, a1-2-2, c1-1-1	3
11-15	-Types and levels of urban planning (national, regional, local)	12	12	--	--	c1-1-1	4
16-19	-Stages of Urban Planning (General Planning - Urban Design - Project Planning)	6	6	--	--	a1-2-3, a1-2-6, a1-2-7, a6-1-1 , b6-1-1, c1-1-1, c3-1-1, d8-1-1	5
20-23	-Urban planning standards	6	6	--	--	a1-2-3, a1-2-4, a1-2-5, a1-2-6, a6-1-1, b1-1-1, b6-1-1, c1-1-1, c3-1-1, , d8-1-1	6
24-26	-Planning of different cities in terms of size, shape and location	6	6	--	--	a1-2-3, a1-2-4, a1-2-5, a1-2-6, a6-1-1, b1-1-1, b6-1-1, c1-1-1, c3-1-1, , d8-1-1	7
25- 27	-Characteristics and systems of urban planning	6	6	--	--	a1-2-3, a1-2-6, a6-1-1, b1-1-1, b6-1-1, c1-1-1, c3-1-1, d8-1-1	8
28-30	Discussion and presentations	18	18	-	--	a2-1-1, a3-1-1, b3-1-1, c2-1-1, d5-1-1, d6-1-1, d8-1-1, d8-1-2	9

31	Total	90	90	--	--		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contributes in achieving.	A1 (a1-2), A2 (a2-1), A3 (a3-1, A6(a6-1)	B3 (b3-1), B6 (b6-1)	C1 (c1-1), C2 (c2-1), C3 (c3-1)	D5 (d5-1), D6 (d6-1), D8 (d8-1)

6. Course Subject Area:

A	**B**	**C**	**D**	**E**	**F**	**G**	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
20%	---	10%	---	20%	50%		100%

7. Course Topics.

Topic No.	Topic	Weeks
1st	Introduction	1-3
2nd	-Introduction to Urban design key concepts and definitions -Urban Planning Science	4-7
3rd	-Basic concepts of urban planning Types and levels of urban planning (national, regional, local)	8-10 11-15
4th	-Stages of Urban Planning (General Planning - Urban Design - Project Planning)	16-19
5th	-Stages of Urban Planning (General Planning - Urban Design - Project Planning)	20-23
6th	-Urban planning standards	
7th	Planning of different cities in terms of size, shape and location	24-26
8th	-Urban planning standards	25- 27
9th	Discussion and presentations	28- 30

8. ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	9th
Course ILOs	**Knowledge & Understanding**								
a1-2-1 List some of the contemporary theories of architecture.	x	x	x						
a1-2-2 Identify different theories of architecture.	x	x	x						
a1-2-3 Investigate the differences between the Induction and Deduction inference methodology					x	x	x	x	
a1-2-4 Investigate short essays in certain topics of the course.						x	x		
a1-2-5 Outline the distinguishing features for the different periods.						x	x		
a1-2-6 Investigate theoretical concepts.					x	x	x	x	
a2-1-1 Recognize the interaction between his/her research and surrounding environment.	x								x
a2-1-2 Show awareness of political and cultural issues and their implications on architecture		x							
Course ILOs	**Intellectual Skills**								
b3-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.									x
b6-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.					x	x	x	x	
Course ILOs	**Professional Skill**								
c1-1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.	x	x	x	x	x	x	x	x	
c2-1-1 Conduct a focused review of the relevant literature and create appropriate									x

conceptual framework,										
c3-1-1 Comparative thinking between different architectural schools, philosophies directions and theories.					x	x	x	x		
Course ILOs	**General Skills**									
d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .	x								x	
d6-1-1 Work in a team and Social leadership skills.	x								x	
d8-1-1 Use of text- book to collect the data that he needs.					x	x	x	x	x	
d8-1-2 Deliver selected parts of the course in oral seminar using available displaying equipments.									x	

9. Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self-learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-2-1	x	x											
	a1-2-2	x	x											
	a1-2-3	x	x											
	a1-2-4	x	x											
	a1-2-5	x	x											
	a1-2-6	x	x											
	a2-1-1		x	x										
	a3-1-1		x	x										
	a3-1-2		x	x										
	a6-1-1		x	x										
Intellectual Skills	b3-1-1	x												
	b6-1-1	x	x	x										
Professional	c1-1-1	x								x				

Skills	c2-1-1	x	x	x						x				
	c3-1-1	x	x	x						x				
General Skills	d5-1-1			x						x				
	d6-1-1		x	x					x	x				
	d8-1-1		x	x					x					
	d8-1-2		x	x					x					

10.Assessment

- **Assessment Methods**

Final Written Examination	to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	31
Total	100%	

11.Facilities required for teaching and learning

- **Laboratory Usage:** None.

- **Library Usage:**
  Students should be encouraged to use library technical resources in the preparation of laboratory reports and oral presentation .At least one oral presentation should involve a significant component of library research to encourage this component of study.

12.List of References:

Course and Lab Notes:

No lectures and Labs notes.

Essential Books (Text Books):

- Næss, Petter. "Urban planning: residential location and compensatory behaviour in three Scandinavian cities." In *Rethinking Climate and Energy Policies*, pp. 181-207. Springer, Cham, 2016.
- Robert W. Miller, Richard J. Hauer and Les P. Werner, Urban forestry, 2015.
- Hugh Barton and Catherine Tsourou, Healthy Urban Planning, 2013.
- Peter Hall and Mark Tewdwr-Jones, Urban and Regional Planning, 2010.
- Cochrane and Allan, *Understanding urban policy: A critical approach.* Oxford, UK: Blackwell,2007.
- Ewing and Otto Clemente (2013),Measuring Urban Design (Metrics for Livable Places), Island Press, USA

Periodicals, Web Sites, etc.

5. http://www.archrecord.com/
6. http://www.worldarchitecturenews.com

13.Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**

Signature :

Date:

UPL 616

Managing of Urban Development

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Managing of Urban Development	**Code Symbol**: UPL 616	
Lecture	3 hours	
Tutorial / Laboratory	-- hour	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

This course aims to define the process of managing urban development and dealing with each other, talking about urban growth and challenges, global management methods, different applications, maximize the use and adaptation in light of the special circumstances of the developing world (Management concept and functions, Urban development management, Urban management functions, Urban management methods, Implementation and financing mechanisms, Methods of participation in development management, Resource management, Land and infrastructure management, Housing supply and services).

2. Course Objectives

By the end of the course the students will be able to:

- Demonstrate a full knowledge of the process of managing urban development concepts and functions.
- Clarify the relation between urban growth and challenges, global management methods, different applications, maximize the use and adaptation in light of the special circumstances of the developing world.
- Compare , Urban management methods

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following

Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة**	a1-2 Understand the theories, basics and specialized knowledge in the field of Architectural Engineering .	a1-2-1 List some of urban development projects. a1-2-2 Identify different urban development projects. a1-2-3 Describe Polices and Ingredients of urban development and urban management in Egypt present and future. a1-2-4 Prepare short essays in certain topics of the course. a1-2-5 Investigate the importance of considering the social and ethical aspects in the process of urban development over the years.
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a2-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a2-1-1 Recognize the interaction between his/her research and surrounding environment. a2-1-2 Show awareness of political and cultural issues and their implications on urban development projects
A3- Main scientific advances in the field of specialization. **التطورات العلمية في مجال التخصص**	a3-1 Report new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.	a3-1-1 Estimate new advances in Implementation and financing mechanisms, Methods of participation in development management, Resource management.
A4- Fundamentals of ethical & legal professional practice in the field of specialization. **المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال التخصص**	a4-1 Recognize ethical and professional responsibility issues arising in the practice of the engineering profession.	A4-1-1 Estimate sustainable urban development managing approaches
A6- Basics and ethics of scientific research **أساسيات وأخلاقيات البحث العلمي**	a6-1 Recognize Basics and ethics of scientific research.	a6-1-1 Recognize the different styles of citation
B. Intellectual skills		

B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems. **تحليل و تقييم المعلومات في مجال التخصص و القياس عليها لحل المشاكل**	b1-1 Demonstrate an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.	b1-1-1 Demonstrate algorithms and flowcharts approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning problems.
B3- Link and integrate diverse knowledge to solve professional problems. **الربط بين المعارف المختلفة لحل المشاكل المهنية**	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b3-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.
B6- Plan for performance development in the field of practice . **التخطيط لتطوير الأداء في مجال التخصص**	b6-1 Plane to guide progress in his / her professional career.	b6-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.
B7- Take professional decisions in different professional practical contexts. **سياقات في المهنية القرارات اتخاذ متنوعة مهنية**	b7-1 Acquire decision making capabilities in different situation when facing problems related to Architectural Engineering and Urban Planning .	b7-1-1 Assess the relation between urban growth and challenges, global management methods, different applications.
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1 Employ competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.
C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.2-1 Write and evaluate a professional report on specialized related to Architectural Engineering and Urban Planning .	c2-1-1 Prepare a focused review of the relevant literature and create appropriate conceptual framework.

C3- Evaluate means and tools available in the field of practice. **تقييم الطرق و الأدوات القائمة في مجال التخصص**	c3-1 Evaluate methods and tools reported in a specified published articles and researches related to Architectural Engineering and Urban Planning field.	c3-1-1 Apply comparative thinking between the use and adaptation in light of the special circumstances of the developing world.
D. General and transferrable skills		
D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 Employ the information technology skills to serve his / her career development.	d2-2-1 Use the information technology skills to serve his / her career development.
D5- Use diferent sources to obtain knowledge and information. **استخدام المصادر المختلفة للحصول على المعلومات و المعارف**	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .
D8- Learn independently and seek continuous learning. **التعلم الذاتي و المستمر**	d8-1 Seek continuous learning through continuous education, organizing and participating in seminars, workshops, national and international conferences.	d8-1-1 Use of text- book to collect the data that he needs. d8-1-2 Prepare selected parts of the course in oral seminar using available displaying equipment.

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-3	History of city management	3	3	--	--	A1-2,a2-1,a3-1,c1-1	1
4-6	Types of municipalities	3	3	--	--	A4-1,a6-1,c3-1,d8-1	2
7-9	Structure of responsibilities	3	3	--	--	B4-1,b6-1,c3-1,d8-1	3
10-13	The centralized model of city management	3	3	--	--	B4-1,b7-1,c3-1,d8-1, d5-1	4
14-16	The decentralized model of city management	3	3	--	--	1,a3-1,c1-1,B4-1,b7-1,c3-1,d8-1, d5-1	5
17-18	The role of the private and	3	3	--	--	A1-2,a2-1,a3-	6

	public sectors in city management					1,c1-1,B4-1,b7-1,c3-1,d8-1, d5-1	
19-20	Funding sources.	3	3	--	--	A1-2,a2-1,a3-1,c1-1,B4-1,b7-1,c3-1,d8-1, d5-1,d8-1	7
21-25	Sharing between public and private sectors	3	3	-	--	c1-1,B4-1,b7-1,c3-1,d8-1, d5-1,d8-1	8
26-30	Long-term plans, Five-year plans, Budgets programs.	3	3	---	--	A1-2,a2-1,a3-1,c1-1,B4-1,b7-1,c3-1,d8-1, d5-1	9
31	Final exam			--			
	Total	90	90	--	--		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Program Academic Standards that the course contributes in achieving.	A1 (a1-2), A2 (a2-1), A3 (a3-1), A4(a4-1), A6(a6-1)	B1 (b1-1), B3 (b3-1), B6 (b6-1), B7(b7-1)	C1 (c1-1), C2 (c2-1), C3 (c3-1)	D2 (d2-1), D5 (d5-1), D8 (d8-1)

6. Course Subject Area:

A	**B**	**C**	**D**	**E**	**F**	**G**	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
30%	---	**60%**	---	---	---	**10%**	**100%**

7. Course Topics.

Topic No.	Topic	Weeks
1st	History of city management	1-3
2nd	Types of municipalities	4-6
3rd	Structure of responsibilities	7-9
4th	The centralized model of city management	10-13

5th	The decentralized model of city management	14-16
6th	The role of the private and public sectors in city management	17-18
7th	Funding sources.	19-20
8th	Sharing between public and private sectors	21-25
9th	Long-term plans, Five-year plans, Budgets programs.	26-30

8. ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	**9th**
Course ILOs	**Knowledge & Understanding**								
a1-2-1 List some of urban development projects.	x	x	x		x	x			x
a1-2-2 Identify different urban development projects.		x			x		x	x	
a1-2-3 Describe Polices and Ingredients of urban development and urban management in Egypt present and future..	x	x	x	x		x			x
a1-2-4 Prepare short essays in certain topics of the course.	x			x		x	x	x	
a1-2-5 Investigate the importance of considering the social and ethical aspects in the process of urban development over the years	x	x	x		x	x	x		x
a2-1-1 Recognize the interaction between his/her research and surrounding environment.	x		x	x	x			x	
a2-1-2 Show awareness of political and cultural issues and their implications on urban development projects	x	x	x	x		x		x	x
a3-1-1 Estimate new advances in Implementation and financing mechanisms, Methods of participation in development management, Resource management.	x	x	x		x			x	
a4-1-1 Estimate Sustainable urban development managing approaches		x		x			x		x
a6-1-1 Recognize the different styles of citation	x	x		x	x	x		x	x

Course ILOs	**Intellectual Skills**								
b1-1-1 Demonstrate algorithms and flowcharts approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning problems.	x	x		x	x	x			
b3-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.	x		x	x	x		x	x	
b6-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.	x	x		x	x	x	x		x
b7-1-1 Assess the relation between urban growth and challenges, global management methods, different applications.	x	x	x	x	x	x			x
Course ILOs	**Professional Skill**								
c1-1-1 Employ competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.	x	x	x		x	x			x
c2-1-1 Prepare a focused review of the relevant literature and create appropriate conceptual framework.	x		x	x	x		x		
c3-1-1 Apply comparative thinking between the use and adaptation in light of the special circumstances of the developing world.	x	x	x	x		x	x		x
Course ILOs	**General Skills**								
d2-2-1 Use the information technology skills to serve his / her career development.	x		x	x	x		x		x
d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .	x	x		x	x		x		
d8-1-1 Use of text- book to collect the	x		x		x				x

data that he needs.									
d8-1-2 Prepare selected parts of the course in oral seminar using available displaying equipment.	x	x	x	x	x	x	x		x

9. Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self-learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-2-1	x		x		x	x		x	x				
	a1-2-2	x		x		x	x		x	x				
	a1-2-3	x					x		x	x				
	a1-2-4			x		x			x	x				
	a1-2-5	x		x		x	x		x	x				
	a2-1-2	x				x	x			x				
	a3-1-1			x		x			x	x				
	A4-1-1	x		x		x	x		x	x				
	A5-1-1	x		x					x	x				
Intellectual Skills	b1-1-1	x		x		x	x			x				
	b3-1-1	x		x					x	x				
	b6-1-1					x	x		x	x				
	B7-1-1	x		x		x	x		x	x				
Professional Skills	c1-1-1	x							x	x				
	c2-1-1	x		x			x		x	x				
	c3-1-1	x		x			x			x				
General Skills	d2-1-1			x			x		x	x				
	d5-1-1	x		x			x		x	x				
	d8-1-1	x					x		x	x				
	d8-1-2	x		x			x		x	x				

10. Assessment

- **Assessment Methods**

Final Written Examination — to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	31
Total	100%	

11. Facilities required for teaching and learning

- Lecture/ Seminar rooms equipped with dark curtains, projector, and projection board, blackground, advanced PC and data show, and exihibition rooms.
- **Laboratory Usage:** None.
- **Library Usage:**

Students should be encouraged to use library technical resources in the preparation of reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12. List of References:

Course and Lab Notes:

No lectures and Labs notes.

Essential Books (Text Books):

- Stren, Richard E., ed. *African cities in crisis: managing rapid urban growth*. Routledge, 2019.
- D. Taylor, Emmanuel Torquebiau, Natural Resource Management and Local Development,2010.
- Ed Blakely ,My Storm: Managing the Recovery of New Orleans in the Wake of Katrina,2012.
- Ed Blakely ,Dialogues in Urban Planning: Towards Sustainable Regions,2008.
- Ed Blakely ,Managing Urban Disaster Recovery: Policy, Planning, Concepts and Cases,2012.
- Marcel Tanner, Urban Health in Developing Countries: Progress and Prospects, 2014.
- John Abbott, Sharing the City: Community Participation in Urban Management,2013.
- Stijn Oosterlynck, Jef Van den Broeck, Louis Albrechts, Frank Moulaert, Ann Verhetsel, Strategic Spatial Projects: Catalysts for Change, 2010.

Periodicals, Web Sites, etc.

https://unhabitat.org/collection/urban-development-and-management/
https://www.environmentalscience.org/career/urban-planner

13. Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**

Signature :

Date:

UPL 620

Comparative Analysis of Urban Applications

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Comparative Analysis of Urban Applications	**Code Symbol**: UPL 620	
Lecture	3 hours	
Tutorial / Laboratory	-- hour	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

This course investigates the methods used in the treatment of urban projects at both the local and global levels, projects in similar countries in their social, economic and environmental conditions with the conditions in the Arab Republic of Egypt, conducting analytical studies, applying evaluation methods and reaching results based on sound foundations.

2. Course Objectives

By the end of the course the students will be able to:

- Control the software precisely.
- Utilize it to make drawings from scratch.
- Edit existing GIS models and print out drawings.

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards	Program ILOs	Course ILOs

(ARS)		
A. Knowledge and understanding		
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a2-1Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a2-1-1 Recognize the interaction between his/her research and surrounding environment. a2-1-2 Show awareness of political and cultural issues and their implications on architecture
A5- Basics and principles of quality in professional practice in the field of specialization. **في الجودة أساسيات و مبادئ مجال في المهنية الممارسة التخصص**	a5-1 Explain Quality Assurance concepts of Architectural Engineering and Urban Planning.	a5-1-1 Recognize the interaction between his/her research and surrounding environment. a5-1-2 Show awareness of political and cultural issues and their implications on architecture
A6- Basics and ethics of scientific research **العلمي البحث وأخلاقيات أساسيات**	a6-1 Recognize Basics and ethics of scientific research	a6-1-1 Identify new advances in analysis and methodologies of Architectural Engineering and Urban Planning.
B. Intellectual skills		
B4- Conduct a research study and/or writing systematic scientific study about Research problem. **كتابة أو /و بحثية دراسة إجراء مشكلة حول منهجية علمية دراسة بحثية**	b4-1 Write an research plain to conduct applied research.	b4-1-1 Demonstrate algorithms and flowcharts approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning problems.
B6- Plan for performance development in the field of practice . **مجال في الأداء لتطوير التخطيط التخصص**	b6-1 Plane to guide progress in his / her professional career.	b6-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.
B7- Take professional decisions in different professional practical contexts. **سياقات في المهنية القرارات اتخاذ متنوعة مهنية**	b7-1 Acquire decision making capabilities in different situation when facing problems related to Architectural Engineering and Urban Planning .	b7-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.
C. Professional and practical skills		
C1- Master the basic as	c1-1 Express competence	c1-1-1 Illustrate

well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.
C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.2-1 Write and evaluate a professional report on specialized related to Architectural Engineering and Urban Planning .	c2-1-1 Prepare a focused review of the relevant literature and create appropriate conceptual framework.
C3- Evaluate means and tools available in the field of practice. **تقييم الطرق و الأدوات القائمة في مجال التخصص**	c3-1 Evaluate methods and tools reported in a specified published articles and researches related to Architectural Engineering and Urban Planning field.	c3-1-1 Utilize Comparative thinking between different architectural schools, philosophies directions and theories.
D. General and transferrable skills		
D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 Employ the information technology skills to serve his / her career development.	d2-2-1 Use the information technology skills to serve his / her career development.

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-3	Program introduction.	12	8	4	--	a2-1-1, a6-1-1 , c1-1-1, c3-1-1,	1
4-7	Program installation and GUI identification.	12	8	4	--	a2-1-2 , a5-1-1, c3-1-1	2
8-10	Using CAD programs applications and commands for 2D DWGs.	12	8	4	--	a1-2-1, a1-2-2, b1-1-1, c1-1-1	3
11-15	Follow up for GISprogram utilization to make new drawings.	12	8	4	--	b7-1-1, c1-1-1	4
16-19	Control the software precisely and utilize it to make drawings from scratch.	6	4	2	--	b4-1-1, b6-1-1	5
20-23	Recognizing and using commands for modifying existing CAD drawings.	6	4	2	--	c1-1-1, c3-1-1,	6
24-30	Creating photos and printing drawings.	6	4	2	--	a1-2-2, b1-1-1, c1-1-1	7

	Total	72	44	22	--		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contributes in achieving.	A2 (a2-1), A5 (a5-1), A6(a6-1)	B4 (b4-1), B6 (b6-1), B7 (b7-1)	C1 (c1-1), C2 (c2-1), C3 (c3-1)	D2 (d2-1),

6. Course Subject Area:

A	**B**	**C**	**D**	**E**	**F**	**G**	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
---	---	10%	10%	30%	50%		100%

7. Course Topics.

Topic No.	Topic	Weeks
1st	Introduction	1-3
2nd	Program identification.	4-7
3rd	Utilizing GIS commands and its applications.	8-10
4th	Follow up for GISprogram utilization to make new drawings.	11-15
5th	Editing existing GISmodels.	16-19
6th	Possible Output formats of the program.	20-23
7th	Expressionism in architecture	24-30

8. ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	9th
Course ILOs	**Knowledge & Understanding**								
a2-1-1 Recognize the interaction between his/her research and surrounding environment.	x	x	x						

a2-1-2 Show awareness of political and cultural issues and their implications on architecture									
a5-1-1 Recognize the interaction between his/her research and surrounding environment.	x	x	x						
a5-1-2 Show awareness of political and cultural issues and their implications on architecture	x	x	x						
a6-1-1 Identify new advances in analysis and methodologies of Architectural Engineering and Urban Planning.					x	x	x	x	
Course ILOs	**Intellectual Skills**								
b4-1-1 Demonstrate algorithms and flowcharts approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning problems.			x	x	x	x	x	x	
b6-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.									x
b7-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.					x	x	x	x	
Course ILOs	**Professional Skill**								
c1-1-1 Illustrate competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.	x	x	x	x	x	x	x	x	
c2-1-1 Prepare a focused review of the relevant literature and create appropriate conceptual framework,									x
c3-1-1 Utilize comparative thinking between different architectural schools, philosophies directions and theories.					x	x	x	x	
Course ILOs	**General Skills**								

d2-2-1 Use the information technology skills to serve his / her career development.					x	x	x	x	

9. Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & Understanding	a2-1-1	x	x											
	a2-1-21		x	x										
	a5-1-1		x	x										
	a5-1-2		x	x										
	a6-1-1		x	x										
Intellectual Skills	b4-1-1	x												
	b6-1-1	x												
	b7-1-1	x	x	x					x					
Professional Skills	c1-1-1	x								x				
	c2-1-1	x	x	x					x	x				
	c3-1-1	x	x	x					x					
General Skills	d2-1-1			x										

10. Assessment

- **Assessment Methods**

Final Written Examination	to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	32
Total	100%	

11. Facilities required for teaching and learning

- **Laboratory Usage:** None.

- **Library Usage:**
  -Students are expected to practice some exercises on GIS commands applications. Besides, they should be subjected to consecutive quizzes testing their ability of utilizing the program to create drawings from scratch or modifying existing ones.

-Students should be encouraged to use library technical resources to be prepared for the laboratory exercises and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12.List of References:

Course and Lab Notes:

No lectures and Labs notes.

Essential Books (Text Books):

1. Goodfellow, Tom. "Seeing political settlements through the city: A framework for comparative analysis of urban transformation." *Development and Change* 49, no. 1 (2018): 199-222.
2. Wahba, Sh. 2007. Value Of Architecture Today: Architecture Between Culture & Commerce A Reading In The Contemporary Architecture. Al-Azhar Engineering Ninth International Conference. April 12 - 14, 2007. Code A 06.
3. Robinson D., Computer Modelling for Sustainable Urban Design: Physical Principles, Methods and Applications,2012.

Periodicals, Web Sites, etc.

7. http://www.archrecord.com/
8. http://www.worldarchitecturenews.com

13.Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**

Signature :

Date:

UPL 621

Statistics and Urban Demographic Studies

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Statistics and Urban Demographic Studies	**Code Symbol**: UPL 621	
Lecture	3 hours	
Tutorial / Laboratory	-- hour	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

This course investigates the concepts of statistical processes, calculations of mean deviation, correlation, random distribution, natural distribution and population predictions, in addition to determining densities and congestion areas.

2. Course Objectives

By the end of the course the students will be able to:

- Understand the principles of demographic studies
- Identify data types, data sources and data collection techniques
- Recognize the importance of socio-economic and cultural studies in urban planning and urban design projects
- Understand the significance of different demographic studies (population growth, education, illiteracy… etc.)

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards	Program ILOs	Course ILOs

(ARS)		
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة**	a1-3 Understand the theories, basics and specialized knowledge in the field of Urban Planning.	a1-3-1 Outline the principles of social and demographic studies. a1-3-2 Recognize the importance of socio-economic and cultural studies in urban planning and urban design projects
B. Intellectual skills		
B3- Link and integrate diverse knowledge to solve professional problems. **الربط بين المعارف المختلفة لحل المشاكل المهنية**	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b3-1-1 Analyze demographic mobility growth and trends in different areas
B5- Assess risks in professional practice in the field of specialization, **الممارسات في المخاطر تقييم التخصص مجال في المهنية**	b5-1 Evaluate pros and cons of given methodologies for Architectural Engineering and Urban Planning .	b5-1-1 Evaluate and assess demographic and economic growth, trends and policies.
B7- Take professional decisions in different professional practical contexts. **سياقات في المهنية القرارات اتخاذ متنوعة مهنية**	b7-1 Acquire decision making capabilities in different situation when facing problems related to Architectural Engineering and Urban Planning .	b7-1-1 Identify socio-economic and cultural patterns to urban form
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1 Analyze and use data by different techniques
D. General and transferrable skills		
D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 Employ the information technology skills to serve his / her career development.	d2-1-1 Prepare projects and data using different techniques (computer, manual… etc.)
D6- Lead a team in	d6-1 Practice team working,	d6-1-1 Work in teams .

familiar professional context العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة	and lead teams in specified professional jobs.	

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-3	Introduction	12	8	4	--	a1-3-1, a1-3-2	1
4-6	Principles of social and demographic studies	12	8	4	--	a1-3-1, a1-3-2	2
7-9	Data Types, Data sources and Data collection techniques	12	8	4	--	b3-1-1, c1-1-1, d6-1-1	3
10-13	Different Applications(Job classification, income/ Education and economic level, Marital status)	12	8	4	--	b3-1-1, b5-1-1, c1-1-1, d2-1-1	4
14-16	Environment and behavior studies and cross cultural studies	6	4	2	--	b3-1-1, b7-1-1, c1-1-1	5
17-18	Social & urban changes	6	4	2	--	b3-1-1, b5-1-1, b7-1-1, c1-1-1, d2-1-1	6
19-20	Spatial location & urban growth	6	4	2	--	b3-1-1, b5-1-1, b7-1-1, c1-1-1, d2-1-1	7
21- 24	Population trends and growth rates	6	4	2	--	b3-1-1, b5-1-1, b7-1-1, c1-1-1	8
25-30	Discussion and presentations	18	12	6	--	a1-3-2, b3-1-1, b5-1-1, b7-1-1, c1-1-1, d2-1-1, d6-1-1	9
	Total	90	56	34	--		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills

Programme Academic Standards that the course contributes in achieving.	A1 (a1-3)	B3 (b3-1), B5 (b5-1), B7 (b7-1)	C1 (c1-1)	D2 (d2-1), D6 (d6-1),

6. Course Subject Area:

A	B	C	D	E	F	G	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
15%	**50%**	---	---	**20%**	**15%**	---	**100%**

7. Course Topics.

Topic No.	Topic	Weeks
1st	Introduction	1-3
2nd	Principles of social and demographic studies	4-6
3rd	Data Types, Data sources and Data collection techniques	7-9
4th	Different Applications(Job classification, income/ Education and economic level, Marital status)	10-13
5th	Environment and behavior studies and cross cultural studies	14-16
6th	Social & urban changes	17-18
7th	Spatial location & urban growth	19-20
8th	Population trends and growth rates	21- 24
9th	Discussion and presentations	25-30

8. ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	9th
Course ILOs	**Knowledge & Understanding**								
a1-3-1 Outline the principles of social and demographic studies.	x	x							
a1-3-2 Recognize the importance of socio-economic and cultural studies in urban planning and urban design projects	x	x							x

Course ILOs	**Intellectual Skills**								
b3-1-1 Analyze demographic mobility growth and trends in different areas			x	x	x	x	x	x	x
b5-1-1 Evaluate and assess demographic and economic growth, trends and policies.				x		x	x	x	x
b7-1-1 Identify socio-economic and cultural patterns to urban form					x	x	x	x	x
Course ILOs	**Professional Skill**								
c1-1-1 Analyze and use data by different techniques			x	x	x	x	x	x	x
Course ILOs	**General Skills**								
d2-1-1 Prepare projects and data using different techniques (computer, manual… etc.)				x		x	x		x
d6-1-1 Work in teams .			x						x

9. Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-3-1	x												
	a1-3-2	x	x											
	b3-1-1	x				x							x	
	b5-1-1	x				x							x	
	b7-1-1	x				x							x	
Professional Skills	c1-1-1					x			x				x	
General Skills	d2-1-1		x						x					
	d6-1-1		x			x			x					

10. Assessment

- **Assessment Methods**

Final Written Examination	to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	31
Total	100%	

11.Facilities required for teaching and learning

- **Laboratory Usage:** None.

- **Library Usage:**

Students should be encouraged to use library technical resources in the preparation of reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12.List of References:

Course and Lab Notes:

lectures notes.

Essential Books (Text Books):

1. Bramanti, L., & Edmunds, P. J. 2016. Density-associated recruitment mediates coral population dynamics on a coral reef. *Coral Reefs*, *35*(2), 543-553.
2. Lundquist, J., 2014, "Demography: The Study of Human Population", USA: Waveland Press.
3. Preston, S., 2000, "Demography: Measuring and Modeling Population Processes", UK: Wiley-Blackwell.
4. Sharma, R., 2004, "Demography and Population Problems", India: Atlantic.

Periodicals, Web Sites, etc.

9. http://www.capmas.gov.eg
10. http://www.gopp.gov.eg

13.Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**

Signature :

Date:

UPL 622

Urban Design and Planning in Developing Countries

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Urban Design and Planning in Developing Countries	**Code Symbol**: UPL 622	
Lecture	3 hours	
Tutorial / Laboratory	-- hour	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

This course states urban design concept and planning in developing countries by significant practices, buildings, theories, and criticisms to allow the students to be familiar with the fundamental elements and essential issues of Urban Design. Besides allow the student to apply contemporary tools and approaches to problems related to the built environment, present projects and data using different techniques (computer, manual…etc)

2. Course Objectives

By the end of the course the students will be able to:

- Enhance their perception of factors in Urban spaces.
- Gain practice in the basic skills of Urban design analysis.
- Gain an appreciation of both the process and product of the design of the built environment.
- Have a practical experience in re-designing public spaces.

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **المتعلقة الأساسيات و النظريات ذات المجالات في وكذا التعلم بمجال العلاقة**	a-1-1. Understand and work with accordance to laws and regulations governing urban planning.	a1-1-1 List some of the urban planning theories. a1-1-2 Prepare short essays in certain topics of the course.
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **الممارسة بين المتبادل التأثير البيئة علي وانعكاسها المهنية**	a-2-1 Recognize current trends in urban planning methods and examples worldwide.	a2-1-1 Recognize the interaction between his/her research and surrounding environment. a2-1-2 Show awareness of political and cultural issues and their implications on urban design
B. Intellectual skills		
B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems. **تحليل و تقييم المعلومات في مجال التخصص و القياس عليها لحل المشاكل**	b1-1 Assess the site analysis studies that could affect an Urban &Environmental Planning.	b1-1-1 Analyze site properties from the environmental point of view b1-1-2 .Identify the concepts of sustainable development
B6- Plan for performance development in the field of practice . **التخطيط لتطوير الأداء في مجال التخصص**	b6-1 Plane to guide progress in his / her professional career.	b6-1-1 Practice problem solving skills.
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	c1-1 Integrate community design parameters into urban planning projects.	c1-1-1 Use competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Urban Planning, using latest engineering techniques,

		skills, and tools.
C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.2-1 Write and evaluate a professional report on specialized related to Urban Planning .	c2-1-1 Employ appropriate conceptual framework.
D. General and transferrable skills		
D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 Exchange knowledge and skills with engineering community and industry.	d2-1-1 Prepare environmental solutions and approaches to projects d-2-1-2 Prepare Urban & Environmental Planning program preparation.
D5- Use diferent sources to obtain knowledge and information. **استخدام المصادر المختلفة للحصول على المعلومات و المعارف**	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-3	Introduction	9	6	-	3	a1-2-1, a2-1-2, c1-1-1, d5-1-1	1
4-9	the natural environment (context) forces : 1. Global or generalclimate. 2. Land form 3. Soil 4. Peedology &hydrology 5. Vegetation Wild life	18	12	-	6	a1-2-1, a2-1-2, b 6-1-1, c1-1-1	2
10-16	Concepts of : 1. Comfort 2. Heating 3. Cooling 4. ventilation	21	14	-	7	a1-1-1, a1-1-2, b1-1-1, c2-1-1	3

17-19	The ethics of sustainability	9	6	-	3	A2-1-1, a2-1-2, b1-1-2, b6-1-1, c2-1-1, d2-1-1	4
17-18	Symbolism and semiotics in urban design	9	6	-	3	a1-2-1, a2-1-2, c1-1-1, d5-1-1	5
19-20	Expressionism in urban design	9	6	-	3	a1-2-1, a2-1-2, b 6-1-1, d12-1-1	6
20-24	Planning with climate	15	10	-	5	a1-1-1, a1-1-2, b1-1-1, d2-1-2	7
25-30	Use computer application in case studies and applications.	18	12	-	6	A2-1-1, a2-1-2, b1-1-2, b6-1-1, c2-1-1, d5-1-1	8
	Total	90	60	-	30		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contributes in achieving.	A1 (a1-2), A2 (a2-1)	B1 (b1-1), B6 (b6-1)	C1 (c1-1), C2 (c2-1)	D2 (d2-1), D5 (d5-1)

6. Course Subject Area:

A	**B**	**C**	**D**	**E**	**F**	**G**	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
30%	---	**60%**	---	**5%**	---	**5%**	**100%**

7. Course Topics.

Topic No.	Topic	Weeks
1st	Introduction	1-3
2nd	the natural environment (context) forces global or general climate.	4-9

3rd	Concepts of : 1. Comfort 2. Heating 3. Cooling	10-16
4th	The ethics of sustainability	17-19
5th	Symbolism and semiotics in urban design	17-18
6th	Expressionism in urban design	19-20
7th	Planning with climate	20-24
8th	Use computer application in case studies and applications.	25-30

8. ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**
Course ILOs	**Knowledge & Understanding**							
a1-1-1 List some of the urban planning theories.	x	x	x					
a1-1-2 Prepare short essays in certain topics of the course.	x	x	x					
a2-1-1 Recognize the interaction between his/her research and surrounding environment.					x	x	x	x
a2-1-2 Show awareness of political and cultural issues and their implications on urban design						x	x	
Course ILOs	**Intellectual Skills**							
b1-1-1 Analyze site properties from the environmental point of view			x	x	x	x	x	x
b1-1-2 .Identify the concepts of sustainable development								

b6-1-1 Practice problem solving skills.					x	x	x	x
Course ILOs	**Professional Skill**							
c1-1-1 Use competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Urban Planning, using latest engineering techniques, skills, and tools.	x	x	x	x	x	x	x	x
c2-1-1 Employ appropriate conceptual framework.								
Course ILOs	**General Skills**							
d2-1-1 Prepare environmental solutions and approaches to projects					x	x	x	x
d-2-1-2 Prepare Urban & Environmental Planning program preparation.	x							
d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .					x	x	x	x

9. Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-1-1	x	x											
	a1-1-2	x	x											

	a2-1-1	x	x											
	a2-1-2	x	x											
Intellectual Skills	b1-1-1	x												
	b1-1-2	x												
	b6-1-1	x	x	x										
Professional Skills	c1-1-1	x												
	c2-1-1	x	x	x					x					
General Skills	d2-1-1			x					x					
	d2-1-2			x					x					
	d5-1-1		x	x					x					

10.Assessment

- **Assessment Methods**

Final Written Examination — to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	32
Total	100%	

11. Facilities required for teaching and learning

A. laboratory Usage:

Students are expected to prepare and conduct some laboratory experiments relating to determination of the relay setting and establishment of different relay time - current characteristics. Also to test some protection function and to prepare lab reports.

B. Library Usage:

Students should be encouraged to use library technical resources in the preparation of laboratory reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12. List of references:

1. د علي الحيدري وآخرون، 2002 ، التصميم الحضري، الهيكل والدراسات الميدانية، عربية للطباعة والنشر، القاهرة، الجمهورية مصر العربية
2. *3-Burgess, R., & Jenks, M. (Eds.). (2002). Compact cities: sustainable urban forms for developing countries. Routledge*
3. *4- Ewing and Otto Clemente (2013),Measuring Urban Design (Metrics for Livable Places), Island Press, USA*
4. 5- *Vasconcellos, E. A. (2014). Urban Transport Environment and Equity: The case for developing countries. Routledge.*
5.

Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**

Signature :

Date:

UPL 623

Comparative Analysis of Urban Fabrics

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Comparative Analysis of Urban Fabrics	**Code Symbol**: UPL 623	
Lecture	3 hours	
Tutorial / Laboratory	-- hour	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

This course is about Analytical comparison for different urban fabrics in areas with distinct cultural, economic and social conditions. The effect of economic, cultural, social and political conditions on the urban fabric of the city. Analysis of some examples to know the conditions that lead to some different urban forms.

2. Course Objectives

By the end of the course the students will be able to:

- Demonstrate a full knowledge of deffierent types of urban fabrics.
- Clarify the relation between the cultural, economic, political, social conditions and Urban fabrics forms.

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة**	a1-2 Understand the theories, basics and specialized knowledge in the field of Architectural Engineering .	a1-2-1 List some of the urban fabric types. a1-2-2 Identify different influential factors on urban fabric planning. a1-2-3 Identify short essays in certain topics of the course. a1-2-4 Investigate the distinguishing features for the different fabrics. a1-2-5 Identify the importance of considering the social and ethical aspects in the process of urban planning over the years. a1-2-6 Identify a theoretical background with various styles.
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a2-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a2-1-1 Recognize the interaction between his/her research and surrounding environment. a2-1-2 Show awareness of political and cultural issues and their implications on urban fabrics
A3- Main scientific advances in the field of specialization. **التطورات العلمية في مجال التخصص**	a3-1 Report new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.	a3-1-1 Report new advances in analysis and methodologies of Architectural Engineering and Urban Planning.
B. Intellectual skills		

B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems. **تحليل و تقييم المعلومات في مجال التخصص و القياس عليها لحل المشاكل**	b1-1 Demonstrate an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.	b1-1-1 Determine the types of problems and elements that have a significant impact on urban environment.
B4- Conduct a research study and/or writing systematic scientific study about Research problem. **إجراء دراسة بحثية و /أو كتابة دراسة علمية منهجية حول مشكلة بحثية**	b4-1 Write a research plain to conduct applied research	b4-1-1 Analyze some examples to know the conditions that lead to some different urban forms to define problems in urban planning.
B6- Plan for performance development in the field of practice . **التخطيط لتطوير الأداء في مجال التخصص**	b6-1 Plane to guide progress in his / her professional career.	b6-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1 Practice competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Urban Planning, using latest engineering techniques, skills, and tools.
C3- Evaluate means and tools available in the field of practice. **تقييم الطرق و الأدوات القائمة في مجال التخصص**	c3-1 Evaluate methods and tools reported in a specified published articles and researches related to Architectural Engineering and Urban Planning field.	c3-1-1 Improve comparative thinking between different urban planning schools, philosophies directions and theories.
D. General and transferrable skills		
D5- Use different sources to obtain knowledge and information. **استخدام المصادر المختلفة للحصول على المعلومات و المعارف**	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .
D6- Lead a team in	d6-1 Practice team	d6-1-1 Work in a team and

familiar professional context العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة	working, and lead teams in specified professional jobs.	Social leadership skills.
D8- Learn independently and seek continuous learning. التعلم الذاتي و المستمر	d8-1 Seek continuous learning through continuous education, organizing and participating in seminars, workshops, national and international conferences.	d8-1-1 Use of text- book to collect the data that he needs. d8-1-2 Prepare selected parts of the course in oral seminar using available displaying equipment.

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-3	Introduction	9	6	3	--	a1-2-1, a1-2-2, a2-1-1, c1-1-1, , d6-1-1	1
4-6	Urban fabric topologies	9	6	3	--	a1-2-1, a1-2-2, a1-2-3, a2-1-2, c1-1-1	2
7-9	Characterization of urban fabric types and identification of open space typologies	9	6	3	--	a1-2-1, a1-2-2, b1-1-1, c1-1-1, c-3-1-1	3
10-13	Investigation of interactions between urban open space design and microclimate	12	8	4	--	a2-1-1, a2-1-2, b1-1-1,b6-1-1 c1-1-1	4
14-16	The ethics and aesthetics of sustainability in urban planning.	9	6	3	--	a1-2-3, a1-2-6 , a2-1-1 , b1-1-1, b6-1-1, c1-1-1, c3-1-1, d8-1-1	5
17-18	The effect of economic and cultural conditions on the urban fabric of the city	6	4	2	--	a1-2-3, a1-2-4, a1-2-5, a1-2-6, b1-1-1, b6-1-1, c1-1-1, c3-1-1, d5-1-1, d8-1-1	6
19-20	The effect of social and political conditions on the urban fabric of the city	6	4	2	--	a1-2-3, a1-2-4, a1-2-5, a1-2-6, b1-1-1, b6-1-1, c1-1-1, c3-1-1, d8-1-1	7
21- 24	Analytical comparison for different urban fabrics in	12	8	4	--	a1-2-3, a1-2-6,a3-1-1, b1-	8

	areas with distinct cultural, economic and social conditions.					1-1,b4-1-1, b6-1-1, c1-1-1, c3-1-1, d5-1-1,d6-1-1, d8-1-1	
25-28	Analysis of some examples(cities) to know the conditions that lead to some different urban forms	12	8	4	--	a1-2-3, a1-2-6,a3-1-1, b1-1-1, b4-1-1 ,b6-1-1, c1-1-1, c3-1-1, d5-1-1,d6-1-1, d8-1-1	9
29-30	Discussion and presentations	6	4	2	--	a2-1-1, a3-1-1, b6-1-1, c1-1-1, d5-1-1, d6-1-1, d8-1-1, d8-1-2	10
	Total	90	60	30	--		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contributes in achieving.	A1 (a1-2), A2 (a2-1), A3 (a3-1	B1 (b1-1), B4 (b4-1), B6 (b6-1)	C1 (c1-1), C3 (c3-1)	D5 (d5-1), D6 (d6-1), D8 (d8-1)

6. Course Subject Area:

A	**B**	**C**	**D**	**E**	**F**	**G**	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
30%	---	**60%**	---	**5%**	---	**5%**	**100%**

7. Course Topics.

Topic No.	Topic	Weeks
1st	Introduction	1-3
2nd	Urban fabric topologies	4-6
3rd	Characterization of urban fabric types and identification of open space typologies	7-9
4th	Investigation of interactions between urban open space design and microclimate	10-13

5th	The ethics and aesthetics of sustainability in urban planning.	14-16
6th	The effect of economic and cultural conditions on the urban fabric of the city	17-18
7th	The effect of social and political conditions on the urban fabric of the city	19-20
8th	Analytical comparison for different urban fabrics in areas with distinct cultural, economic and social conditions.	21- 24
9th	Analysis of some examples(cities) to know the conditions that lead to some different urban forms	25-28
10th	Discussion and presentations	29-30

8. ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	9th	10th
Course ILOs	**Knowledge & Understanding**									
a1-2-1 List some of the urban fabric types.	x	x	x							
a1-2-2 Identify different influential factors on urban fabric planning.	x	x	x							
a1-2-3 Identify short essays in certain topics of the course.		x			x	x	x	x	x	
a1-2-4 Investigate the distinguishing features for the different fabrics						x	x			
a1-2-5 Identify the importance of considering the social and ethical aspects in the process of urban planning over the years.						x	x			
a1-2-6 Identify a theoretical background with various styles.					x	x	x	x		
a2-1-1 Recognize the interaction between his/her research and surrounding environment.	x			x	x					x
a2-1-2 Show awareness of political and cultural issues and their implications on urban fabrics		x		x						x
a3-1-1 Report new advances in analysis and methodologies of Architectural Engineering and Urban Planning.								x	x	x
Course ILOs	**Intellectual Skills**									

b1-1-1 Determine the types of problems and elements that have a significant impact on urban environment			x	x	x	x	x	x	x	
b4-1-1 Analyze some examples to know the conditions that lead to some different urban forms to define problems in urban planning.								x	x	
b6-1-1 Assess and argue for the relevance of the findings with regard to practical implications and identify the need for further knowledge within the field.				x	x	x	x	x	x	x
Course ILOs	**Professional Skill**									
c1-1-1 Practice competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Urban Planning, using latest engineering techniques, skills, and tools	x	x	x	x	x	x	x	x	x	x
c3-1-1 Improve comparative thinking between different urban planning schools, philosophies directions and theories.			x		x	x	x	x	x	
Course ILOs	**General Skills**									
d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .						x		x	x	x
d6-1-1 Work in a team and Social leadership skills.	x							x	x	x
d8-1-1 Use of text- book to collect the data that he needs.					x	x	x	x	x	x
d8-1-2 Prepare selected parts of the course in oral seminar using available displaying equipment.										x

9. Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-2-1	x	x							x				
	a1-2-2	x	x	x					x					
	a1-2-3	x	x	x			x							
	a1-2-4	x	x	x					x	x	x			
	a1-2-5	x	x											
	a1-2-6	x	x											
	a2-1-1		x	x			x				x			
	a2-1-2	x	x	x			x							
	a3-1-1		x	x			x				x			x
Intellectual Skills	b1-1-1	x				x			x					
	b4-1-1	x		x			x				x			x
	b6-1-1	x	x	x			x							
Professional Skills	c1-1-1	x		x										x
	c3-1-1	x	x	x					x					
General Skills	d5-1-1			x			x	x						
	d6-1-1		x	x			x				x			x
	d8-1-1		x	x			x				x			x
	d8-1-2		x	x			x				x			x

10. Assessment

- **Assessment Methods**

Final Written Examination — to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	31
Total	100%	

11. Facilities required for teaching and learning

- **Laboratory Usage:** None.
- **Library Usage:**

Students should be encouraged to use library technical resources in the preparation of reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12.List of References:

Course and Lab Notes:

No lectures and Labs notes.

Essential Books (Text Books):

1. William.J.V.Neill,2004,urban planning and cultural identity.
2. **Ozge yalciner,2012,green and ecological technologies for urban planning.**
3. **عثمان محمد غنيم ، 2015 ، اساليب التحليل النوعي للتخطيط التنموي والعمراني**
4. **اكاديمية نايف العربية ، 2014 ، انماط التخطيط العمراني وعلاقتها بالمخالفات المرورية**

13.Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**

Signature :

Date:

UPL 648

Environmental planning for urban projects

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Environmental planning for urban projects	**Code Symbol**: UPL 648	
Lecture	3 hours	
Tutorial / Laboratory	-- hour	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

This course investigates the impact of the environment on the success and balance of the planning process, taking into account the social and economic dimensions. In addition, it introduces the definition of international conventions and local comfort, theories and planning methods capable of working in the field of regional and urban planning, applied analytical studies in the field of environmental planning.

2. Course Objectives

By the end of the course the students will be able to:

- Demonstrate a full knowledge of the definition of international conventions and local comfort.
- Clarify the relation between the impact of the environment on the success and balance of the planning process, and the social and economic dimensions.
- Analyis the same projects and make an environemntal decition on how to develop concepts to enhance the project components.

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة**	a1-2 Understand the theories, basics and specialized knowledge in the field of Architectural Engineering .	a1-2-1 List some of international conventions and local comfort projects. a1-2-2 Identify the impact of the environment on the success and balance of the planning process.
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a2-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a2-1-1 Recognize the interaction between his/her research and surrounding environment. a2-1-2 Estimate the social and economic dimensions
A3- Main scientific advances in the field of specialization. **التطورات العلمية في مجال التخصص**	a3-1 Report new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.	a3-1-1 Identify new advances in analysis and methodologies of Architectural Engineering and Urban Planning.
A6- Basics and ethics of scientific research **أساسيات وأخلاقيات البحث العلمي**	a6-1 Recognize Basics and ethics of scientific research.	a6-1-1 Recognize the different styles of citation
B. Intellectual skills		
B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems. **تحليل و تقييم المعلومات في مجال التخصص و القياس عليها لحل المشاكل**	b1-1 Demonstrate an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.	b1-1-1 Demonstrate algorithms and flowcharts approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning problems.

B3- Link and integrate diverse knowledge to solve professional problems. **الربط بين المعارف المختلفة لحل المشاكل المهنية**	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b3-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.
B6- Plan for performance development in the field of practice . **التخطيط لتطوير الأداء في مجال التخصص**	b6-1 Plane to guide progress in his / her professional career.	b6-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1 Illustrate competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.
C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.2-1 Write and evaluate a professional report on specialized related to Architectural Engineering and Urban Planning .	c2-1-1 Conduct a focused review of the relevant literature and create appropriate conceptual framework.
C3- Evaluate means and tools available in the field of practice. **تقييم الطرق و الأدوات القائمة في مجال التخصص**	c3-1 Evaluate methods and tools reported in a specified published articles and researches related to Architectural Engineering and Urban Planning field.	c3-1-1 Apply Comparative international conventions and local comfort, theories and planning methods capable of working in the field of regional and urban planning
D. General and transferrable skills		
D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 Employ the information technology skills to serve his / her career development.	d2-2-1 Use the information technology skills to serve his / her career development.
D5- Use diferent sources to obtain knowledge and	d5-1 Use different sources of information like library,	d5-1-1 Use different sources of information

information. **استخدام المصادر المختلفة للحصول على المعلومات و المعارف**	internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .
D6- Lead a team in familiar professional context **العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة**	d6-1 Practice team working, and lead teams in specified professional jobs.	d6-1-1 Work in a team and Social leadership skills.
D8- Learn independently and seek continuous learning. **التعلم الذاتي و المستمر**	d8-1 Seek continuous learning through continuous education, organizing and participating in seminars, workshops, national and international conferences.	d8-1-1 Use of text- book to collect the data that he needs. d8-1-2 Prepare selected parts of the course in oral seminar using available displaying equipment.

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-3	Indicators and methods of measuring environmental impact Methodology and steps of environmental impact assessment	3	2	1	--		1
4-6	Select the domain Step evaluation of alternatives and consultation Environmental Report Step	3	2	1	--		2
7-9	Environmental impact assessment of planning projects	3	2	1	--		3
10-13	Introduction, Objectives& modern attempts of the Urban Renewal.	3	2	1	--		4
14-16	Environmental Urban Renewal for land uses:-Housing , commercial , Industrial, open spaces & green zones , wild-life sanctuary	3	2	1	--		5
17-18	Environmental Renewal program in cities: Visual Environment, social &economics Environment&	3	2	1	--		6

	Infrastructure networks Environment						
19-21	Impact of environmental impact assessment on land use and transport….	3	2	1	--		7
22- 26	Modern types of environmental assessment, including strategic environmental assessment	3	2	1	--		8
27-30	Discussing the environmental report of the applied project	3	2	1	--		9
31	Final exam						
		90	60	30	--		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Program Academic Standards that the course contributes in achieving.	A1 (a1-2), A2 (a2-1), A3 (a3-1, A6(a6-1)	B1 (b1-1), B3 (b3-1), B6 (b6-1)	C1 (c1-1), C2 (c2-1), C3 (c3-1)	D2 (d2-1), D5 (d5-1), D6 (d6-1), D8 (d8-1)

6. Course Subject Area:

A	**B**	**C**	**D**	**E**	**F**	**G**	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
30%	---	**50%**	**10%**		---	**10%**	**100%**

7. Course Topics.

Topic No.	Topic	Weeks
1st	Indicators and methods of measuring environmental impact Methodology and steps of environmental impact assessment	1-3
2nd	Select the domain Step evaluation of alternatives and consultation Environmental Report Step	4-6
3rd	Environmental impact assessment of planning projects	7-9
4th	Introduction, Objectives& modern attempts of the Urban Renewal.	10-13

5th	Environmental Urban Renewal for land uses:-Housing , commercial , Industrial, open spaces & green zones , wild-life sanctuary	14-16
6th	Environmental Renewal program in cities: Visual Environment, social &economics Environment& Infrastructure networks Environment	17-18
7th	Impact of environmental impact assessment on land use and transport….	19-21
8th	Modern types of environmental assessment, including strategic environmental assessment	22- 26
9th	Discussing the environmental report of the applied project	27-30

8. ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	9th
Course ILOs	**Knowledge & Understanding**								
a1-2-1 List some of international conventions and local comfort projects.	x		x	x					x
a1-2-2 Identify the impact of the environment on the success and balance of the planning process.				x	x	x	x	x	x
a2-1-1 Recognize the interaction between his/her research and surrounding environment.	x	x	x	x	x				x
a2-1-2 Estimate the social and economic dimensions	x		x	x			x	x	
a3-1-1 Identify new advances in analysis and methodologies of Architectural Engineering and Urban Planning.	x				x	x	x		x
a6-1-1 Recognize the different styles of citation	x			x		x			x
Course ILOs	**Intellectual Skills**								
b1-1-1 Demonstrate algorithms and flowcharts approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning problems.				x	x			x	x
b3-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.	x		x			x	x	x	

b6-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.			x	x		x	x		
Course ILOs	**Professional Skill**								
c1-1-1 Illustrate competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.		x		x		x		x	x
c2-1-1 Conduct a focused review of the relevant literature and create appropriate conceptual framework.	x		x	x	x	x		x	
c3-1-1 Apply Comparative international conventions and local comfort, theories and planning methods capable of working in the field of regional and urban planning	x		x	x		x	x	x	
Course ILOs	**General Skills**								
d2-2-1 Employ the information technology skills to serve his / her career development.	x	x			x	x	x	x	x
d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .	x		x		x	x	x	x	
d6-1-1 Work in a team and Social leadership skills.	x	x			x	x			x
d8-1-1 Use of text- book to collect the data that he needs.	x		x	x	x	x	x		x
d8-1-2 Prepare selected parts of the course in oral seminar using available displaying equipment.	x	x			x	x			x

9. Teaching and Learning Method:

Course Intended learning	Teaching and Learning Method

outcomes (ILOs)		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self-learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-2-1	x				x					x	x		x
	a1-2-2	x		x					x	x		x		
	a2-1-1	x		x		x			x	x	x	x		x
	A2-1-2	x		x						x		x		
	a3-1-1	x				x				x	x			x
	a6-1-1			x					x		x	x		x
Intellectual Skills	b1-1-1	x		x		x				x		x		
	b3-1-1								x		x	x		x
	b6-1-1	x		x		x				x		x		x
Professional Skills	c1-1-1	x							x	x	x			
	c2-1-1			x		x			x	x		x		x
	c3-1-1	x		x		x					x			x
General Skills	d2-1-1			x					x	x		x		
	d5-1-1	x		x		x					x	x		x
	d6-1-1	x				x			x	x	x			x
	d8-1-1			x								x		
	d8-1-2	x				x			x	x	x	x		x

10. Assessment

- **Assessment Methods**

Final Written Examination	to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	31
Total	100%	

11. Facilities required for teaching and learning

- Lecture/ Seminar rooms: equipped with dark curtains, projector, and projection board, blackground, advanced PC and data show, and exihibition rooms.
- **Laboratory Usage:** None.
- **Library Usage:**

Students should be encouraged to use library technical resources in the preparation of reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12. List of References:

Course and Lab Notes:

No lectures and Labs notes.

Essential Books (Text Books):

- Steiner, F. R., Butler, K., & American Planning Association. (2012). Planning and urban design standards. John Wiley & Sons.
- Boeing, G. (2018). Measuring the complexity of urban form and design. Urban Design International, 23(4), 281-292.

Periodicals, Web Sites, etc.

1. https://www.arch.virginia.edu/programs/urban-environmental-planning
2. https://www.environmentalscience.org/career/urban-planner
3. https://landuse.co.uk/services/urban-design-masterplanning/

13. Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**

Signature :

Date:

UPL 663

Contemporary Trends of Urban Design

Course Specification

Program on which the course is given	MS.C in Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MS.C**
Date of specification approval	2020

A- Basic Information

Title: Contemporary Trends of Urban Design	**Code Symbol**: UPL 663	
Lecture	3 hours	
Tutorial / Laboratory	-- hour	
Total	3 hours	Bylaw 2000

B- Professional Information

1. Course Aims:

The course will adopt a critical perspective towards contemporary trends in urban planning and design, in order to develop an in-depth approach toward a more meaningful urban design for the future. The objective of the course is to stimulate students to formulate their own viewpoints by sharpening their critical thinking and enabling a provocative debate into the inquiry of the conceptual nature of urban design. The course concentrates on urban design studios where students will investigate the complex nature of 'successful' urban design trends (those that are at the leading edge of practice today) .

2. Course Objectives

After completing the course the student will be able to:

• Comprehend more clearly the relation between theory and practice in urban planning and design and the plethora of disciplines involved in bridging architecture and planning on micro and meso scales.
• Understand theoretically and practically the complexities of urban design issues in not just designing but also retrofitting suburban, town or central urban areas.
• Have good knowledge and understanding of problems that arise in creating and maintaining environments for urban activities as well as approaches and methods of urban planning and design in helping to cope with such problems.
• Have good knowledge and understanding of various contemporary approaches and trends to everyday urbanism problems in cities and suburban areas.

• Be able to express own urban planning and design results as well as other viewpoints in a coherent and qualitative way by the way of drawings, sketches, essays and ad-lib/oral manner.

• Have advanced skills of urban design studio work in order to comprehend major urban issues both as end users and as researchers and technical experts.

3. Intended Learning Outcomes (ILOs) for the whole program

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة**	a1-2 Understand the theories, basics and specialized knowledge in the field of Architectural Engineering .	a1-2-1 List some of the contemporary theories of architecture. a1-2-2 Identify different theories of architecture. a1-2-3 Outline the differences between the Induction and Deduction inference methodology a1-2-4 Investigate short essays in certain topics of the course. a1-2-5 Define the distinguishing features for the different periods. a1-2-6 Define theoretical concepts. a1-2-7 Identify the importance of considering the social and ethical aspects in the process of architecture design over the years. a1-2-8 State a theoretical background with various styles. a1-2-9 Recognize and appreciate architectural work of the third architectural pioneers.

A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a2-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a2-1-1 Recognize the interaction between his/her research and surrounding environment. a2-1-2 Show awareness of political and cultural issues and their implications on architecture
A3- Main scientific advances in the field of specialization. **التطورات العلمية في مجال التخصص**	a3-1 Report new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.	a3-1-1 Define new advances in analysis and methodologies of Architectural Engineering and Urban Planning.
A6- Basics and ethics of scientific research **أساسيات وأخلاقيات البحث العلمي**	a6-1 Recognize Basics and ethics of scientific research.	a6-1-1 Recognize the different styles of citation
B. Intellectual skills		
B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems. **تحليل و تقييم المعلومات في مجال التخصص و القياس عليها لحل المشاكل**	b1-1 Demonstrate an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.	b1-1-1 Demonstrate algorithms and flowcharts approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning problems.
B3- Link and integrate diverse knowledge to solve professional problems. **الربط بين المعارف المختلفة لحل المشاكل المهنية**	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b3-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems related to Architectural Engineering and Urban Planning.
B6- Plan for performance development in the field of practice . **التخطيط لتطوير الأداء في مجال التخصص**	b6-1 Plane to guide progress in his / her professional career.	b6-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1 Practice competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using

		latest engineering techniques, skills, and tools.
C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.2-1 Write and evaluate a professional report on specialized related to Architectural Engineering and Urban Planning .	c2-1-1 Conduct a focused review of the relevant literature and create appropriate conceptual framework.
C3- Evaluate means and tools available in the field of practice. **تقييم الطرق و الأدوات القائمة في مجال التخصص**	c3-1 Evaluate methods and tools reported in a specified published articles and researches related to Architectural Engineering and Urban Planning field.	c3-1-1 Apply comparative thinking between different architectural schools, philosophies directions and theories.
D. General and transferrable skills		
D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 Employ the information technology skills to serve his / her career development.	d2-2-1 Use the information technology skills to serve his / her career development.
D5- Use diferent sources to obtain knowledge and information. **استخدام المصادر المختلفة للحصول على المعلومات و المعارف**	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .
D6- Lead a team in familiar professional context **العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة**	d6-1 Practice team working, and lead teams in specified professional jobs.	d6-1-1 Work in a team and Social leadership skills.
D8- Learn independently and seek continuous learning. **التعلم الذاتي و المستمر**	d8-1 Seek continuous learning through continuous education, organizing and participating in seminars, workshops, national and international conferences.	d8-1-1 Use of text- book to collect the data that he needs. d8-1-2 Prepare selected parts of the course in oral seminar using available displaying equipment.

4. Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-3	Introduction	12	8	4	--	a1-2-1, a1-2-2, a1-2-8, a2-1-1, c1-1-1, d5-1-1, d6-1-1	1
4-6	Contemporary Trend design	12	8	4	--	a1-2-1, a1-2-2, a1-2-8, a2-1-2, c1-1-1	2
7-9	Contemporary philosophies	12	8	4	--	a1-2-1, a1-2-2, b1-1-1, c1-1-1	3
10-13	New modernism Post urbanism	12	8	4	--	a1-2-7, a1-2-9, b1-1-1, c1-1-1	4
14-16	New modernism Post urbanism	6	4	2	--	a1-2-3, a1-2-6, a1-2-7, a1-2-8, a1-2-9, a6-1-1 , b1-1-1, b6-1-1, c1-1-1, c3-1-1, d2-2-1, d8-1-1	5
17-18	Role playing design 5 groups research on given trends	6	4	2	--	a1-2-3, a1-2-4, a1-2-5, a1-2-6, a1-2-7, a1-2-9, a6-1-1, b1-1-1, b6-1-1, c1-1-1, c3-1-1, d2-2-1, d8-1-1	6
19-20	presentation	6	4	2	--	a1-2-3, a1-2-4, a1-2-5, a1-2-6, a1-2-7, a1-2-9, a6-1-1, b1-1-1, b6-1-1, c1-1-1, c3-1-1, d2-2-1, d8-1-1	7
21- 24	Analysis of other students designs	6	4	2	--	a1-2-3, a1-2-6, a1-2-9, a6-1-1, b1-1-1, b6-1-1, c1-1-1, c3-1-1, d2-	8

						2-1, d8-1-1	
25-30	Performance based design - lecture	18	12	6	--	a2-1-1, a3-1-1, b3-1-1, c2-1-1, d5-1-1, d6-1-1, d8-1-1, d8-1-2	9
	Total	90	56	34	--		

5. Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contributes in achieving.	A1 (a1-2), A2 (a2-1), A3 (a3-1, A6(a6-1)	B1 (b1-1), B3 (b3-1), B6 (b6-1)	C1 (c1-1), C2 (c2-1), C3 (c3-1)	D2 (d2-1), D5 (d5-1), D6 (d6-1), D8 (d8-1)

6. Course Subject Area:

A	**B**	**C**	**D**	**E**	**F**	**G**	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
30%	---	**60%**	---	**5%**	---	**5%**	**100%**

7. Course Topics.

Topic No.	Topic	Weeks
1st	Introduction	1-3
2nd	Contemporary Trend design	4-6
3rd	Contemporary philosophies	7-9
4th	New modernism Post urbanism	10-13
5th	New modernism Post urbanism	14-16
6th	Role playing design 5 groups research on given trends	17-18
7th	presentation	19-20
8th	Analysis of other students designs	21- 24
9th	Performance based design - lecture	25-30

8. ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	9th
Course ILOs	**Knowledge & Understanding**								
a1-2-1 List some of the contemporary theories of architecture.	x	x	x						
a1-2-2 Identify different theories of architecture.	x	x	x						
a1-2-3 Outline the differences between the Induction and Deduction inference methodology					x	x	x	x	
a1-2-4 Prepare short essays in certain topics of the course.						x	x		
a1-2-5 Define the distinguishing features for the different periods.						x	x		
a1-2-6 Define theoretical concepts.					x	x	x	x	
a1-2-7 Identify the importance of considering the social and ethical aspects in the process of architecture design over the years.				x	x	x	x		
a1-2-8 State a theoretical background with various styles.	x	x			x				
a1-2-9 Recognize and appreciate architectural work of the third architectural pioneers.				x	x	x	x	x	
a2-1-1 Recognize the interaction between his/her research and surrounding environment.	x								x
a2-1-2 Show awareness of political and cultural issues and their implications on architecture		x							
a3-1-1 Define new advances in analysis and methodologies of Architectural Engineering and Urban Planning.									x
a6-1-1 Recognize the different styles of citation					x	x	x	x	
Course ILOs	**Intellectual Skills**								
b1-1-1 Demonstrate algorithms and flowcharts approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning problems.			x	x	x	x	x	x	
b3-1-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve									x

professional problems related to Architectural Engineering and Urban Planning.									
b6-1-1 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further knowledge within the field.					x	x	x	x	
Course ILOs	**Professional Skill**								
c1-1-1 Practice competence skills, such as identifying, formulating, analyzing, and creating engineering solutions related to Architectural Engineering and Urban Planning, using latest engineering techniques, skills, and tools.	x	x	x	x	x	x	x	x	
c2-1-1 Conduct a focused review of the relevant literature and create appropriate conceptual framework,									x
c3-1-1 Apply comparative thinking between different architectural schools, philosophies directions and theories.					x	x	x	x	
Course ILOs	**General Skills**								
d2-2-1 Use the information technology skills to serve his / her career development.					x	x	x	x	
d5-1-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge about Architectural Engineering and Urban Planning .	x								x
d6-1-1 Work in a team and Social leadership skills.	x								x
d8-1-1 Use of text- book to collect the data that he needs.					x	x	x	x	x
d8-1-2 Prepare selected parts of the course in oral seminar using available displaying equipment.									x

9. Teaching and Learning Method:

Course Intended learning	Teaching and Learning Method

outcomes (ILOs)		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-2-1	x	x											
	a1-2-2	x	x											
	a1-2-3	x	x											
	a1-2-4	x	x											
	a1-2-5	x	x											
	a1-2-6	x	x											
	a1-2-7	x	x											
	a1-2-8	x	x											
	a1-2-9	x	x											
	a2-1-1		x	x										
	a3-1-1		x	x										
	a3-1-2		x	x										
	a6-1-1		x	x										
Intellectual Skills	b1-1-1	x												
	b3-1-1	x												
	b6-1-1	x	x	x										
Professional Skills	c1-1-1	x												
	c2-1-1	x	x	x						x				
	c3-1-1	x	x	x						x				
General Skills	d2-1-1			x					x	x				
	d5-1-1			x					x	x				
	d6-1-1		x	x					x					
	d8-1-1		x	x					x					
	d8-1-2		x	x					x					

10.<u>Assessment</u>

- **Assessment Methods**

Final Written Examination	to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

- **Assessment Schedule and Grades Distribution**

Assessment Method	Percentage	week
Final Examination	100	31
Total	100%	

11.Facilities required for teaching and learning

- **Laboratory Usage:** None.

- **Library Usage:**

Students should be encouraged to use library technical resources in the preparation of reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12.List of References:

Course and Lab Notes:

No lectures and Labs notes.

Essential Books (Text Books):

1. Panayotov, P., & Trifonova, I. (2016, October). Contemporary trends in urban design. In iind international furniture congress (p. 9).
2. AboMoslim, S & Russell, A. 2005. Evaluating Innovative Design And Construction Technologies For Super Hi-Rise Buildings On An International Basis. 6th Construction Specialty Conference, Toronto, Ontario, Canada. June 2-4, 2005.
3. Wahba, Sh. 2007. Value Of Architecture Today: Architecture Between Culture & Commerce A Reading In The Contemporary Architecture. Al-Azhar Engineering Ninth International Conference. April 12 - 14, 2007. Code A 06.
4. Mahgoub, Y. 2006 Architecture and the Expression of Cultural Identity in Kuwait, Paper presented at the 1st International Symposium on Environment, Behavior and Society, People in Place in People, February 9-11, 2006, Sydney, Australia.
5. Mahgoub, Y. 2007. Hyper Identity: The Case Of Kuwaiti Architecture. Archnet-IJAR, International Journal of Architectural Research, Volume 1 - Issue 1 - March 2007

Periodicals, Web Sites, etc.

11. http://www.archrecord.com/
12. http://www.worldarchitecturenews.com

13.Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**

Signature :

Date:

Master of Science

Thesis

Specification

Thesis Specification

Program on which the thesis is given	MS.C in Architectural Engineering and Urban Planning
Major or minor element of program	Major
Department offering the program	Architectural Engineering and Urban Planning
Department offering the course	MS.C
Academic year/Level	2020
Date of specification approval	

A- Basic Information

Title: Thesis	**Code Symbol**: **Without**	
Lecture	Independent but regular contacts with the supervisor is required	
Tutorial / Laboratory	Independent	
Total	At least 2 years	Bylaw 2000

B- Professional Information

1- Thesis Aims:

The Master's Thesis is an independent project (degree project) to develop and display the skills and abilities of the student to carry out individual, independent scientific work on a specific topic, exploring it in a trans-disciplinary manner, and assessing solutions and conclusions with respect to the different dimensions of sustainability. It does not aim to provide additional substantive material or methodological toolkit, the way typical graduate courses do. Its goal is rather modest as it attempts to apply student cumulative understanding and skills to specific research situation. From the perspective of one's program of study, however, the thesis phase poses a real-world test helping to make a realistic transition from coursework to dissertation. Completing a dissertation successfully is the last and often most challenging part of master studies. The goal is to put one's theoretical knowledge and research proficiency to practical test by carrying out an independent, albeit guided, project producing an original piece of research and making a significant contribution to solving a problem and expanding the knowledge base in the specific discipline. While research is an ongoing process, in which one is expected to stay on top of the relevant developments in the discipline, the assumption is that students are capable of thinking through the important milestones in the dissertation process and developing a dissertation prospectus that spells out the core concepts and questions as

well as the designs of research and the structure of intended dissertation. The overall aim of the thesis phase is that the students should further develop and enhance their ability to independently plan, conduct and report on a research project which makes a contribution to the current state-of-the-art in the area. Also, the student should exhibit ability to in detail, creatively, with a high level of clarity and authority, using scientific scrutiny and adequate tools identify, explain, analyze and assess issues pertinent to a MS.c thesis in the research field, within which the thesis project is placed. On balance, a successful completion of the thesis phase is marked by student ability to do the following:

1. Apply his/her theoretical and methodological understanding and skills into devising researchable ideas and specific research questions and hypotheses,
2. Conduct a focused review of the relevant literature and create appropriate conceptual framework,
3. Develop a realistic research design with specific research strategies,
4. Communicate research ideas and their appropriate theoretical and methodological issues effectively and efficiently,
5. Gain understanding of the process of dissertation including stress, time, and project management, committee formation, dissertation proposition and defense, and human subjects reviews.
6. Develop and execute his/her survey to collect the necessary data to prove / support the problem that he has set up.
7. Identify own knowledge needs with respect to the planned project.
8. Write theses and report on research projects in a scientifically sound way.
9. Describe what the contribution of his/her thesis is and relate it to the current state-of-the-art within one or several international knowledge communities within the discipline
10. State the threats against and argue for the validity of her/his research methods, and in doing so, show awareness of that the concept of validity may have different values and be used in different ways within qualitative and quantitative research approaches.
11. Analyze a master's thesis in a constructively critical way and identify the major strong and weak points of the thesis.
12. Describe how and where he/she has searched for, and why he/she has probably found the most relevant related work.

2- Intended Learning Outcomes (ILOs) for the whole program

The thesis is designed to achieve the above objectives through the following **Intended Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Thesis ILOs
A. Knowledge and understanding		
A1- Basic facts & theories in the field of Architectural Engineering and Urban	a1-1Understand the theories, basics and specialized knowledge pertinent to a MS.C thesis in the research field.	a1-1-1 Identify profound knowledge and understanding of the thesis topic, especially in relation

Planning and interrelated fields.		to the different dimensions of sustainability, and to previous and current research in the field, and relating it to a wider perspective. a1-1-2 Identify deeper methodological knowledge and understanding of system analysis approaches to the environmental and sustainability issues in the thesis, and of research methodology suitable to identify more sustainable solutions to the problems addressed in the thesis.
A2- Mutual relation between professional aspects of Architectural Engineering and Urban Planning technologies and effects on the Environment.	a2-1 Discuss Social effects of Architectural Engineering and Urban Planning technologies.	a2-1-1 State mutual relation between professional social aspects of his/her research and its effects on the Environment.
	a2-2 Recognize the interaction between Architectural Engineering and Urban Planning technologies and surrounding environment.	a2-2-1 Recognize the interaction between his/her research and surrounding environment.
A3- Main scientific advances in the field of Architectural Engineering and Urban Planning.	a3-1 Classify the Potential applications of advanced Architectural Engineering and Urban Planning.	a3-1-1 State the Potential applications of his/her research and its value in relation to contemporary research issues. a3-1-2 Define what the contribution of his/her thesis is and relate it to the current state-of-the-art within one or several international knowledge communities within the discipline.
	a3-2 Report new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application.	a3-2-1 State the new advances in analysis and design methodologies related to his/her research issues.
	a3-3 Discuss the recent and update developments in the most important themes related to Architectural Engineering and Urban Planning	a3-3 Identify the recent and update developments in the most important themes related to his/her research issues.

A4- Fundamentals of ethical & legal practice.	a4-1 Recognize ethnical and professional responsibility issues arising in the practice of the engineering profession.	a4-1-1 Describe and explain principles for ethical considerations in relation to scientific research. a4-1-2 State an ability to make assessments regarding sustainability problems while taking into account relevant scientific, social and ethical aspects, and demonstrate an awareness of ethical aspects of research and development work thereby demonstrating insight into the potential and limitations of knowledge and science to solve sustainability problems.
A5- Quality standards of the practice.	a5-1 Explain Quality Assurance concepts of different Architectural Engineering and Urban Planning components and systems development phases	a5-1-1 Recognize Quality Assurance concepts of different Architectural Engineering and Urban Planning systems development phases
A6- Basics and ethics of scientific research	a6-1 Recognize Basics and ethics of scientific research.	A6-1-1 Relate insights into ethical aspects on research in general.
B. Intellectual skills		
B1- Interpret, analyze & evaluate the information to solve problems.	b1-2 Interpret, analyze, and evaluate a given system specification information and relate it to the design of the required system.	b1-2-1 Identify and formulate a problem from a scientific perspective, collect data or use already collected empirical data, and demonstrate skills and ability to perform analyses related to the scientific problem.
B2- Solve some problems that do not conform to classic data (incomplete data).	b2-1 Apply broad knowledge of modern computational methods and think critically to solve unstructured problems (with incomplete data) related to Architectural Engineering and Urban Planning.	b2-2-1 Practice his/her theoretical and methodological understanding and skills into devising researchable ideas and specific research questions and hypotheses and to formulate judgments with incomplete data.
B3- Integrate different information to solve professional problems.	b3-2 Use integrated approaches to scientific problem Solving.	b3-2-1 Interpret, critically and systematically, theoretical knowledge and

		empirical data, using appropriate research methods and properly handling uncertainties, thereby contributing to the production of knowledge. b3-2-2 Demonstrate an ability to integrate knowledge and handle complexity, and to formulate judgments with incomplete data.
B4- Conduct a scientific research &/Or write scientific systematic approach to a research problem (hypothesis)	b4-1 Write an research plain to conduct applied research.	b4-1-1 Demonstrate an ability to critically, independently and creatively identify and formulate a realistic research plan with specific research strategies for his applied research and specifying steps and timelines.
	b4-2 Perform applied research on industrial and societal concerns problems related to Architectural Engineering and Urban Planning (thesis).	b4-2-1 Demonstrate ability to independently conduct an applied research project on industrial and societal concerns problems related to the field of Architectural Engineering and Urban Planning
B5- Evaluate risks imposed during professional practice	b5-1 Evaluate pros and cons of given methodologies for Architectural Engineering and Urban Planning development.	b5-1-1 Analyze a master's thesis in a constructively critical way and identify the major strong and weak points of the thesis.
B6- Plan for professional improvement.	b6-1 Plane to guide progress in his / her professional career.	b6-1-1 Demonstrate an ability to identify his/her need of further knowledge and to take responsibility for developing such knowledge through a plan to guide progress in his / her professional career.. b6-1-2 Assess and argue for the relevance of the findings with regard to practical implications, and identify the need for further

		knowledge within the field.
B7- Take professional decisions in wide range of professional situation	b7-1 Acquire decision making capabilities in different situation when facing problems related to analysis, design and development in Architectural and Urban Planning Engineering.	b7-1-1 Practice decision making capabilities in different situation when facing problems related to analysis, design and development his/her research plan.
C. Professional and practical skills		
C1- Be competent in all basic and some of the advanced professional skills related to the field of Architectural Engineering and Urban Planning.	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1 Improve the ability to identify and formulate a problem from a scientific perspective, collect data or use already collected empirical data, and demonstrate skills and ability to perform analyses related to the scientific problem.
C2- Write and appraise reports	c.2-1 Write and evaluate a professional report on specialized related to Architectural Engineering and Urban Planning technical matters.	c2-1-1 Prepare theses and report on research projects in a scientifically sound way. c2-1-2 Conduct a focused review of the relevant literature and create appropriate conceptual framework,
C3- Evaluate methods and tools used in the field of Architectural Engineering and Urban Planning	c3-1 Evaluate methods and tools reported in a specified published articles and researches concerning specified problem related to Architectural Engineering and Urban Planning field.	c3-1-1 Analyze and evaluate methods and tools reported in a specified published articles and researches concerning specified problem related to Architectural Engineering and Urban Planning field in a constructively critical way and identify the major strong and weak points of them.
D. General and transferrable skills		
D1- Communicate effectively using all methods.	d1-1 Express professional and communication skills to innovate and to interact with the scientific community, research team and	d1-1-1 Communicate research ideas and their appropriate theoretical and

	technocrats involved in multinational companies at global level in the related fields to Architectural Engineering and Urban Planning.	methodological issues effectively and efficiently, d1-1-2 Demonstrate the ability to communicate results both verbally and in writing.
D2- Use information technology to improve his/her professional practice.	d2-1 Use state-of-the-art computer aided design tools for solving Architectural Engineering and Urban Planning engineering problems.	d2-1-1 Use state-of-the-art computer aided design tools for solving Architectural Engineering and Urban Planning engineering problems.
	d2-2 Employ the information technology skills to serve his / her career development.	d2-2-1 Use the information technology skills to serve his / her career development.
D3- Practice self appraisal and determine his learning needs.	d3-1 Apply self evaluation and specify his educational needs related to Architectural Engineering and Urban Planning aspects.	d3-1-1 Demonstrate own knowledge needs with respect to the planned project. d3-1-1 Use new knowledge in the specific field in which the MS.c thesis is to be written.
D4- Share in determination of standards for evaluation of others.	d4-1 Design standards to evaluate others performance.	d4-1-1 Demonstrate ability to critically evaluate other people's performance in a systematic and standard way.
D5- Use different sources of information to obtain data.	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1 Use different sources of information like library, internet access facilities, etc. to develop and execute his/her survey to collect the necessary data to prove / support the problem that he/she has set up.
D6- Work in teams.	d6-1 Practice team working, and lead teams in specified professional jobs.	d6-1-1 Demonstrate significantly enhanced group working abilities to implement a certain project.
D7- Manage time effectively	d7-1 Manage time perfectly.	d7-1-1 Use time and work to deadlines. d7-1-2 Prepare a workable weekly schedule based on his/her individual thesis direction. d7-1-3 Use understanding of the process of

		dissertation including stress, time, and project management, committee formation, dissertation proposition and defense, and human subjects reviews.
D8- Learn independently and seek continuous learning.	d8-1 Express a strong foundation of continuous learning so they can maintain their technical competency.	d8-1-1 Demonstrate a strong foundation of continuous learning so they can maintain their technical competency.
	d8-2 Seek continuous learning through continuous education, organizing and participating in seminars, workshops, national and international conferences.	d8-2 Acquire continuous learning through continuous education, organizing and participating in seminars, workshops, national and international conferences.

3- Thesis Phases:

The Master's Thesis is an independent project (degree project) to develop and display the skills and abilities of the student to carry out individual, independent scientific work on a specific topic. The readings for the thesis work are selected by the individual student in collaboration with the supervisor. **The Master's Thesis phases can be outlined as follow:**

1. Developing a thesis proposal by formulating a realistic research plan with specific research strategies and specifying steps and timelines
2. Identify and construct a problem/thesis statement.
3. Presentation and defending of self-authored materials describing the thesis proposal at a seminar with external discussants (Department Staff).
4. Conduct a focused review of the relevant literature and create appropriate conceptual framework.
5. Analyze and evaluate methods and tools reported in a specified published articles and researches concerning the thesis problem in a constructively critical way and identify the major strong and weak points of them.
6. Carry out research:
   - Use state-of-the-art computer aided design tools.
   - Provide practical and/or laboratory services that can help.
7. Analysis and discussion of the simulated / practical results.
8. Developing defensible conclusions.
9. Writing the final thesis.

10. Presentation and defending of self-authored materials describing the thesis at a seminar with external discussants (Department Staff).
11. Reporting on and presenting the thesis in a final defense. At the examination seminar, the student should be able to respond to criticism given and also act as an opponent.

- The thesis work also includes a number of thesis workshop sessions in advance, where research and writing methods are discussed, and where the individual initial drafting of the thesis scope and outline is discussed.
- Throughout these phases:

  - The academic supervisor helps and guides the students.
  - The student is to write a manuscript in the format of a scientific article to be published.
  - Documentation is carried out.

4- Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contributes in achieving.	A1 (a1-1), A2 (a2-1, a2-2), A3 (a3-1, a3-2, a3-3), A4 (a4-1), A5 (a5-1), A6 (a6-1)	B1 (b1-2), B2 (b2-1), B3 (b3-2), B4 (b4-1,b4-2) B5 (b5-1), B6 (b6-1), B7 (b7-1)	C1 (c1-1), C2 (c2-1), C3 (c3-1)	D1 (d1-1), D2 (d2-1, d2-2), D3 (d3-1), D4 (d4-1), D5 (d5-1), D6 (d6-1), D7 (d7-1), D8 (d8-1, d8-2)

5- Course Subject Area:

A	B	C	D	E	F	G	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
---	---	-	-	-	100		100 %

6- Learning and Teaching Methods:

Besides proposing, planning, conducting and presenting one's own master thesis project, the student is required to read, analyze and evaluate methods and tools reported in a specified published articles and researches concerning the thesis problem in a constructively critical way and identify the major strong and weak points of them and write an opponent report about it. The supervisor supports and supervises the student throughout the entire thesis project, but it is the student who must take on the responsibility of requesting support and supervision during the on-going project. The student is expected to report to her/his supervisor at least every four weeks. Besides this, the student is required to hand in a written progress report at least every three months. One or several lectures or seminars held by internal guest researchers, and focusing on

research methods and the art of presenting research results, are arranged during the thesis development. In-seminar discussions should be enhanced with additional student-advisor (and committee, if appropriate) meetings. Students are expected to be prepared for all seminar meetings. It is mandatory for the student to have regular contacts with the supervisor so that the supervisor is able to follow the student's work process to secure the progress and the quality of the work. The thesis work also includes a number of thesis workshop sessions in advance, where research and writing methods are discussed, and where the individual initial drafting of the thesis scope and outline is discussed.

7- Assessment Methods:

7.1 Assessment is carried out by evaluating of the student ability to clearly present the thesis orally and to discuss and defend the conclusions and the knowledge and arguments behind them, in a dialogue with examiner committee.

7.2 For a passing grade the student must (a) make an acceptable oral presentation of the thesis; (b) perform an acceptable defense of the thesis and should be able to respond to criticism given by the examiner committee and also act as an opponent.

8- Facilities required for teaching and learning

Blackboard – Class Room Equipped with Computer and Video Projector - Computer Lab - Library.

A. laboratory Usage:

Students are expected to prepare and conduct some computer simulation and practical works using computer ad specialized Architectural Engineering and Urban Planning labs.

B. Library Usage:

Students should be encouraged to use library technical resources during the thesis development.

9- List of References:

The readings for the thesis work are selected by the individual student in collaboration with the supervisor.

10- Program Coordination Committee:

Programme coordinator:	**Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**
Head of the Department:	**Prof. Dr. Ashraf Abd-Elfatah El-Mokadem**

Date:

UPL 612

Urban Development Economy

Course Specification

Program on which the course is given	Master degree
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MSc Graduate Program**
Date of specification approval	2020

A- Basic Information

Title: Urban Development Economy	Code Symbol: - UPL 612	
Lecture	3 hours	
Tutorial / Laboratory	--------	
Total	**3** hours	Bylaw 2000

B- Professional Information

1- Course Aims:

Analyzing the Economical Structure of Society, Economic Development, Urban Development with Concentration on Magnifying the Economical Product of the Society by Offering Job Opportunity and Forming Economical Projects. The Self-Sufficient Productive Society in the Distribution of Urban Areas and Settlement.

2- Course Objectives

- Understand sustainability and its relation to planning and urban design
- Identify urban, social, political, economic and environmental problems
- Demonstrate a full knowledge of the economic structure of society.
- Understand the city, its evolution, growth, development, its elements and components
- Evaluate for different examples internationally and locally.

3- Intended Learning Outcomes (ILOs)

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **النظريات والأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة**	a1-3 Understand the theories, basics and specialized knowledge in the field of Urban Planning.	a1-3-1 Recognize economical processes and techniques. a1-3-2 Recognize the analysis of economical product. .
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a2-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a2-1-1- Identify factors influencing building economics and their ranges of effect on designs and projects.
A3- Main scientific advances in the field of specialization. **التطورات العلمية في مجال التخصص**	a3-1 Report new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.	a3-1-1- Identify the content areas of the factors related to building economics and their architectural applications.
B. Intellectual skills		
B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems. **تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل**	b1-1 Demonstrate an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.	b1-1-1- Formulate the Problem-solving skills. b1-1-2- Practice oral communication skills.
B2- Solve specialized problems with lack of some data and variables, (incomplete data).	b2-1 Apply broad knowledge of modern computational	b2-1-1- Select the analytical studies that could affect urban societies.

حل المشاكل المتخصصة مع عدم توافر بعض المعطيات	methods and think critically to solve unstructured problems (with incomplete data) related Architectural Engineering and Urban Planning.	b2-1-2- Classify the available urban development solutions.
B3- Link and integrate diverse knowledge to solve professional problems. **الربط بين المعارف المختلفة لحل المشاكل المهنية**	b3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b3-1-1- Discuss the analytical studies that could develop the new urban district and the old urban districts. b3-1-2- Evaluate different solutions.
B4- Conduct a research study and/or writing systematicscientific study about Research problem. **إجراء دراسة بحثية و /أو كتابة دراسة علمية منهجية حول مشكلة بحثية**	b4-1 Write an research plain to conduct applied research.	b4-1-1 Choose the proper approach to address a given query in architectural humanities.
B7- Take professional decisions in different professional practical contexts. **اتخاذ القرارات المهنية في سياقات مهنية متنوعة**	b7-1 Acquire decision making capabilities in different situation when facing problems related to Architectural Engineering and Urban Planning .	b7-1-1- Maintain decision making capabilities in new urban design decision facing problems of old district and how to harmony with them.
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص**	c1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1-Utilize the methods of application of urban design in new districts and how to use computer simulation programs in it.
C2- Write and evaluate technical and	c.2-1 Write and	c2-1-1-Apply the urban

professional reports. **كتابة وتقييم التقارير المهنية**	evaluate a professional report on specialized related to Architectural Engineering and Urban Planning .	design into the students' architectural design projects.
D. General and transferrable skills		
D1- Communicate effectively using all methods. التواصل الفعال بأنواعه المختلفة	d1-1Communicate effectively with the scientific community, research team and technocrats involved in multinational companies in the related fields to Architectural Engineering and Urban Planning.	d1-1-1 Mange economic criteria and decision making d-1-1-2 consider different economical, technical and environmental issues
D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 Employ the information technology skills to serve his / her career development.	d2-1-1- Use the information technology to improve researches by using computer simulation programs also.
D4- Set evaluation criteria and benchmarks for others. **وضع قواعد ومؤشرات تقييم أداء الآخرين**	d4-1 Design standards to evaluate others performance.	d4-1-1- Prepare an evaluation of other researches D4-1-2 Develop evaluation and urban & human projects criticism. D4-1-3- Prepare the urban & human projects program.
D5- Use different sources to obtain knowledge and information. **استخدام المصادر المختلفة للحصول على المعلومات والمعارف**	d5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their	d5-1-1 Use of text- book to collect the data that he needs.

	conceptual knowledge.	
D6- Lead a team in familiar professional context العمل في فريق،وقيادة فرق في سياقات مهنية مختلفة	d6-1 Practice team working, and lead teams in specified professional jobs.	d6-1-1Work in a team in the research work.
D7- Manage time effectively إدارةالوقت بكفاءة	d7-1 Manage time perfectly.	d7-1-1 Prepare calculation of time value of money

4-Course Contents

Lecture Topic	Total Hours	Lecture Hours	Practical /Tutorial Hours
Introduction	12	12	
Analyzing the economical structure of society	12	12	
Economical development	24	24	
Urban development	24	24	
The economical product The self-sufficient productive societies in the distribution of urban areas and settlement.	18	18	
Total	**90**	**90**	

5-Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contributes in achieving.	A1(a1-3) A2 (a2-1) A3 (a3-1)	B1 (b1-1), B2 (b2-1), B3 (b3-1), B4 (b4-1) B7 (b7-1)	C1 (c1-1), C2 (c2-1)	D1 (d1-1), D2 (d2-1), D4 (d4-1), D5 (d5-1), D6 (d6-1), D7 (d7-1),

6-Course Subject Area:

A	B	C	D	E	F	G	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total

50%	---	5%	10%	5%	30%		100 %

7-Course Topics.

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-4	1- Introduction	12	12		--	a1-3,a2-1,b1-1,b2-1,b6-1,c1-1,d4-1	1
5-8	2- Urban plans in new districts	12	12		--	a3-1 ,b1-1,b4-1, c1-1,c3-1,d1-1,d4-1,d5-1,d6-1,d7-1	2
9-16	3- Analysis of present situation in new settlements	24	24		--	a1-3,a2-1, b3-1,c1-1,d1-1,d2-1,d4-1	3
17-24	4- The proposed goals	24	24		--	a1-3,a2-1,a3-1,b1-1,b3-1,c1-1,d1-1	4
25-28	5- Examples of urban projects internationally and locally	18	18		--	b1-1,b7-1,c1-1,c3-1,d4-1,d2-1,d5-1,d6-1,d7-1	5
Total		**90**	**90**				

8-ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**
Course ILOs	**Knowledge & Understanding**				
a1-3 Understand the theories, basics and specialized knowledge in the field of Urban Planning.	x	x			

a2-1-1- Identify factors influencing building economics and their ranges of effect on designs and projects.	x		x	x	
a3-1-1- Identify the content areas of the factors related to building economics and their architectural applications.	x		x	x	
Course ILOs	**Intellectual Skills**				
b1-1-1- Formulate the Problem solving skills. b1-1-2- Practice oral communication skills.	x	x	x	x	x
b2-1-1- Select the analytical studies that could affect urban societies. b2-1-2- Classify the available urban development solutions.	x	x	x	x	x
b3-1-1- Discuss the analytical studies that could develop the new urban district and the old urban districts. b3-1-2- Evaluate different solutions.			x	x	
b4-1-1 Choose the proper approach to address a given query in architectural humanities.		x			
b7-1-1- Maintain decision making capabilities in new urban design decision facing problems of old district and how to harmony with them.					x
Course ILOs	**Professional Skill**				
c1-1-1- Utilize the methods of application of urban design in new districts and how to use computer simulation programs in it.	x	x	x	x	x
c2-1-1-Apply the urban design into the students' architectural design projects.		x			x
Course ILOs	General Skills				
d1-1-1 Manage economic criteria and decision making considering different economical, technical and environmental issues		x	x	x	
d-1-1-2 consider different economical, technical and environmental issues			x		x
d2-1-1- Use the information technology to improve researches by using computer simulation programs also.			x		x
d4-1-1- Prepare an evaluation of other researches d4-1-2 Develop evaluation and urban & human projects criticism. d4-1-3- Prepare the urban & human projects program.	x	x	x		
d5-1-1 Use of text- book to collect the data that he needs.		x			x
d6-1-1Work in a team in the research work.			x	x	
d7-1-1 Prepare calculation of time value of money.			x	x	

9- Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-3-1	x	x	x										
	a1-3-2									x				
	a1-3-3			x										
	a2-1-1	x							x					
	a2-1-2	x												
	a3-1-1	x	x	x					x	x				
Intellectual Skills	b1-1-1	x							x	x				
	b1-1-2	x												
	b2-1-1	x								x				
	b2-1-2			x						x				
	b3-1-1								x	x				
	b3-1-2	x												
	b4-1-1		x							x				
	b7-1-1	x												
Professional Skills	c1-1-1		x											
	c2-1-1		x											
General Skills	d1-1-1			x										
	d2-1-1			x										
	d4-1-1			x			x							
	d5-1-1		x											
	d6-1-1			x						x	x			
	d7-1-1						x							

10- Assessment

10.1 Assessment Methods

Final Written Examination : to assess students' knowledge, understanding, analysis, creativity, problem solving, andproblem identification.

10.2 Assessment Schedule and Grades Distribution

Assessment Method	Percentage	week
Final Examination	100%	31
Total	100%	

11-Facilities required for teaching and learning

- **Laboratory Usage:** None.

- **Library Usage:**

Students should be encouraged to use library technical resources in the preparation of reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12-List of References:

1- **Text books:**

- Kuznesof, Elizabeth Anne. Household Economy And Urban Development: Sao Paulo 1765-1836. Routledge, 2019.
- Miles M. E., M. N. Laurence et al. , Real Estate Development - 5th Edition: Principles and Process, (2015).
- Edward J. Blakely and Nancey G. Leigh , Planning Local Economic Development: Theory and Practice (NULL) (2016).

2- Recommended books:

وصف مصر بالمعلومات، 2014

7- Facilities required for teaching and learning:

3- - Appropriate teaching class accommodations including presentation board and data show

13- Program Coordination Committee:

Course Coordinator: Dr. Mohamed AlGohary

Program Coordinator: Dr. Basma Nashaat El-Mowafy

Head of the Department: Prof. Dr. Ashraf Abd-Elfatah El-Mokadem

Date: 10-2020

UPL 613

PLANNING SQUATTER AREAS

Course Specification

Program on which the course is given	Architecture and Urban Planning
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	M.Sc.
Date of specification approval	***2020***

A- Basic Information

Title: Planning Squatter Areas	**Code Symbol**: UPL 613	
Lecture	3 hours	
Tutorial/ Laboratory	---------	
Total	3 hours	By law 2000

C- Professional Information

1- Course Aims:

This course aims to acquire the student with the essential knowledge to understand of development of Squatter areas studies and essential issues of the present situations in existing Squatter areas to conclude Recommendations in the form of Urban Plans to Improve and develop these areas. The course aims to identify the problem of development of slum areas for residential zones in Egypt. The course provides the students with the necessary practical and professional skills concerning with the methods of urban, social, economic, and environmental survey for these areas and how to analyze information to reach recommendations and prepare proposals for improvements.

2- Course Objectives

- Supply the student with the essential knowledge to understand of development of squatter areas studies.
- Conclude recommendations in the form of urban plans to improve and develop these areas.
- Identify the problem of development of slum areas for residential zones in egypt.
- Provide the students with the necessary practical and professional skills concerning with the methods of urban, social, economic, and environmental survey.
- Analyze information to reach recommendations and prepare proposals for improvements.

2- Intended Learning Outcomes (ILOs)

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	ILOs	Subjects Covering such ILOs
A. Knowledge and Understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice.	a1-3- Understand the theories, basics and specialized knowledge in the field of Urban Planning.	a1-3-1 Recognize Urban Renewal processes and techniques . a1-3-2 Recognize the site analysis studies in development of Squatter areas. a1-3-3 Recognize development of Squatter areas for medium scale projects.
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment.	a2-1-Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment.	a2-1-1 Recognize Necessary practical and professional skills concerning the differentiation of the development of Squatter areas for residential zones.
B. Intellectual Skills		
B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems.	b1-1- Demonstrate an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning.	b1-1-1 Determine the urban Renewal studies to determine the characteristics of site & site potentialities and implication for development of Squatter areas for residential zones. b1-1-2 Distinguish the development of Squatter areas for residential zones.
B2- Solve specialized problems with lack of some data and variables, (incomplete data).	b2-1- Apply broad knowledge of modern computational methods and think critically to solve unstructured problems (with incomplete data) related Architectural Engineering and Urban Planning.	b2-1-1 Maintain Problem solving skills.

B3- Link and integrate diverse knowledge to solve professional problems	b3-1- Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b3-1-1- Assess the analytical studies that could affect development of Squatter areas.
B-5. Assess and evaluate the characteristics and performance of components, systems and processes.	b5-1- Improve the student's skills about assessment and evaluating different systems and techniques.	b5-1-1- Distinguish different techniques for dealing with Squatter areas.
C. Professional and Practical Skills		
C1- Master the basic as well as the latest professional skills in the field of specialization.	c1-1- Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1- Improve urban Renewal presentation skills. c1-1-2 Practice the Urban Renewal principles for development of Squatter areas analysis. c1-1-3- Utilize the Urban Renewal studies skills for medium scale of Squatter areas projects. c1-1-4- Apply the development of Squatter areas for residential zones program preparation.
C2- Write and evaluate technical and professional reports.	c2-1 Write and evaluate a professional report on specialized related to Architectural Engineering and Urban Planning.	c2-1-1- Apply urban design principles into the students' architectural design projects.
C3- Evaluate means and tools available in the field of practice.	c3-1- Evaluate methods and tools reported in a specified published articles and researches related to Architectural Engineering and Urban Planning field.	c3-1-1- Practice evaluation and The Urban Renewal criticism.
D. General and Transferrable Skils		
D1- Communicate effectively using all methods.	d1-1- Communicate effectively with the scientific community, research team and technocrats involved in multinational companies in the related fields to Architectural	d1-1-1- Prepare selected parts of the course in oral seminar using available displaying equipments.

	Engineering and Urban Planning.	
D5- Use different sources to obtain knowledge and information.	d5-1- Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1- Prepare short essays in certain topics of the course. d5-1-2- Use of text- book to collect the data that he needs.
D6- Lead a team in familiar professional context	d6-1- Practice team working, and lead teams in specified professional jobs.	d6-1-1- Work in groups to assess the ability to creatively solve problems.

3- Course Contents

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
week 1	**Introduction:** 1. Introduction. 2. Objectives of the development of Squatter areas.	3	3			a1-3-1	1
Weeks 2, 3, 4	**Historical roots of Squatter areas:** The modern attempts of development of slum areas.	9	9			a1-3-1, a2-1-1, b1-1-2, d5-1-1, d5-1-2	2
Weeks 5, 6, 7	**The theoretical approaches for development of Squatter areas.**	9	9			a1-3-1, a2-1-2, b1-1-2, b2-1-1, c3-1-1, d5-1-1, d5-1-2	3
Weeks 8, 9, 10, 11	**Development of slum areas strategies since the fifties in Egypt.** - Squatter areas problem for low-income groups. - Social and Economic factors influencing the Squatter areas. -Informal Housing and the role of people participation and self - help project.	12	12			a1-3-1, a2-1-2, b2-1-1, c3-1-1, d5-1-1, d5-1-2	4
Weeks 12, 13, 14, 15	**Analytical studies of Squatter areas.**	12	12			a1-3-1, a1-3-2, b3-1-1	5
Weeks 16, 17, 18, 19	**The role of community participation in the implementation of development of Squatter areas programs.**	12	12			a1-3-1, a1-3-2, b3-1-1, d5-1-1, d5-1-2	6
Weeks 20, 21, 22, 23	**Slide show for some development of Squatter areas projects**	12	12			a1-3-1, a1-3-3, b1-1-1, b2-1-1, b3-1-1, c1-1-4, d1-1-1, d5-1-1, d5-1-2, d6-1-1	7

Weeks 24, 25, 26, 27	**Apply development of Squatter areas studies in medium scale projects** (Squatter areas ,old districts, Informal zones… etc.) -Seminar/ Presentation of development of Squatter areas exercises.	12	12			a1-3-1, a1-3-2, a1-3-3, a2-1-1, b1,1,1-b2-1-1, b3-1-1, c1-1-1, c1-1-2, c1-1-3, c1-1-4, d1-1-1, d5-1-1, d6-1-1	8
Weeks 28-30	**Final submission of the exercise.**	9	9			a1-3-1, a1-3-3, b1,1,1- b2-1-1, b3-1-1, c1-1-1, c1-1-2, c1-1-3, c1-1-4, c3-1-1, d1-1-1, d5-1-1, d6-1-1	9
		90	90				

4- Relationship between the course and the programme

Field	**National Academic Reference Standard(NARS)**			
	Knowledge & Understanding	**Intellectual Skills**	**Professional Skills**	**General Skills**
Program Academic Standards that the course contribute in achieving	A1 (a1-3), A2 (a2-1).	B1 (b1-1), B2 (b2-1), B3 (B3-1).	C1 (c1-1), C3 (c3-1).	D1 (d1-1), D5 (d5-1), D6 (d6-1).

5- Course Subject Area:

A	B	C	D	E	F	G	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
30%	__	10%	__	10%	50%	__	100

6- Course Topics

Topic No.	**Topic**	**Weeks**
1st	**Introducation:** 1. Introduction.	**1**

	2. Objectives of the development of Squatter areas.	
2nd	**Historical roots of Squatter areas:** The modern attempts of development of slum areas.	**2,3,4**
3rd	**The theoretical approaches for development of Squatter areas.**	**5,6,7**
4th	**Development of slum areas strategies since the fifties in Egypt.** - Squatter areas problem for low-income groups. - Social and Economic factors influencing the Squatter areas. -Informal Housing and the role of people participation and self - help project.	**8,9,10,11**
5th	**Analytical studies of Squatter areas.**	**12,13,14,15**
6th	**The role of community participation in the implementation of development of Squatter areas programs.**	**16,17,18,19**
7th	**Slide show for some development of Squatter areas projects**	**20,21,22,23**
8th	**Apply development of Squatter areas studies in medium scale projects** (Squatter areas ,old districts, Informal zones… etc.) -Seminar/ Presentation of development of Squatter areas exercises.	**24,25,26,27**
9th	**Final submission of the exercise.**	**28-30**

7- Matrix Topics

Course Intended Learning Outcomes (ILOs)		**Course topics**								
		1st	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	**9th**
A- Knowledge & Understanding	a1-3-1- Recognize Urban Renewal processes and techniques .	X	X	X	X	X	X	X	X	X
	a1-3-2- Recognize the site analysis studies in development of Squatter areas.					X	X		X	
	a1-3-3- Recognize the development of Squatter areas for medium scale projects							X	X	X
	a2-1-1- Recognize Necessary practical and professional skills		X	X	X				X	

	concerning the differentiation of the development of Squatter areas for residential zones.									
B-Intellectual Skill	b1-1-1- Determine the Urban Renewal studies to determine the characteristics of site & site potentialities and implication for development of Squatter areas for residential zones.							X	X	X
	b1-1-2- Distinguish the development of Squatter areas for residential zones.		X	X						
	b2-1-1- Maintain Problem solving skills.			X	X			X	X	X
	b3-1-1- Assess the analytical studies that could affect development of Squatter areas.					X	X	X	X	X
	b5-1-1- Distinguish different techniques for dealing with Squatter areas.					X	X	X		
C- Professional Skill	c1-1-1- Illustrate the urban Renewal presentation skills.								X	X
	c1-1-2- Practice the Urban Renewal principles for development of Squatter areas analysis.								X	X
	c1-1-3- Utilize the Urban Renewal studies skills for medium scale of Squatter areas projects.								X	X
	c1-1-4- Apply the development of Squatter areas for residential zones program preparation.							X	X	X
	c3-1-1- Practice evaluation and The Urban Renewal criticism.			X	X					X
D- General Skills	d1-1-1- Prepare selected parts of the course in oral seminar using available displaying equipments.							X	X	X
	d5-1-1- Prepare short essays in certain topics of the course.		X	X	X		X	X		

	d5-1-2- Use of text- book to collect the data that he needs.		X	X	X		X	X	X	X
	d6-1-1- Work in groups to assess the ability to creatively solve problems.							X	X	X

8- Teaching and Learning Method

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Site visits	Self learning	Cooperative	Discovering	Modeling	Playing
A- Knowledge & Understanding	a1-3-1	X	X			X	X		X		X			
	a1-3-2	X							X		X			
	a1-3-3	X	X											
	a2-1-1	X												
B-Intellectual Skill	b1-1-1	X							X		X			
	b1-1-2	X												
	b2-1-1	X					X				X			
	b3-1-1	X					X							
C- Professional Skill	c1-1-1	X	X	X				X						
	c1-1-2	X		X				X						
	c1-1-3	X		X				X	X					
	c1-1-4	X		X				X						
	c3-1-1	X		X			X	X						
D- General Skills	d1-1-1		X	X										
	d5-1-1		X	X			X							
	d5-1-2	X												
	d6-1-1			X				X	X					

9- Teaching and learning method for low capacity and outstanding Students:

For low capacity students	Assign a portion of the office hours for those students.
	Give them specific tasks.
	Repeat the explanation of some of the material and tutorials.
	Assign a teaching assistance to follow up the performance of this group of students.
For outstanding Students	Give them some research topics to be searched using the internet and conduct presentation.
	Encourage them to take parts in the running research projects.

10- Assessment

10-1 Assessment Methods

Final Written Examination to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification

10-2 Assessment Schedule and Grades Distribution

Assessment Method	Percentage	week
Final Examination	-	-
Mid term written Examination1	-	-
Attendance	-	-
End of term written examination	100	31
Total	100%	

11- Facilities required for teaching and learning:

Lecture room facility:

The lecture room is provided by data show for illustrating the subjects during lecturing .

12- List of references:

Course notes : None

Text books:

Healey, Patsy. "Planning and change." Connections: Exploring Contemporary Planning Theory and Practice with Patsy Healey (2015).

على الحيدرى وأخرون – التصميم الحضرى – الهيكل والدراسات الميدانية – مكتبة مدبولى – 2002.

أحمد خالد علام وأخرون – تجديد الأحياء – مكتبة الأنجلوالمصرية – (1997).

Recommended books

مركز بحوث الإسكان والتخطيط العمرانى – مشروع التعاون المصرى الهولندى المشترك للتدريب والبحوث فى مجال الإسكان والتنمية العمرانية – دليل تطوير المناطق العشوائية فى مصر – القاهرة 2003.

Periodicals, Web sites, etc

- **http://www.araburban.net/category/19.htm**
- **http://en.wikipedia.org/wiki/urban**

13- Program Coordination Committee:

Course Coordinator:	Dr. Mohamed El Gohary
Program Coordinator:	Dr. Basma Nashaat El-Mowafy
Head of the Department:	Prof. Dr. Ashraf Abd-Elfatah El-Mokadem

Date: 10-2020

UPL 618

Urban Design in New Districts

Course Specification

Program on which the course is given	Master degree
Major or minor element of program	Major
Department offering the program	Architecture and Urban Planning
Department offering the course	Architecture and Urban Planning
Academic year/Level	**MSc Graduate Program**
Date of specification approval	2020

A- Basic Information

Title: Urban design in new district	**Code Symbol: - UPL 618**	
Lecture	3 hours	
Tutorial / Laboratory		
Total	**3** hours	Bylaw 2000

B- Professional Information

1- Course Aims:

This course aims to Study Urban Plans in New Districts, Analysis of Present Situation in new settlements to assess their success in achieving the proposed Goals. Then, Study examples of urban project internationally and locally.

2- Course Objectives

- Demonstrate a full knowledge of the present situation in new settlements.
- Evaluate for different examples internationally and locally.
- Acquire decision making capabilities in new urban design decision facing problems of old districts.
- Interpret the methods of application of urban design in new districts and how to use computer simulation programs in it.

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3- Intended Learning Outcomes (ILOs)

This course is designed to achieve the above objectives through the following Intended

Learning Outcomes (ILOs):

NAQAAE Academic Reference Standards (ARS)	Program ILOs	Course ILOs
A. Knowledge and understanding		
A1. Theories, basics and specialized knowledge in the field of learning, as well as the subjects that affect his/her professional practice. **النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة**	a-1-3 Understand the theories, basics and specialized knowledge in the field of Urban Planning.	a-1-3-1 Recognize new urban projects processes and techniques. a-1-3-2 Recognize the analysis of new urban projects. a-1-3-3- Recognize urban studies projects for big scale projects.
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment. **التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة**	a-2-1 Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment	a-2-1-1- State new districts which affords new housing and work opportunities a2-1-2- Investigate principles of urban development.
A3- Main scientific advances in the field of specialization. **التطورات العلمية في مجال التخصص**	a-3-1 Report new advances in analysis and design methodologies in Architectural Engineering and Urban Planning and its application paradigms.	a-3-1-1-Recognize necessary practical and professional new skills in the field of new urban districts
A4- Fundamentals of ethical & legal professional practice in the field of specialization. **المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال التخصص**	a-4-1 Recognize ethical and professional responsibility issues arising in the practice of the engineering profession.	a-4-1-1- Recognize the urban new cities law of design districts.
A5- Basics and principles of quality in professional practice in the field of specialization. **مبادئ و أساسيات الجودة في الممارسة المهنية في مجال التخصص**	a-5-1 Explain Quality Assurance concepts of Architectural Engineering and Urban Planning.	a-5-1-1- Outline current trends of theorization in urban design
A6- Basics and ethics of scientific research	a-6-1 Recognize Basics and ethics of scientific research.	a-6-1-1- List the basic methods of research

أساسيات وأخلاقيات البحث العلمي		analysis a-6-1-2 State the basic skills of making Proposals
B. Intellectual skills		
B2- Solve specialized problems with lack of some data and variables, (incomplete data). **حل المشاكل المتخصصة مع عدم توافر بعض المعطيات**	b-2-1 Apply broad knowledge of modern computational methods and think critically to solve unstructured problems (with incomplete data) related Architectural Engineering and Urban Planning.	b2-1-1- Maintain Problem solving skills. b2-1-2- Assess oral communication skills. b-2-1-3- Assess the analytical studies that could affect urban societies. b-2-1-4- Investigate different solutions. .
B3- Link and integrate diverse knowledge to solve professional problems. **الربط بين المعارف المختلفة لحل المشاكل المهنية**	b-3-1 Analyze, interpret and manipulate data from a variety of sources and relate it to solve professional problems.	b-3-1-1- Assess the analytical studies that could the new urban district to the old urban districts.
B5- Conduct a research study and/or writing systematic scientific study about Research problem. **إجراء دراسة بحثية و /أو كتابة دراسة علمية منهجية حول مشكلة بحثية**	b-5-1 Write an research plain to conduct applied research.	b-5-1-1 Select the proper approach to address a given query in architectural humanities.
B7- Take professional decisions in different professional practical contexts. **اتخاذ القرارات المهنية في سياقات مهنية متنوعة**	b7-1 Acquire decision making capabilities in different situation when facing problems related to Architectural Engineering and Urban Planning .	b7-1-1- Practice decision making capabilities in new urban design decision facing problems of old district and how to harmony with them.
C. Professional and practical skills		
C1- Master the basic as well as the latest professional skills in the field of specialization. **إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص**	c-1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c-1-1-1-Employ the methods of application of urban design in new districts and how to use computer simulation programs in it.

C2- Write and evaluate technical and professional reports. **كتابة و تقييم التقارير المهنية**	c.-2-1 Write and evaluate a professional report on specialized related to Architectural Engineering and Urban Planning .	c-2-1-1-Apply the urban design into the students' architectural design projects.
D. General and transferrable skills		
D1- Communicate effectively using all methods. التواصل الفعال بأنواعه المختلفة	d1-1Communicate effectively with the scientific community, research team and technocrats involved in multinational companies in the related fields to Architectural Engineering and Urban Planning.	d1-1-1 Use economic criteria and decision making considering different economical ,technical and environmental issues
D2- Use information technology to improve his/her professional practice. **استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**	d2-1 Employ the information technology skills to serve his / her career development.	d2-1-1- Use the information technology to improve researches by using computer simulation programs also.
D4- Set evaluation criteria and benchmarks for others. **وضع قواعد ومؤشرات تقييم أداء الآخرين**	d-4-1 Design standards to evaluate others performance.	d-4-1-1- Prepare evaluation of different researches d-4-1-2 Prepare design evaluation and the urban & human projects criticism. d4-1-3- Prepare the urban & human projects program.
D5- Use different sources to obtain knowledge and information. **استخدام المصادر المختلفة للحصول على المعلومات و المعارف**	d-5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d-5-1-1 Use of text-book to collect the data that he needs.
D6- Lead a team in familiar professional context **العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة**	d-6-1 Practice team working, and lead teams in specified professional jobs.	d-6-1-1Work in a team in the research work.
D7- Manage time effectively	d-7-1 Manage time perfectly.	d-7-1-1 Prepare and calculate time value of

إدارة الوقت بكفاءة		money
D8- Learn independently and seek continuous learning. التعلم الذاتي و المستمر	d-8-1 Seek continuous learning through continuous education, organizing and participating in seminars, workshops, national and international conferences.	d-8-1-1- Acquire technical research upgrade and continuous presentations.

4- Course Contents

Lecture Topic	Total Hours	Lecture Hours	Practical /Tutorial Hours
1- Introduction	12	12	--
2- Urban plans in new districts	12	12	--
3- Analysis of present situation in new settlements	24	24	--
4- The proposed elements of urban design	24	24	--
5- Examples of urban projects internationally and locally	18	18	--
Total	**90**	**90**	--

5- Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contributes in achieving.	A1(a1-3) A2 (a2-1) A3 (a3-1) A4 (a4-1) A5(a5-1) A6(a6-1)	B2 (b2-1), B3 (b3-1), B4 (b4-1) B7 (b7-1)	C1 (c1-1), C2 (c2-1)	D1 (d1-1), D2 (d2-1), D4 (d4-1) D5 (d5-1), D6 (d6-1) D7 (d7-1), D8 (d8-1)

6- Course Subject Area:

A	B	C	D	E	F	G	
Humanities and Social Science	Mathematics and Basic Sciences	Basic Engineering Science	Applied Engineering And Design	Computer Applications and ICT	Projects and practice	Disccretionry subjects	Total
50%	---	5%	10%	5%	30%		100 %

7- Course Topics.

Week No.	*Topic*	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*	Topic
			Lec.	Tut.	Lab.		
1-4	1- Introduction	12	12	--	--	A1-3,a2-1, b2-1,c1-1,d4-1	1
5-8	2- Urban plans in new districts	12	12	--	--	A1-3,a2-1,a3-1, b3-1,c1-1,d1-1	2
9-16	3- Analysis of present situation in new settlements	24	24	--	--	A4-1,a5-1, b7-1,c1-1,c3-1,d4-1,d2-1,d5-1,d6-1,d7-1	3
17-24	4- The proposed goals	24	24	--	--	A3-1,a4-1, b4-1,c1-1,c3-1,d1-1,d4-1,d5-1,d6-1,d7-1,d8-1	4
25-28	5- Examples of urban projects internationally and locally	18	18	--	--	A1-3,a2-1,a5-1,a6-1,b3-1,c1-1,d1-1,d2-1,d4-1,d8-1	5
Total		**90**	**90**	**--**			

8- ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**
Course ILOs	**Knowledge & Understanding**				
a1-3-1 Recognize new urban projects processes and techniques.	x	x			x
a1-3-2 Recognize the analysis of new urban projects. .	x	x			x
1-3-3- Recognize urban studies projects for big scale projects. .	x	x			x

a2-1-1- State new districts which affords new housing and work opportunities	x	x			x
a2-1-2- Investigate principles of urban development.	x	x			x
a3-1-1-Recognize necessary practical and professional new skills in the field of new urban districts		x		x	
a4-1-1- Recognize the urban new cities law of design districts.			x	x	
a5-1-1- Outline current trends of theorization in urban design			x		x
a6-1-1- List the basic methods of research analysis		x			x
a6-1-2 State the basic skills of making Proposals					x
Course ILOs	**Intellectual Skills**				
b2-1-1- Maintain problem solving skills.	x	x	x	x	
b2-1-2- Assess oral communication skills.	x	x		x	x
b2-1-3- Assess the analytical studies that could affect urban societies.	x		x	x	x
b2-1-4- Investigate among different solutions. .	x	x	x	x	x
b3-1-1- Assess the analytical studies that could the new urban district to the old urban districts.		x			x
b4-1-1 Select the proper approach to address a given query in architectural humanities.				x	
b7-1-1- Practice decision making capabilities in new urban design decision facing problems of old district and how to harmony with them			x		
Course ILOs	**Professional Skill**				
C1-1-1- Employ the methods of application of urban design in new districts and how to use computer simulation programs in it.	x	x	x	x	x
C2-1-1-Apply the urban design into the students' architectural design projects.			x	x	
Course ILOs	General Skills				
d1-1-1 Use economic criteria and decision making considering different economical ,technical and environmental issues		x		x	x
d2-1-1- Use the information technology to improve researches by using computer simulation programs also.			x		x
d-4-1-1- Prepare evaluation of different researches	x			x	x
d4-1-2 Prepare design evaluation and The urban & human projects criticism.	x			x	x
d4-1-3- Prepare the urban & human projects program.	x			x	x

d5-1-1 Use of text- book to collect the data that he needs.			x	x	
d6-1-1Work in a team in the research work.			x	x	
d7-1-1 Prepare and calculate time value of money			x	x	
d8-1-1- Acquire technical research upgrade and continuous presentations.				x	x

9- Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and Movies	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	a1-3-1	x												
	a1-3-2	x												
	a1-3-3	x												
	a2-1-1	x												
	a2-1-2	x												
	a3-1-1	x												
	a4-1-1	x												
	a5-1-1	x												
	a6-1-1	x								x				
	a6-1-2	x				x								
Intellectual Skills	b2-1-1		x	x					x	x				
	b2-1-2	x												
	b2-1-3	x												
	b2-1-4	x												
	b3-1-1					x								
	b4-1-1												x	
	b7-1-1					x	x				x	x		
Professional Skills	c1-1-1					x								
	c2-1-1		x	x					x	x				
General Skills	d1-1-1												x	

	d2-1-1		x							x				
	d4-1-1	x	x							x				
	d4-1-2	x												
	d4-1-3	x				x								
	d5-1-1					x					x	x		
	d6-1-1			x						x	x			
	d7-1-1						x	x					x	
	d8-1-1						x	x					x	

10- Assessment

10.1 Assessment Methods

Final Written Examination : to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

10.2 Assessment Schedule and Grades Distribution

Assessment Method	Percentage	week
Work year	--	--
Final Examination	100%	31
Total	100%	

11- Facilities required for teaching and learning

- **Laboratory Usage:** None.

- **Library Usage:**

Students should be encouraged to use library technical resources in the preparation of reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

12- List of References:

Course notes: **None**

Text books:

- Barnett, Jonathan. City design: Modernist, traditional, green and systems perspectives. Routledge, 2016.
- Hebatalla Abouelfadl, Dalila ElKerdany, Christoph Wessling, Revitalizing City Districts, Springer publisher ,2017.
- على الحيدرى وأخرون – التصميم الحضرى – الهيكل والدراسات الميدانية – مكتبة مدبولى – 2002.

Recommended books

Wessling, Christoph, Hebatalla Abouelfadl, and Dalila ElKerdany, eds. Revitalizing City Districts: Transformation Partnership for Urban Design and Architecture in Historic City Districts. Springer, 2017.

13-Program Coordination Committee:

Course Coordinator:	Dr. Abd-El-Wahab Helmy
Program Coordinator:	Dr. Basma Nashaat El-Mowafy
Head of the Department:	Prof. Dr. Ashraf Abd-Elfatah El-Mokadem

Date: 10-2020

UPL617

Urban Design in Old Districts

Course Specification

Program on which the course is given	Architecture and Urban Planning Major
Major or minor element of program	Architectural Engineering
Department offering the program	Architectural Engineering
Department offering the course	M.Sc.
Academic year/Level	***2020***
Date of specification approval	

A- Basic Information

Title: Urban Design in Old Districts	**Code Symbol**: UPL617	
Lecture	3 hours	
Tutorial / Laboratory	--	
Total	3 hours	By law 2000

B- Professional Information

1- Course Aims:

This course aims at:

acquire the student with the essential knowledge to understand of development of Squatter areas studies and essential issues of the present situations in existing Squatter areas to conclude Recommendations in the form of Urban Plans to Improve and develop these areas. The course aims to identify the problem of development of slum areas for residential zones in Egypt. The course provides the students with the necessary practical and professional skills concerning with the methods of urban, social, economical, and environmental survey for these areas and how to analyze information to reach recommendations and prepare proposals for improvements.

2- Intended Learning Outcomes (ILOs)

This course is designed to achieve the above objectives through the following Intended **Learning Outcomes (ILOs)**:

NAQAAE Academic Reference Standards (ARS)	Program ILOs Intended Learning Outcomes	Course ILOs
A. Knowledge and understanding المعرفة والفهم		
A1. Theories, basics and specialized knowledge in	A1-1Demonstrate sufficient essential knowledge and a	a1-1-1 Recognize urban & human projects

the field of learning, as well as the subjects that affect his/her professional practice.	deep understanding of the concepts and theories of Architectural Engineering and Urban Planning. إظهار المعرفة الأساسية الكافية للمفاهيم ونظريات الهندسة المعمارية والتخطيط العمراني.	processes and techniques. a1-1-2 Recognize the analysis an urban & human studies of Architecture Urban projects.
	A1-3 Understand the theories, basics and specialized knowledge in the field of Urban Planning. فهم النظريات، أساسيات والمعرفة المتخصصة في مجال التخطيط العمراني.	a1-3-1Recognize necessary practical and professional skills concerning the differentiation of the urban & human studies for projects.
A2- Mutual relation between professional aspects of professional practice and its effects on the Environment.	A2-1Recognize the interaction between Architectural Engineering and Urban Planning and surrounding environment التعرف على التفاعل بين الهندسة المعمارية والتخطيط العمراني والبيئة المحيطة	a2-1-1 Describe the complex relationship between cultural trends, prevailing thought, Individual behavior, social ecology and the built environment.
A4- Fundamentals of ethical & legal professional practice in the field of specialization.	A4-1 Recognize ethical and professional responsibility issues arising in the practice of the engineering profession. التعرف على القضايا المسؤلية عن أخلاق المهنة الهندسية اثناء ممارستها	a4-1-1Outline current trends of theorization in environment-behavior research. Architecture Engineering
B. Intellectual skills مهارات ذهنية		
B1- Analyze and evaluate the information in the field of specialization, and relate it to solve problems.	B1-1 Demonstrate an investigatory and analytic thinking approach (Problem solving) to solve problems related to Architectural Engineering and Urban Planning. عرض المنهج التحليلي (حل المشكلات) من أجل حل المشاكل المتعلقة بالهندسة المعمارية والتخطيط العمراني.	b1-1-1 Assess the analytical studies that could affect urban & human projects. b1-1-2 Compare between the urban & human projects.

B4- Conduct a research study and/or writing systematic scientific study about Research problem.	B4-1 Write and research plain to conduct applied research.	b4-1-1 Select the proper approach to address a given query in architectural humanities.
C. Professional and practical skills مهارات تطبيقية ومهنية		
C1- Master the basic as well as the latest professional skills in the field of specialization.	C1-1 Express competence skills, such as identifying, formulating, analyzing, and creating engineering solutions, using latest engineering techniques, skills, and tools.	c1-1-1 Design evaluation and The urban & human projects criticism. c1-1-2 Practice the urban & human projects program preparation.
D. General and transferrable skills مهارات عامة		
D5- Use different sources to obtain knowledge and information.	D5-1 Use different sources of information like library, internet access facilities, etc. to upgrade and enhance their conceptual knowledge.	d5-1-1Use of text- book to collect the data that he needs.
D6- Lead a team in familiar professional context	D6-1 Practice team working, and lead teams in specified professional jobs.	d6-1-1Work in groups to assess the ability to creatively solve problems

3- Course Contents

Topic	*Total Hours*	*Contact hrs*			*Course ILOs Covered (By No.)*
		Lec.	**Tut.**	**Lab.**	
- INTRODUCATION: **1. Introduction.** **2. Objectives of the development of Squatter areas.**	6	6	--	--	a1-1-1, a1-1-2, c1-1-2
- Historical roots of Squatter areas.	6	6	--	--	a1-3-1, a2-1-1, b1-1-1, d6-1-1
- The modern attempts of development of slum areas.	6	6	--	--	a4-1-1, b1-1-2, c1-1-1
- The theoretical approaches for development of Squatter areas.	6	6	--	--	a4-1-1, b4-1-1, c1-1-2, d6-1-1
- Development of slum areas strategies since the fifties in Egypt. **- Squatter areas problem for low-**	6	6	--	--	a1-1-1, a1-1-2, b1-1-1, b4-1-1, c1-1-1, c1-1-2 , d5-1-1, d6-1-1

income groups. **- Social and Economic factors influencing the Squatter areas.** **-Informal Housing and the role of people participation and self - help project.**					
Analytical studies of Squatter areas.	6	6		--	a1-3-1, a1-1-2, c1-1-2, d5-1-1, b1-1-1
vi-The role of community participation in the implementation of development of Squatter areas programs.	12	12			a1-1-2, d5-1-1, c1-1-1, b1-1-2
vii -Slide show for some development of Squatter areas projects	12	12			a1-1-2, d5-1-1, c1-1-1, b1-1-2
viii - Apply development of Squatter areas studies in medium scale projects (Squatter areas ,old districts, Informal zones… etc.) **-Seminar/ Presentation of development of Squatter areas exercises.**	12	12			a1-1-2, a4-1-1, d6-1-1c1-1-2 , b1-1-1, b4-1-1
viiii - Final submission of the exercise.	18	18		--	a1-1-2, a4-1-1, d6-1-1, c1-1-2, b1-1-1, b4-1-1
TOTAL	90	90			

4- Relationship between the course and the programme

Field	National Academic Reference Standard(NARS)			
	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
Programme Academic Standards that the course contribute in achieving	A1 (a1-1-1, a1-1-2, a1-3-1), A2 (a2-1-1) , A4 (a4-1-1)	B1 (b1-1-1, b1-1-2), B4 (b4-1-1)	C1 (c1-1-1, c1-1-2)	D5 (d5-1-1) D6 (d6-1-1)

5- Course Subject Area:

A	B	C	D	E	F	G	
Humanities and Social Science	**Mathematics and Basic Sciences**	**Basic Engineering Science**	**Applied Engineering And Design**	**Computer Applications and ICT**	**Projects and practice**	**Disccretionry subjects**	**Total**
70%	**---**	**---**	**----**	**20%**	**10%**		**100 %**

6- Course Topics.

Topic No.	Topic	Weeks
1st	**- INTRODUCATION:** **1. Introduction.** **2. Objectives of the development of Squatter areas.** **- Historical roots of Squatter areas.**	1-4
2nd	**The modern attempts of development of slum areas.**:	5-8
3rd	**The theoretical approaches for development of Squatter areas.**	9-12
4th	**- Development of slum areas strategies since the fifties in Egypt.** **- Squatter areas problem for low-income groups.** **- Social and Economic factors influencing the Squatter areas.** **-Informal Housing and the role of people participation and self - help project.**	13-16
5th	**Analytical studies of Squatter areas.**	17-19
6th	**vi-The role of community participation in the implementation of development of Squatter areas programs.** **vii -Slide show for some development of Squatter areas projects**	20-23
7th	**- Apply development of Squatter areas studies in medium scale projects (Squatter areas ,old districts, Informal zones… etc.)** **-Seminar/ Presentation of development of Squatter areas exercises.** **Final submission of the exercise**	24-30
TOTAL		

7- ILOs Matrix Topics

Course topics	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**
Course ILOs	**Knowledge & Understanding**						
a1-1-1 Recognize urban & human projects processes and techniques.	X			X			
a1-1-2 Recognize the analysis an urban & human studies of Architecture Urban projects.	X			X	X	X	X
a1-3-1 Recognize necessary practical and professional skills concerning the differentiation of the urban & human studies for projects.	X				X	X	
a2-1-1 Describe the complex relationship between cultural trends, prevailing thought, Individual behavior, social ecology and the built environment.	X						
a4-1-1Outline current trends of theorization in environment-behavior research. Architecture Engineering		X	X				X

Course ILOs	Intellectual skills						
b1-1-1 Assess the analytical studies that could affect urban & human projects.	X			X	X		X
b1-1-2 Compare between the urban & human projects.		X				X	
b4-1-Select the proper approach to address a given query in architectural humanities.				X			X
Course ILOs	**Professional and practical skills**						
c1-1-1 Design evaluation and The urban & human projects criticism.		X		X		X	X
c1-1-2 Practice the urban & human projects program preparation.	X		X	X	X		
Course ILOs	**General and transferrable skills**						
d5-1-1Use of text- book to collect the data that he needs.				X	X	X	
d6-1-1Work in groups to assess the ability to creatively solve problems	X		X	X		X	X

8- Teaching and Learning Method:

Course Intended learning outcomes (ILOs)		Teaching and Learning Method												
		Lecture	Presentation and	Discussion	Tutorial	Problem solving	Brain storming	Projects	Report	Self learning	Cooperative	Discovering	Computer Simulation	Practical Experiments
Knowledge & understanding	**A1-1-1**	X	X	X					X			X		
	A1-1-2	X	X											
	A1-3-1	X	X			X								
	A2-1-1	X	X	X			X				X			
	A4-1-1	X	X					X		X				
Intellectual Skills	**B1-1-1**	X	X											
	B1-1-2	X	X	X			X			X				
	B4-1-1		X									X		
Professional Skills	**C1-1-1**		X	X					X					
	C1-1-2	X	X				X			X				
General Skills	**D5-1-1**		X	X				X						
	D6-1-1					X					X			

9- Assessment

9.1 Assessment Methods

Final Written Examination : to assess students' knowledge, understanding, analysis, creativity, problem solving, and problem identification.

9.2 Assessment Schedule and Grades Distribution

Assessment Method	Percentage	week
Final Examination	100	31
Total	100%	

10- Facilities required for teaching and learning

- video projector – Slide projector – data show

A. laboratory Usage:

Students are expected to prepare and conduct some computer simulation assignments using digital systems simulators on general computer labs.

B. Library Usage:

Students should be encouraged to use library technical resources in the preparation of laboratory reports and oral presentation. At least one oral presentation should involve a significant component of library research to encourage this component of study.

11- List of references:

Text books:

1) الحاج, هند حيدر ضاحي, & زحل الطيب عوض. (2017). الإدراك البصري للتصميم الحضري لشوارع المدن (Doctoral dissertation, جامعة السودان للعلوم والتكنولوجيا).

Abouelfadl, H., ElKerdany, D., & Wessling, C. (2017). Revitalizing City Districts. (2 Transformation Partnership for Urban Design and Architecture in Historic City Districts.

Recommended books

1- Algohary, S., & El-Faramwy, A. (2010). Egyptian Approach to Informal Settlements Development. Retrieved October, 13, 2016.

Periodicals, Web Sites, etc.

- http://www.araburban.net/category/19.htm
- http://en.wikipedia.org/wiki/urban

12- Program Coordination Committee:

Course Coordinator:

Head of the Department: **Prof. Dr.** Ashraf Abdel Fatah Elmokadem.

Date: