Course Specification

Course Code: ARE 4103 **Course Title: Housing**

1. Basic information

Program Title	Architecture department			
Department offering the program	Architecture department			
Department offering the course	Architecture department			
Course Code	ARE 4103			
Year/Level	Fourth year /Fifth Level			
Specialization	**Major**			
Teaching Hours	Lectures	Tutorial	Practical	Total
	4	2	-	6

2. Course Aims

No.	Aim
1	Produce innovative design engineering solutions in many practices field of design and executive architecture engineering and urban planning at the local, regional, and international levels .(AM1.2)

3. Course Learning Outcomes (CLOs)

Clo15	Function efficiently as an individual and as a member of multi-disciplinary and multi-cultural teams.
Clo21	Create architectural, urban and planning designs that meet aesthetic and technical requirements
Clo23	Produce designs that meet the requirements of building users
Clo24	Deal with the relation between people, buildings, and their surrounding environment
Clo25	Produce designs with the scale of humanity and its needs

4. Course Contents

Topics	Week
Definitions of shelter and housing - basic human needs and their relationship to population.	1
Planning and housing regulations	2
Housing model design considerations	3
Sustainable neighborhoods	4
Laws regulating the planning and design of residential areas.	5
The basics of classifying residential models	6
The basics of designing residential models (1)	7
Planning criteria for calculating the carrying capacity of a housing project	8
The housing problem in Egypt (causes and manifestations) + Research	10
Attitudes to solving the housing problem in Egypt (politics of preparation - and empowerment)	11

The basics of designing residential models (2)	12
Classifications of roads in the neighborhood + Presentation of Research	13
Submitting Semifinal Project	14
Submitting Final Project	15

5. Teaching and Learning methods

Course learning Outcomes (CLOs)	Teaching and Learning Methods											
	Lectures	Assignment	Labs	Research and Reports	Projects	Presentation	Site Visits	Discussion and Dialogue	Brain storm	E-Learning	Self-learning	Modeling and Simulation
Clo15	-	√	-	√		√		√	√		√	-
Clo21		√			√				√	√		
Clo23	√	√	-	√	√	√	√	√	√	√	√	-
Clo24	√	√	-		√		√	√	√	√	√	-
Clo25	-	-	-	-	√	√	-	-	-	√	-	-

6. Students' Assessment

6.1 Students' Assessment Method

No.	Assessment Method	CLOs
1	Written exam	**Clo15, Clo21, Clo23, Clo24, Clo25**
2	Discussions	**Clo15, Clo23, Clo24**
3	Mid Term Exam	**Clo15, Clo21, Clo23, Clo24**
4	Class works	**Clo15, Clo21, Clo23, Clo24**
5	Projects	**Clo21, Clo23, Clo24, Clo25**
6	Researches	**Clo15, Clo23**
7	Reports	-
8	Presentations	**Clo15, Clo23, Clo25**
9	Quiz	-
10	Skiz	-

6.2 Assessment Schedule

No.	Assessment Method	Weeks
1	Written exam	16
2	Discussions	weekly
3	Mid Term Exam	9
4	Class works	weekly
5	Projects	-
6	Researches	14,15
7	Reports	-
8	Presentations	13
9	Quiz	-
10	Skiz	-

6.3 Weighting of Assessments

	Assessment Method	Weights%	Weights	Weights%	Weights
Teacher Opinion	Discussions	60%	60	5%	5
	Class works			10%	10
	Projects			10%	10
	Researches			5%	5
	Presentations			10%	10
	Mid-term exam			20%	20
Final Exam	Written exam	40%	40	40%	40
Total		100%	100	100%	100

7. List of References

1. Didem Ekici, Jonathan Hale, Katharina Borsi, Nick Haynes," Housing and The City", 1st edition, Routledge, Taylor & Francis Group, UK,2022, SBN:9781003245216, 1003245218
2.N.J. Habraken – The Structure of the Ordinary: Form and Control in the Built Environment, MIT Press ,2020, ISBN:9780262581950, 0262581957.
3. Nagwa Ibrahim Mahmoud (Public Politics and Political Change in Egypt) Ibn Khaldoun Center for German Studies - Cairo - 1994Geoffrey Randall," Housing Rights Guide "Shelter; Revised edition, England,2010, ISBN:9781903595992, 190359599.

8. Facilities required for teaching and learning

Lecture/LMS
White board
Lecture room equipped with e-learning tools (internet, mike, etc.)
Data show

9. Matrix of Course Content with Course LOs

Topics	Aim	LO's
Definitions of shelter and housing - basic human needs and their relationship to population.	1	**Clo23, Clo24**
Planning and housing regulations	1	**Clo23, Clo24**
Housing model design considerations	1	**Clo23, Clo24**
Sustainable neighborhoods	1	**Clo23, Clo24**
Laws regulating the planning and design of residential areas.	1	**Clo23, Clo24**
The basics of classifying residential models	1	**Clo23, Clo24**
The basics of designing residential models (1)	1	**Clo23, Clo24**
Planning criteria for calculating the carrying capacity of a housing project	1	**Clo23, Clo24, Clo25**
The housing problem in Egypt (causes and manifestations) + Research	1	**Clo15, Clo21, Clo23, Clo24, Clo25**
Attitudes to solving the housing problem in Egypt (politics of preparation - and empowerment)	1	**Clo23, Clo24**
The basics of designing residential models (2)	1	**Clo23, Clo24**

Classifications of roads in the neighborhood + Presentation of Research	1	**Clo23, Clo24**
Submitting Semifinal Project	1	**Clo15, Clo21, Clo23, Clo24, Clo25**
Submitting Final Project	1	**Clo15, Clo21, Clo23, Clo24, Clo25**

10. Matrix of Program LOs with Course LOs

Program LOs		**Course LOs**	
Plo7	Function efficiently as an individual and as a member of multi-disciplinary and multi-cultural teams.	Clo15	Function efficiently as an individual and as a member of multi-disciplinary and multi-cultural teams.
Plo11	Create architectural, urban and planning designs that meet aesthetic and technical requirements using Adequate knowledge of history, related fine arts, culture, local heritage, technologies and human sciences.	Clo21	Create architectural, urban and planning designs that meet aesthetic and technical requirements
Plo12	Produce designs that meet the requirements of building users by understanding the relationship between people and buildings, and between the buildings and their surrounding environment, with the necessity of linking the buildings and the spaces between them to the scale of humanity and its needs	Clo23	Produce designs that meet the requirements of building users
		Clo24	Deal with the relation between people, buildings, and their surrounding environment
		Clo25	Produce designs with the scale of humanity and its needs

Title	**Name**	**Signature**
Course coordinator	**Assoc. Prof. Rania Badawy**	
Head of Department	**Assoc. Prof. Reham Osman**	
Date of Approval	**17/9/2024**	

Course Specification

Course Code: ARE 4104 **Course Title: Feasibility Studies & Project Management**

1. Basic information

Program Title	Architecture Engineering			
Department offering the program	Architecture Engineering			
Department offering the course	Architecture Engineering			
Course Code	ARE 4104			
Year/level	Forth year / Fifth level			
Specialization	**Minor**			
Teaching Hours	Lectures	Tutorial	Practical	Total
	2	1	-	3

2. Course Aims

No.	Aim
1	Use data analysis, objective engineering judgment (AM1.1)
2	Use scientific methods that ensure meeting the needs of present and future generations in terms of economic aspects (AM2.2)
3	link between the participating sectors in the construction and development operation of urban communities and between the graduates of the program in the fields of practical training, entrepreneurship, and project management. (AM4.1)

3. Course Learning Outcomes (CLOs)

Clo4	Analyze the data by using statistical analyses to draw conclusions.
Clo5	Evaluate findings, statistical analyses and engineering judgment.
Clo12	Practice research techniques and methods of investigation as an inherent part of learning.
Clo28	Transform design concepts into buildings and integrating plans into comprehensive planning within restrictions: Financing issues and Project management
Clo29	Transform design concepts into buildings and integrating plans within restrictions with regulations

4. Course Contents

Topics	Week
Educating introduction to management, Historical view and evolution of concepts, Basic Managerial Functions.	1
Studying project Management knowledge area	2
Investigates and explores project management processes.	3
Research of Management knowledge area and processes.	4
Create Planning and Time scheduling of project activities by Bar chart.	5
Create Planning and Time scheduling of project activities by CPM method.	6
Mid Term evaluation	7
Educating the Cost analysis, estimating cost based on previous projects.	8
Initial Cost estimating	9
Studying the Importance of feasibility studies in making decisions.	10
Studying Types of feasibility studies.	11-12
Analyzing case studies of feasibility studies in architecture projects.	13

5. Teaching and Learning methods

Course learning Outcomes (CLOs)	Teaching and Learning Methods											
	Lectures	Assignment	Labs	Research and Reports	Projects	Presentation	Site Visits	Discussion and Dialogue	Brain storm	E-Learning	Self-learning	Modeling and Simulation
Clo4	√	√	-	√	-	√	-	√	-	-	-	-
Clo5	√	√	-	√	-	√	-	√	-	-	-	-
Clo12	√	√	-	√	-	√	-	√	-		-	-
Clo28	√	-	-	-	-	-	-	√	-	-	√	-
Clo29	√	√	-	√	-	-	-	√	-	-	-	-

6. Students' Assessment

6.1 Students' Assessment Method

No.	Assessment Method	CLOs
1	Written exam	**Clo4, Clo12, Clo28**
2	Discussions	-
3	Mid Term Exam	**Clo4,Clo5, Clo12**
4	Class works	**Clo4,Clo5, Clo12, Clo29**
5	Projects	-
6	Researches	**Clo4,Clo5, Clo12, Clo29**
7	Reports	-
8	Presentations	**Clo4,Clo5, Clo12**
9	Quiz	**Clo4**
10	Skiz	-

6.2 Assessment Schedule		
No.	**Assessment Method**	**Weeks**
1	Written exam	15
2	Discussions	-
3	Mid Term Exam	7
4	Class works	5-6-9
5	Projects	-
6	Researches	4-13
7	Reports	-
8	Presentations	4-13
9	Quiz	10
10	Skiz	-

6.3 Weighting of Assessments					
	Assessment Method	**Weights%**	**Weights**	**Weights%**	**Weights**
Teacher Opinion	Class works	%50	50	%10	10
	Researches			%10	10
	Presentation			%5	5
	Quiz			%5	5
	Mid-term exam			%20	20
Final Exam	Written exam	%50	50	%50	50
Total		%100	100	%100	100

7. List of References

- Michael Kulwin, “Feasibility Studies in Construction Projects: Practice and Procedure”. Practical Construction Guides, Informa Law, 2011, ISBN: 978-0415715263.
- DAVID CHAPELL & ANDREW WILLS,” The Architect in Practice” Feasibility Study & Project Management: A Practical Guide - Arabic Edition. Paperback – January 2, 2019, ISBN: 978-1-118-90770-2
- A Guide to the Project Management Body of Knowledge (PMBOK® Guide), by Project Management Institute , . Seventh Edition 2021, ISBN: 978-1628251845.
- د. ابراهيم عبد الرشيد ,"اداره مشروعات التشييد "- 2009.

8. Facilities required for teaching and learning

Lecture/Classroom
White board
Data show

9. Matrix of Course Content with Course LO's

Topics	Aim	CLO's
Educating introduction to management, Historical view and evolution of concepts, Basic Managerial Functions.	1	**Clo5**
Studying project Management knowledge area	1	**Clo5**
Investigates and explores project management processes.	1	**Clo4,Clo5**
Research of Management knowledge area and processes.	2	**Clo12**
Create Planning and Time scheduling of project activities by Bar chart.	2	**Clo12**
Create Planning and Time scheduling of project activities by CPM method.	2	**Clo4**
Mid Term evaluation	2	**Clo12**
Educating the Cost analysis, estimating cost based on previous projects.	2	**Clo12, Clo28**
Initial Cost estimating	1-2	**Clo4,Clo12, Clo28**
Studying the Importance of feasibility studies in making decisions.	1-2-3	**Clo4,Clo12, Clo28**
Studying Types of feasibility studies.	2-3	**Clo4**
Analyzing case studies of feasibility studies in architecture projects.	2-3	**Clo12, Clo28, Clo29**
Educating introduction to management, Historical view and evolution of concepts, Basic Managerial Functions.	2-3	**Clo12, Clo28, Clo29**

10. Matrix of Program LOs with Course Los

Program LOs		Course Los	
Plo2	Develop and conduct appropriate experimentation and/or simulation, analyse and interpret data, assess, and evaluate findings, and use statistical analyses and objective engineering judgment to draw conclusions.	**Clo4**	Analyze the data by using statistical analyses to draw conclusions.
		Clo5	Evaluate findings, statistical analyses and engineering judgment.
Plo5	Practice research techniques and methods of investigation as an inherent part of learning.	**Clo12**	Practice research techniques and methods of investigation as an inherent part of learning.

Plo14	Transforming design concepts into buildings and integrating plans into comprehensive planning within restrictions: Financing Project - Project management - Cost control - Project delivery methods, having sufficient knowledge relevant industries, organizations, regulations and procedures.	**Clo28**	Transform design concepts into buildings and integrating plans into comprehensive planning within restrictions: Financing issues and Project management
		Clo29	Transform design concepts into buildings and integrating plans within restrictions with regulations

Title	Name	Signature
Course coordinator	**Assocc. Prof. Reham Othman**	
Head of Department	**Assocc. Prof. Reham Othman**	
Date of Approval	**17/9/2024**	

Course Specification

Course Code: ARE 4201 **Course Title: Project Studies & Technical Report**

1. Basic information

Program Title	Architecture Engineering			
Department offering the program	Architecture Engineering			
Department offering the course	Architecture Engineering			
Course Code	ARE **4201**			
Year/level	Fourth year (5th Level)			
Specialization	**Major**			
Teaching Hours	Lectures	Tutorial	Practical	Total
	1	1	0	2

2. Course Aims

No.	Aim
1	Train the students for innovative and creative thinking, describing and solving design problems and requirements. (AM2.1)

3. Course Learning Outcomes (CLOs)

Clo15	Function efficiently as an individual and as a member of multi-disciplinary and multi- cultural teams.
Clo16	Communicate effectively – graphically, verbally and in writing – with a range of audiences using contemporary tools.
Clo19	Apply new knowledge.
Clo20	Practice self, lifelong and other learning strategies.
Clo28	Transform design concepts into buildings and integrating plans into comprehensive planning within restrictions: Financing issues and Project management
Clo29	Transform design concepts into buildings and integrating plans within restrictions with regulations

4. Course Contents

Topics	Week
How to prepare the necessary introductive studies for the graduation project	1
Specify "Vision – Mission – Aim – Goal" of the project subject.	2
History and Growth of the project subject and its importance.	3
Types of the project subject and discuss the benefits and advantages.	4
Site Analysis and the location of the project.	5
Standards of the project component and spaces program	6
Case studies of similar global and Local projects	8
Smart materials and solutions for sustainable architecture	9
Leeds, sustainability design concept and environmental design	10
Structural systems	11
Revision all the research	12
Semi Final Research	13
Oral Exam	14

5. Teaching and Learning methods

Course learning Outcomes (CLOs)	Teaching and Learning Methods											
	Lectures	Assignment	Labs	Research and Reports	Projects	Presentation	Site Visits	Discussion and Dialogue	Brain storm	E-Learning	Self-learning	Modeling and Simulation
Clo15	-	-	-	√	-	√	-	√	-	-	-	-
Clo16	-	-	-	√	-	√	-	√	-	-	-	-
Clo19	√	-	-	√	-	√	-	√	-	-	-	-
Clo20	-	-	-	-	-	-	-	√	√	-	√	-
Clo28	√	-	-	√	-	√	-	-	-	-	√	-
Clo29	-	-	-	√	-	√	-	-	√	-	√	-

6. Students' Assessment

6.1 Students' Assessment Method

No.	Assessment Method	CLOs
1	Oral exam	Clo15, Clo16, Clo19, Clo20, Clo28, Clo29
2	Discussions	Clo15, Clo16, Clo19, Clo20
3	Mid Term Exam	Clo16, Clo28
4	Class works	-
5	Projects	-

6	Researches	Clo15, Clo16, Clo19, Clo28, Clo29
7	Reports	-
8	Presentations	Clo15, Clo16, Clo19, Clo28, Clo29
9	Quiz	-
10	Skiz	-

6.2 Assessment Schedule

No.	Assessment Method	Weeks
1	Oral exam	15
2	Discussions	weekly
3	Mid Term Exam	9
4	Class works	-
5	Projects	-
6	Researches	weekly
7	Reports	-
8	Presentations	weekly
9	Quiz	-
10	Skiz	-

6.3 Weighting of Assessments

	Assessment Method	Weights%	Weights	Weights%	Weights
Teacher Opinion	Discussions	60	60	10	10
	Researches			20	20
	Presentations			10	10
	Mid-term exam			20	20
Final Exam	Oral Exam	40	40	40	40
Total		100	100	100	100

7. List of References

[1] AM Awai, "Architecture Design Project Book: Create & Design your upcoming projects", Independently published, 2021, ISBN -13 : 979-8481920344
[2] Nicola Leonardi, "Contemporary Architecture in Detail: Sustainable architecture", HOAKI Publisher, 2021, ISBN: 9788417656430
[3] Joseph De Chiara, Michael J. Crosbie, "Time-Saver Standards for Building Types", 7th Edition, United States of America, 2001, ISBN:9780070163874, 0070163871.
[4] Ernst Neufert, Peter Neufert, Bousmaha Baiche, Nicholas Walliman, "Neufert s Architects Data" 4th Edition", Wiley–Blackwell, 2012, ISBN:9781405192538, 1405192534.
[5] Janet Owens, "Report Writing", published by Directory Of Social Change, London, 2011, ISBN:9781906294168, 190629416X.

8. Facilities required for teaching and learning

Lecture/Classroom
White board
Data show

9. Matrix of Course Content with Course LO's

Topics	Aim	CLO's
How to prepare the necessary introductive studies for the graduation project	1	Clo19
Specify "Vision – Mission – Aim – Goal" of the project subject.	1	Clo15, Clo16
History and Growth of the project subject and its importance.	1	Clo15, Clo16, Clo19
Types of the project subject and discuss the benefits and advantages.	1	Clo15, Clo16, Clo19
Site Analysis and the location of the project.	1	Clo16, Clo19, Clo20
Standards of the project component and spaces program	1	Clo19, Clo20
Case studies of similar global and Local projects	1	Clo19, Clo20, Clo28, Clo29
Smart materials and solutions for sustainable architecture	1	Clo19, Clo20, Clo28, Clo29
Leeds, sustainability design concept and environmental design	1	Clo19, Clo20, Clo28, Clo29
Structural systems	1	Clo19, Clo20, Clo28, Clo29
Revision all the research	1	Clo19, Clo20, Clo28, Clo29
Semi Final Research	1	Clo19, Clo20, Clo28, Clo29
Oral Exam	1	Clo19, Clo20, Clo28, Clo29

10. Matrix of Program LOs with Course LOs

Program LOs		Course LOs	
Plo7	Function efficiently as an individual and as a member of multi-disciplinary and multi- cultural teams.	Clo15	Function efficiently as an individual and as a member of multi-disciplinary and multi- cultural teams.
Plo8	Communicate effectively – graphically, verbally and in writing – with a range of audiences using contemporary tools.	Clo16	Communicate effectively – graphically, verbally and in writing – with a range of audiences using contemporary tools.
Plo10	Acquire and apply new knowledge; and practice self, lifelong and other	Clo19	Apply new knowledge.

	learning strategies.	Clo20	Practice self, lifelong and other learning strategies.
Plo14	Transforming design concepts into buildings and integrating plans into comprehensive planning within restrictions: Financing Project - Project management - Cost control - Project delivery methods, having sufficient knowledge relevant industries, organizations, regulations and procedures.	Clo28	Transform design concepts into buildings and integrating plans into comprehensive planning within restrictions: Financing issues and Project management
		Clo29	Transform design concepts into buildings and integrating plans within restrictions with regulations

Title	Name	Signature
Course coordinator	Prof. Dr. Ahmed Yehia	
	Prof. Dr. Usama Nassar	
	Dr. Hadeer Abdelsamie	
Head of Department	Assocc. Prof. Reham Othman	
Date of Approval	17/9/2024	

Course Specification

Course Code: ARE 4101 **Course Title: Architectural Design (6)**

1. Basic information

Program Title	Architecture Engineering			
Department offering the program	Architecture Engineering			
Department offering the course	Architecture Engineering			
Course Code	ARE 4101			
Year/level	Fourth year / Fifth Level			
Specialization	**Major**			
Teaching Hours	Lectures	Tutorial	Practical	Total
	0	10	0	10

2. Course Aims

No.	Aim
1	Provide the students with the capacity to prepare flexible and ecologically responsible designs by understanding modern structural and technological designs. (AM5.1)

3. Course Learning Outcomes (CLOs)

Clo21	Create architectural, urban and planning designs that meet aesthetic and technical requirements
Clo23	Produce designs that meet the requirements of building users
Clo24	Deal with the relation between people, buildings, and their surrounding environment
Clo25	Produce designs with the scale of humanity and its needs

4. Course Contents

Topics	Week
Introduction of the project	1
Research for the Project	
Research Presentation	2
Project Zoning	
Layout 1/500	3
Layout 1/500	
Layout 1/500 + Ground floor plan 1/400	4
Layout 1/500 + Ground floor plan 1/400	
Layout 1/500 + Ground floor plan 1/400	5
Layout 1/500 + Ground floor plan 1/400	
Layout 1/500 + Ground floor plan 1/200 + sections 1/200	6
Layout 1/500 + Ground floor plan 1/200 + sections 1/200	
sections 1/200 + Elevations 1/200	7
sections 1/200 + Elevations 1/200	
sections 1/200 + Elevations 1/200	8
sections 1/200 + Elevations 1/200	
Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 +	10

Elevations 1/200+Prespective	
Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective	
All Project observation	11
All Project observation	
All Project observation	12
All Project observation	
All Project observation	13
All Project observation	
All Project observation	14
All Project observation	
Semifinal project	15
All Project observation	

5. Teaching and Learning methods

Course learning Outcomes (CLOs)	Teaching and Learning Methods											
	Lectures	Assignment	Labs	Research and Reports	Projects	Presentation	Site Visits	Discussion and Dialogue	Brain storm	E-Learning	Self-learning	Modeling and Simulation
CLO21	√		-	√		√	-	√	-			-
CLO23		√	-		√		-	√	-	√	√	-
CLO24		-	-		-		-	√	-	-	-	-
CLO25		√			√					√	√	

6. Students' Assessment

6.1 Students' Assessment Method

No.	Assessment Method	CLOs
1	Written exam	**Clo21, Clo23, Clo24**
2	Discussions	**Clo21, Clo23, Clo24**
3	Mid Term Exam	**Clo23, Clo24**
4	Class works	**Clo23, Clo25**
5	Projects	**Clo23, Clo25**
6	Researches	**Clo21**
7	Reports	-
8	Presentations	**Clo21**
9	Quiz	-
10	Skiz	-

6.2 Assessment Schedule

No.	Assessment Method	Weeks
1	Written exam	16

2	Discussions	weekly
3	Mid Term Exam	9
4	Class works	weekly
5	Projects	15
6	Researches	2
7	Reports	-
8	Presentations	2
9	Quiz	-
10	Skiz	-

6.3 Weighting of Assessments

	Assessment Method	Weights%	Weights	Weights%	Weights
Teacher Opinion	Discussions	60	60	3	3
	Class works			10	10
	Projects			20	20
	Researches			5	5
	Presentations			2	2
	Mid-term exam			20	20
Final Exam	Written exam	40	40	40	40
Total		100	100	100	100

7. List of References

[1] Lee Hwa-Jeong, (2020), "ACA: Architecture competition annual. Vol 14 (Education / Culture/ Welfare & Sports)", Published by Archiworld Co.Ltd, Seoul, South Korea , ISBN-13: 978-8957708194.

[2] Frohlich,A. & Lippok,S., (2019), "Plans and Images: An Archive of Projects on Typology in Architecture" 2013-2018, Germany, ISBN: 9783038601388.

[3] Ernst Neufert, Peter Neufert, Bousmaha Baiche, Nicholas Walliman, (2012), "Neuferts Architects Data 4th Edition", published by Wiley–Blackwell, ISBN-13: 978-1405192538.

8. Facilities required for teaching and learning

Lecture/LMS
White board
Google Class Room
Data show

9. Matrix of Course Content with Course LO's

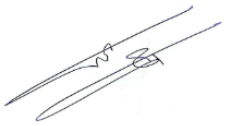
Topics	Aim	CLO's
Introduction of the project Research for the Project	1	**Clo21**
Research Presentation Project Zoning	1	**Clo21, Clo23**
Layout 1/500 Layout 1/500	1	**Clo21, Clo23**

Layout 1/500 + Ground floor plan 1/400 Layout 1/500 + Ground floor plan 1/400	1	**Clo21, Clo23**
Layout 1/500 + Ground floor plan 1/400 Layout 1/500 + Ground floor plan 1/400	1	**Clo21, Clo23**
Layout 1/500 + Ground floor plan 1/200 + sections 1/200 Layout 1/500 + Ground floor plan 1/200 + sections 1/200	1	**Clo21, Clo23**
sections 1/200 + Elevations 1/200 sections 1/200 + Elevations 1/200	1	**Clo21, Clo23, Clo24**
sections 1/200 + Elevations 1/200 sections 1/200 + Elevations 1/200	1	**Clo21, Clo23, Clo24**
Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective	1	**Clo21, Clo23, Clo24, Clo25**
All Project observation All Project observation	1	**Clo21, Clo23, Clo24, Clo25**
All Project observation All Project observation	1	**Clo21, Clo23, Clo24, Clo25**
All Project observation All Project observation	1	**Clo21, Clo23, Clo24, Clo25**
All Project observation All Project observation	1	**Clo21, Clo23, Clo24, Clo25**

10. Matrix of Program LOs with Course LOs

Program LOs		Course LOs	
Plo11	Create architectural, urban and planning designs that meet aesthetic and technical requirements using Adequate knowledge of history, related fine arts, culture, local heritage, technologies and human sciences.	CLO21	Create architectural, urban and planning designs that meet aesthetic and technical requirements
Plo12	Produce designs that meet the requirements of building users by understanding the relationship between people and buildings, and between the buildings and their surrounding environment, with the necessity of linking the buildings and the spaces between them to the scale of humanity and its needs	CLO23	Produce designs that meet the requirements of building users
		CLO24	Deal with the relation between people, buildings, and their surrounding environment
		CLO25	Produce designs with the scale of humanity and its needs

Title	Name	Signature

Course coordinator	**Prof. Dr. Ahmed Yehia** **Prof. Dr. Usama Nassar** **Dr. Hadeer Abdelsamie**	  
Head of Department	**Associa. Prof. Reham Othman**	
Date of Approval	**7/10/2024**	

Ministry of Higher Education
Higher Institute of Engineering and Technology
Architecture Eng. department

Course Specification

Course Code: Are 4102 Course Title: Working Drawings (3)

1. Basic information

Program Title	Architecture Engineering			
Department offering the program	Architecture Engineering			
Department offering the course	Architecture Engineering			
Course Code	ARE 4102			
Year/level	Forth year /Fifth Level			
Specialization	Major			
Teaching Hours	Lectures	Tutorial	Practical	Total
	-	8	-	8

2. Course Aims

No.	Aim
1	Provide the students with modern academic and technical skills , and technical skills, cultural knowledge of history, fine arts, and local and international heritage (AM3.1)

3. Course Learning Outcomes (CLOs)

Clo30	Prepare design project briefs and documents
Clo31	Manage the architect's context in the construction industry including his role in the bidding and procurement of architectural services

4. Course Contents

Topics	Week
Introduction to working drawings- Release of the project	1
Building steel structure systems - The documents set of a preliminary working projects	2
Plans drawings: Basement floor plan +Ground floor plan	3
Plans drawings: First floor plan typical floor plan	4
Section drawings	5
Wall Sections drawings	6
Elevation drawings	8
Layout: Soft scape	9

Layout: hard scape	10
Mechanical shop Drawings	11
Semi Final Submission	12
Final Submission and project presentation	13

Illustrate details of: Construction, Finishes and maintenance.

5. Teaching and Learning methods

Course learning Outcomes (CLOs)	Teaching and Learning Methods											
	Lectures	Assignment	Labs	Research	Projects	Presentation	Site Visits	Discussion	Brain storm	E-Learning	Self-learning	Modeling and simulation
Clo30	√		-	√	√	-	-	√	-	-	√	-
Clo31	√	√	-		√	-	-	√	-	-		-

6.Students' Assessment

6.1 Students' Assessment Method

No.	Assessment Method	CLOs
1	Mid Term Exam	**Clo30, Clo31**
2	Researches	**Clo30**
3	Projects	**Clo30, Clo31**
4	Classwork	**Clo31**
5	Written Exam	**Clo30, Clo31**

6.2 Assessment Schedule

No	Assessment Method	Weeks
1	Mid Term Exam	7
2	Researches	8,12
3	Projects	From week 6 to week 13
4	Classwork	weekly
5	Written Exam	15

6.3 Weighting of Assessments					
	Assessment Method	**Weights%**	**Weights**	**Weights%**	**Weights**
Teacher Opinion	Mid Term Exam	60	60	20	20
	Researches			10	20
	Classwork			10	10
	Project			20	20
Final Exam	Written exam	40	40	40	40
Total		100	100	100	100

7. List of References

[1] McKay B.(2004) .McKay's Building Construction.Publisher: Routledge; 1st edition, 2004, ISBN-13 : 978-1873394724
[2] Chudley, R. & Greeno,R. (2005). Construction Technology (4th ed.) Publisher : Prentice Hall .ISBN-10 : 0131286420, Library Book Code:A-a/16
[3] Capeluto G. & Emesto C.(2017). Intelligent Envelopes for High-Performance Buildings: Design and Strategy (Green Energy and Technology). Publisher: Springer ASIN : B01MXJ8HBN
[4] Hugh Seaton, (2021) "The Construction Technology Handbook", 1st edition, Publisher:Wiley, ISBN-10 : 111971995X

8. Facilities required for teaching and learning

Lecture hall
White board
Data show

9. Matrix of Course Content with Course LO's

Topics	Aim	CLO's
Introduction to working drawings- Release of the project	1	**Clo30**
Building steel structure systems - The documents set of a preliminary working projects	1	**Clo30**
Plans drawings: Basement floor plan +Ground floor plan	1	**Clo30**
Plans drawings: First floor plan typical floor plan	1	**Clo30**
Section drawings	1	**Clo30, Clo31**
Wall Sections drawings	1	**Clo30, Clo31**
Elevation drawings	1	**Clo30, Clo31**
Layout: Soft scape	1	**Clo30, Clo31**
Layout: hard scape	1	**Clo30, Clo31**

Mechanical shop Drawings	1	**Clo30, Clo31**
Semi Final Submission	1	**Clo30, Clo31**
Final Submission and project presentation	1	**Clo30, Clo31**

10. Matrix of Program LOs with Course LOs

Program LOs		Course LOs	
Plo15	Prepare design project briefs and documents and understand the architect's context in the construction industry including, This includes his role in the bidding and procurement of architectural services and the production of buildings	**Clo30**	Prepare design project briefs and documents
		Clo31	Manage the architect's context in the construction industry including his role in the bidding and procurement of architectural services

Title	Name	Signature
Course coordinator	**Assoc Prof. Dr. Yasmin Talaat**	
Head of Department	**Assoc Prof. Dr. Reham Othman**	
Date of Approval	**17-9-2024**	

Course Specification

Course Code: ARE 4299 **Course Title: Project**

1. Basic information

Program Title	Architecture Engineering			
Department offering the program	Architecture Engineering			
Department offering the course	Architecture Engineering			
Course Code	ARE 4299			
Year/level	Fourth year / Fifth Level			
Specialization	**Major**			
Teaching Hours	Lectures	Tutorial	Practical	Total
	0	16	0	16

2. Course Aims

No.	Aim
1	Provide the students with the capacity to prepare flexible and ecologically responsible designs by understanding modern structural and technological designs. (AM5.1)
2	Able to face the professional challenges of the future resulting from the fast-technological development in all life aspects. (AM7.1)

3. Course Learning Outcomes (CLOs)

Clo23	Produce designs that meet the requirements of building users
Clo24	Deal with the relation between people, buildings, and their surrounding environment
CLO25	Produce designs with the scale of humanity and its needs

4. Course Contents

Topics	Week
Introduction of the project	1
Introduction of the project	
Research for the Project + Skiz1	2
Research Presentation + Skiz1	
Layout 1/500	3
Layout 1/500	
Layout 1/500 + Ground floor plan 1/400	4
Layout 1/500 + Ground floor plan 1/400	
Layout 1/500 + Ground floor plan 1/400	5
Layout 1/500 + Ground floor plan 1/400	
Layout 1/500 + Ground floor plan 1/200 + sections 1/200 + typical floors	6
Layout 1/500 + Ground floor plan 1/200 + sections 1/200 + typical floors	
sections 1/200 + Elevations 1/200	7
sections 1/200 + Elevations 1/200	

Skiz 2(Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective)	8
Revision Skiz 2(Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective)	
Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective	10
Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective	
Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective	11
Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective	
All Project observation	12
All Project observation	
All Project observation	13
All Project observation	
All Project observation	14
All Project observation	
Semifinal project	15
Final project	

5.Teaching and Learning methods

Course learning Outcomes (CLOs)	Teaching and Learning Methods											
	Lectures	Assignment	Labs	Research and Reports	Projects	Presentation	Site Visits	Discussion and Dialogue	Brain storm	E-Learning	Self-learning	Modeling and Simulation
Clo23			-	√		√	-	√	-			-
Clo24		√	-		√		-	√	-	√	√	-
CLO25		√	-		√		-		-	√	√	-

6. Students' Assessment

6.1 Students' Assessment Method

No.	Assessment Method	Clos
1	Oral exam	**Clo23, Clo24, Clo25**
2	Discussions	**Clo23, Clo24**
3	Mid Term Exam	**Clo23, Clo24**
4	Class works	**Clo23, Clo24, Clo25**
5	Projects	**Clo23, Clo24, Clo25**
6	Researches	**Clo23**
7	Reports	-
8	Presentations	**Clo23**
9	Quiz	-

10	Skiz	**Clo23, Clo24, Clo25**

6.2 Assessment Schedule

No.	Assessment Method	Weeks
1	Oral exam	16
2	Discussions	weekly
3	Mid Term Exam	9
4	Class works	weekly
5	Projects	15
6	Researches	2
7	Reports	-
8	Presentations	2
9	Quiz	-
10	Skiz	6,11

6.3 Weighting of Assessments

	Assessment Method	Weights%	Weights	Weights%	Weights
Teacher Opinion	Discussions	100	100	5	5
	Class works			20	20
	Projects			25	25
	Researches			6	6
	Presentations			4	4
	Skiz			20	20
	Mid-term exam			20	20
Final Exam	Oral exam	100	100	100	100
Total		100	100	100	100

7.List of References

[1] Nathalie Bonnardel, Alicja Wojtczuk, Pierre - YvesGilles, SylvainMazon, (2018), “The creative process in design”, ISBN-13: 978-1401861643.
[2] Ruoyu Jin, (2019), “Sustainable Construction Technologies”, London South Bank University, ISBN 9780128117491.
[3] Lee Hwa-Jeong, (2020), “ACA: Architecture competition annual. Vol 14 (Education / Culture/ Welfare & Sports)”, Publisher : Archiworld Co.Ltd, Koria, ISBN-13: 978-8957708194.
[4] Frohlich,A. & Lippok,S., (2019), “Plans and Images: An Archive of Projects on Typology in Architecture 2013-2018, THE UNIVERSITY OF CHICAGO PRESS , Germany, ISBN 13: 9783038601388.

8.Facilities required for teaching and learning

Lecture/Classroom
White board
Data show

9.Matrix of Course Content with Course LO’s

Topics	Aim	CLO's
Introduction of the project	1	Clo23
Introduction of the project	1	
Research for the Project + Skiz1	1&2	Clo23, Clo24
Research Presentation + Skiz1	1&2	
Layout 1/500	1&2	Clo23, Clo24
Layout 1/500	1&2	
Layout 1/500 + Ground floor plan 1/400	1&2	Clo23, Clo24
Layout 1/500 + Ground floor plan 1/400	1&2	
Layout 1/500 + Ground floor plan 1/400	1&2	Clo23, Clo24
Layout 1/500 + Ground floor plan 1/400	1&2	
Layout 1/500 + Ground floor plan 1/200 + sections 1/200 + typical floors	1&2	Clo23, Clo24
Layout 1/500 + Ground floor plan 1/200 + sections 1/200 + typical floors	1&2	
sections 1/200 + Elevations 1/200	1&2	Clo24, Clo25
sections 1/200 + Elevations 1/200	1&2	
Skiz 2(Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective)	1&2	Clo24, Clo25
Revision Skiz 2(Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective)		
Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective	1&2	Clo23, Clo24, Clo25
Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective		
Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective	1&2	Clo23, Clo24, Clo25
Layout 1/500 + Ground floor plan 1/200 + sections 1/200+ sections 1/200 + Elevations 1/200+Prespective		
All Project observation	1&2	Clo23, Clo24, Clo25
All Project observation		
All Project observation	1&2	Clo23, Clo24, Clo25
All Project observation		
All Project observation	1&2	Clo23, Clo24, Clo25
All Project observation		
Semifinal project	1&2	Clo23, Clo24, Clo25
Final project		

10.Matrix of Program LOs with Course Los

Program Los		Course Los	
Plo12	Produce designs that meet the requirements of building users by	CLO23	Produce designs that meet the requirements of building users

	understanding the relationship between people and buildings, and between the buildings and their surrounding environment, with the necessity of linking the buildings and the spaces between them to the scale of humanity and its needs	CLO24	Deal with the relation between people, buildings, and their surrounding environment
		CLO25	Produce designs with the scale of humanity and its needs

Title	Name	Signature
Course coordinator	**Prof. Dr. Ahmed Yehia** **Prof. Dr. Usama Nassar** **Dr. Hadeel Mahmoud** **Dr. Nesma Helmy**	
Head of Department	**Associa. Prof. Reham Othman**	
Date of Approval	**1/10/2024**	

Course Specification
Course Code: ARE 4271 Course Title: Elective Course (4) Humanities in Architecture

1. Basic information

Program Title	Architecture department			
Department offering the program	Architecture department			
Department offering the course	Architecture department			
Course Code	ARE 4271			
Year/Level	Fourth-year/ Fifth Level			
Specialization	**Major**			
Teaching Hours	Lectures	Tutorial	Practical	Total
	3	2	-	5

2. Course Aims

No.	Aim
1	Use scientific methods that ensure meeting the needs of present and future generations in terms of social, cultural, environmental, and economic aspects. (AM2.2)

3. Course Learning Outcomes (CLOs)

Clo19	Apply new knowledge.
Clo20	Practice self, lifelong and other learning strategies.
Clo24	Deal with the relation between people, buildings, and their surrounding environment
Clo25	Produce designs with the scale of humanity and its needs

4. Course Contents

Topics	Week
Introduction to the study of Environment and behavior	1
The shift in global thought towards the human trend in architecture & urbanism	2
The science of ergonomics and its fields of application in architecture	3
Human nature and needs (Maslow's hierarchy)	4
The nature of man and his needs (Gashlett theory)	5
The Role of behavioral sciences in designing urban spaces	6
Behavioral unit and terms of use in the design	7
The mental image, for a sense of beauty	8
The characteristics of a good shape and its impact on the user	10
The gap between the designer and the user	11
The space, its characteristics, and its role in adapting to the user	12
Behavioral unit and terms of use in the design	13
The mental image, for a sense of beauty and its impact on the user	14
The characteristics of a good shape and its impact on the user	15

5. Teaching and Learning methods

	Teaching and Learning Methods

Course Learning Outcomes (CLos)	Lectures	Assignment	Labs	Research and Reports	Projects	Presentation	Site Visits	Discussion and Dialogue	Brain storm	E-Learning	Self-learning	Modeling and Simulation
Clo19	√		-	√	-	√	√	√	√		-	-
Clo20	√		-	√	-		√		√	√	-	-
Clo24	√	√	-	√	-	√				√	-	-
Clo25	√	√	-	√	-	√	√	√		√	-	-

6. Students' Assessment

6.1 Students' Assessment Method

No.	Assessment Method	CLOs
1	Written Exam	**Clo19, Clo20, Clo24, Clo25**
2	Discussions	**Clo19, Clo25**
3	Mid Term Exam	**Clo19, Clo20, Clo24**
4	Class works	**Clo24, Clo25**
5	Researches	**Clo19, Clo20, Clo24, Clo25**
6	Presentations	**Clo20, Clo24, Clo25**
7	Quiz	**Clo24, Clo25**

6.2 Assessment Schedule

No	Assessment Method	Weeks
1	Written Exam	16
2	Discussions	weekly
3	Mid Term Exam	9
4	Class works	4 & 12
5	Researches	Bi-week
6	Presentations	Bi-week
7	Quiz	4 & 12

6.3 Weighting of Assessments

Assessment Method				Weights%	Weights
Teacher Opinion	Discussions	50	50%	5%	5
	Mid-term exam			20%	20
	Assignment			5%	5
	Presentations			5%	5
	Researches			10%	10
	Quiz			5%	5
Final Exam	Written exam	**50**	50%	50%	50
		Total		100%	100

7. List of References

[1] K. M. Dessie, Thomas LA swell (2022) Human considerations in architectural design, King Saud University Publishing House, architectural design,

[2] London F. (2023) (Healthy Place making: Wellbeing Through Urban Design", RIBA Publishing,1st edition, ISBN-10: 1859468837
[3] Lynch, K. (2021). The image of the city. (6TH edition). MIT Press, ISBN 0-262-62001-4

8. Facilities required for teaching and learning

Lecture
Whiteboard
LMS
Data show

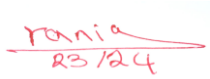
9. Matrix of Course Content with Course LO's

Topics	Aim	CLO's
Introduction to the study of Environment and behavior	1	**Clo19, Clo20**
The shift in global thought towards the human trend in architecture and urbanism	1	**Clo19, Clo20**
The science of ergonomics and its fields of application in architecture	1	**Clo24, Clo25**
Human nature and needs (Maslow's hierarchy)	1	**Clo24, Clo25**
The nature of man and his needs (Gashlett theory)	1	**Clo24**
The Role of behavioral sciences in designing urban spaces	1	**Clo24**
Behavioral unit and terms of use in the design	1	**Clo19, Clo24**
The mental image, for a sense of beauty	1	**Clo24, Clo25**
the characteristics of a good shape and its impact on the user	1	**Clo19, Clo24, Clo25**
The gap between the designer and the user	1	**Clo20, Clo25**
The space, its characteristics, and its role in adapting to the user	1	**Clo19, Clo24**
Behavioral unit and terms of use in the design	1	**Clo24, Clo25**
The mental image, for a sense of beauty and the characteristics of a good shape and its impact on the user	1	**Clo24, Clo25**

10. Matrix of Program LOs with Course LOs

Program LOs		Course LOs	
Plo10		Clo19	Apply new knowledge.

	Acquire and apply new knowledge; and practice self, lifelong and other learning strategies.	Clo20	Practice self, lifelong and other learning strategies.
Plo12	Produce designs that meet the requirements of building users by understanding the relationship between people and buildings, and between the buildings and their surrounding environment, with the necessity of linking the buildings and the spaces between them to the scale of humanity and its needs	Clo24	Deal with the relation between people, buildings, and their surrounding environment
		Clo25	Produce designs with the scale of humanity and its needs

Title	Name	Signature
Course coordinator	**Assoc Prof. Rania Badawy**	
Head of Department	**Assoc Prof. Reham Othman**	
Date of Approval	**7/10/2024**	

	Ministry of Higher Education **Higher Institute of Engineering and Technology** **Architecture Eng. Department**	

Course Specification

Course Code: ARE 4105 **Course Title:** Professional Practice & Legislation

1. Basic information

Program Title	Architecture Engineering Department			
Department offering the program	Architecture Engineering Department			
Department offering the course	Architecture Engineering Department			
Course Code	**ARE 4105**			
Year/level	Fourth year / Fifth Level			
Specialization	**Minor**			
Teaching Hours	Lectures	Tutorial	Practical	Total
	2	1	-	3

2. Course Aims

No.	Aim
1	link between the participating sectors in the construction and development operation of urban communities and between the graduates of the program in the fields of practical training, entrepreneurship, and project management . (AM4.1)
2	Enable students to possess knowledge of regulations and laws and commitment to ethics and professional practice. (AM4.3)

3. Course Learning Outcomes (CLOs)

Clo6	Apply engineering design processes to produce cost-effective solutions.
Clo7	Meet specified needs with consideration for global, cultural, social, economic, environmental, and ethical aspects.
CLO9	Utilize contemporary technologies, codes of practice and standards.
Clo29	Transform design concepts into buildings and integrating plans within restrictions with regulations

4. Course Contents

Topics	Week
Introduction of the course (Engineering projects stages and types of drawings)	1
Obligations of the owner, contractor and engineer	2
Organization of construction works (internal heights - internal surface - internal dimension - flat openings - doors)	3
Organization of construction works (requirements for stairs - courtyards)	4
Licensing documents - Deciding on the license - Obligations of the license applicant	5
Follow up on the group project	6
Building validity certificate for occupancy	7

Building requirements at road intersections	8
Types of contracting and contracting contracts	10
Types of tender	11
Organization of construction works (cornices and protrusions - balconies)	12
The Law of Reconciliation in Urbanization 2019	13
Professional ethics	14
Final Project Submission	15

5. Teaching and Learning methods

Course learning Outcomes (CLOs)	Teaching and Learning Methods											
	Lectures	Assignment	Labs	Research and Reports	Projects	Presentation	Site Visits	Discussion and Dialogue	Brain storm	E-Learning	Self-learning	Modeling and Simulation
Clo6	√	-	-	-	-	-	-		√	-	-	-
Clo7	-	-	-	√	√	-	-	√	-	√	√	-
Clo9	√	√	-	√	√	-	-	-	-	-	-	-
Clo29	√	√	-	√	√	-	-	√	√	√	√	-

6. Students' Assessment

6.1 Students' Assessment Method

No.	Assessment Method	Clos
1	Written exam	**Clo6, Clo7, Clo29**
2	Discussions	**Clo7, Clo29**
3	Mid Term Exam	**Clo6, Clo7, Clo29**
4	Class works	**Clo9, Clo29**
5	Projects	**Clo7, Clo9, Clo29**
6	Researches	**Clo7, Clo9, Clo29**
7	Reports	-
8	Presentations	-
9	Laboratory	-
10	Quiz	-
11	Skiz	-

6.2 Assessment Schedule

No.	Assessment Method	Weeks
1	Written exam	16
2	Discussions	weekly
3	Mid Term Exam	9
4	Class works	3-6
5	Projects	3-6-10
6	Researches	3-6-10

7	Reports	-
8	Presentations	-
9	Laboratory	-
10	Quiz	-
11	Skiz	-

6.3 Weighting of Assessments

	Assessment Method	Weights%	Weights	Weights%	Weights
Teacher Opinion	Discussions	50	50	5	5
	Class works			5	5
	Projects			10	10
	Researches			10	10
	Mid-term exam			20	20
Final Exam	Final exam	50	50	50	50
Total		100	100	100	100

7. List of References

- جمال الدين نصار، "قانون وتشريعات وعقود الاتحاد الدولي للمهندسين الاستشاريين (فيدك)"، الاتحاد الدولي للمهندسين الاستشاريين، 2005. (كود الكتاب بالمكتبة: A-a/42) ISBN: **9403520604**
- الجريدة الرسمية، "قانون البناء الموحد رقم 119 لعام 2008"، عدد 14 مكرر، جمهورية مصر العربية، 2019.
- اتحاد المهندسين العرب، "ميثاق أخلاق مهنة الهندسة"، يناير 2018.
- أحمد القطان، "العقود والمواصفات الحاكمة بين المالك والاستشاري والمقاول"، دار الكتب العلمية للنشر والتوزيع، القاهرة، 2021.

8. Facilities required for teaching and learning

Lecture/Classroom
White board
LMS
Data show

9. Matrix of Course Content with Course LO's

Topics	Aim	CLO's
Introduction of the course (Engineering projects stages and types of drawings)	1	**Clo6**
Obligations of the owner, contractor and engineer	1	**Clo6, Clo7**
Organization of construction works (internal heights - internal surface - internal dimension - flat openings - doors)	2	**Clo9, Clo29**
Organization of construction works (requirements for stairs - courtyards)	2	**Clo9, Clo29**

Licensing documents - Deciding on the license - Obligations of the license applicant	1,2	**Clo6, Clo29**
Follow up on the group project	2	**Clo7, Clo29**
Building validity certificate for occupancy	1	**Clo7, Clo29**
Building requirements at road intersections	1	**Clo7, Clo29**
Types of contracting and contracting contracts	1	**Clo6, Clo7**
Types of tender	1	**Clo7**
Organization of construction works (cornices and protrusions - balconies)	2	**Clo9, Clo29**
The Law of Reconciliation in Urbanization 2019	1	**Clo7**
Professional ethics	2	**Clo7**
Final Project Submission	2	**Clo7, Clo29**

10. Matrix of Program LOs with Course Los

Program Los		Course Los	
Plo3	Apply engineering design processes to produce cost-effective solutions that meet specified needs with consideration for global, cultural, social, economic, environmental, ethical, and other aspects as appropriate to the discipline and within the principles and contexts of sustainable design and development.	**Clo6**	Apply engineering design processes to produce cost-effective solutions.
		Clo7	Meet specified needs with consideration for global, cultural, social, economic, environmental, and ethical aspects.
Plo4	Utilize contemporary technologies, codes of practice and standards, quality guidelines, health and safety requirements, environmental issues, and risk management principles.	**Clo9**	Utilize contemporary technologies, codes of practice and standards.
Plo14	Transforming design concepts into buildings and integrating plans into comprehensive planning within restrictions: Financing Project - Project management - Cost control - Project delivery methods, having sufficient knowledge relevant industries, organizations, regulations and procedures.	**Clo29**	Transform design concepts into buildings and integrating plans within restrictions with regulations

Title	Name	Signature
Course coordinator	**Dr. Hadeel Mahmoud**	
Head of Department	**Assocc. Prof. Reham Othman**	
Date of Approval	**7/10/2024**	

Course Specification

Course Code: Are 4263 Course Title: Elective Course (3) Urban Renewal

1. Basic information

Program Title	Architecture Engineering			
Department offering the program	Architecture Engineering			
Department offering the course	Architecture Engineering			
Course Code	ARE 4263			
Year/level	Fourth year /Fifth Level			
Specialization	Major			
Teaching Hours	Lectures	Tutorial	Practical	Total
	3	2	0	5

2. Course Aims

No.	Aim
1	link between the participating sectors in the construction and development operation of urban communities and between the graduates of the program in the fields of urban renewal (AM4.1)

3. Course Learning Outcomes (CLOs)

Clo7	Meet specified needs with consideration for global, cultural, social, economic, environmental, and ethical aspects.
Clo8	Achieve the principles of design within the principles and contexts of sustainable design and development.
Clo26	Prepare environmentally responsible designs to preserve and rehabilitate the environment

4. Course Contents

Topics	Week
Concepts, definitions, introduction to the issue of renewal of urban areas	1
Urbanization and expansion of urban cities- Heritage Impact Assessment	2
Urban Renewal Plans	3
urban regeneration policies in Egypt	4
Buildings Conservations	5
Restoration of culture heritage	6

Preservations of culture heritage	7
National urban renewal projects	8
International urban renewal projects	10
Release of the project	11
Tools for the implementation of revaluation processes of urban areas part 1	12
Tools for the implementation of revaluation processes of urban areas part 2	13
researches submission	14
Final Project submission	15

5. Teaching and Learning methods

Course learning Outcomes (CLOs)	Teaching and Learning Methods											
	Lectures	Assignment	Labs	Research and Reports	Projects	Presentation	Site Visits	Discussion and Dialogue	Brain storm	E-Learning	Self-learning	Modeling and simulation
Clo7	√	-	-				√	-	√	√		-
Clo8	√	-	-	√	√	√	√		√		√	-
Clo26		-	-	√	√	√					√	-

6. Students' Assessment

6.1 Students' Assessment Method

No.	Assessment Method	CLOs
1	Mid Term Exam	**Clo7, Clo8**
2	Projects	**Clo8, Clo26**
3	Researches	**Clo8, Clo26**
4	Presentations	**Clo8, Clo26**
5	Written Exam	**Clo7, Clo8, Clo26**

6.2 Assessment Schedule

No.	Assessment Method	Weeks
1	Mid Term Exam	9
2	Projects	15
3	Researches	14
4	Presentations	15
5	Written Exam	16

6.3 Weighting of Assessments

	Assessment Method	Weights%	Weights	Weights%	Weights

Teacher Opinion	Mid Term Exam	50	50	20	20
	Projects			10	10
	Researches			10	10
	Presentations			10	10
Final Exam	Written exam	50	50	50	50
Total		100	100	100	100

7. List of References

[1] Steffen L. (2019), Urban Regeneration, (2nd ed.). Palgrave Macmillan Cham- ISBN 978-3-030-04710-8

[2] Yanli W., Bing W., Linbo L.(2021). Urban Redevelopment and Traffic Congestion Management Strategies. Publisher: Springer Nature Singapore. ISBN : 9780415447706 A-d/132-

[3] Millspaugh M. & Gurney V. (2018). The Human Side of Urban Renewal: A Study of the Attitude Changes Produced by Neighborhood Rehabilitation. Sagwan Press,1st edition, ISBN-10 : 1376881357

8. Facilities required for teaching and learning

Lecture hall
White board
Google Classroom
Data show

9. Matrix of Course Content with Course LO's

Topics	Aim	CLO's
Concepts, definitions, introduction to the issue of renewal of urban areas	1	**Clo7**
Urbanization and expansion of urban cities- Heritage Impact Assessment	1	**Clo7, Clo8**
Urban Renewal Plans	1	**Clo8, Clo26**
urban regeneration policies in Egypt	1	**Clo7, Clo8**
Buildings Conservations	1	**Clo8, Clo26**
Restoration of culture heritage	1	**Clo7, Clo8, Clo26**
Preservations of culture heritage	1	**Clo8, Clo26**
National urban renewal projects	1	**Clo8, Clo26**
International urban renewal projects	1	**Clo8, Clo26**
Release of the project	1	**Clo7, Clo8, Clo26**
Tools for the implementation of revaluation processes of urban areas : land use plans, decisions pertaining to conditions of development.	1	**Clo7, Clo8, Clo26**

Semi Final Project & researches submission	1	**Clo7, Clo8, Clo26**
Final Project & researches submission	1	**Clo7, Clo8, Clo26**

10. Matrix of Program LOs with Course LOs

Program LOs		Course LOs	
Plo3	Apply engineering design processes to produce cost-effective solutions that meet specified needs with consideration for global, cultural, social, economic, environmental, ethical	**Clo7**	Meet specified needs with consideration for global, cultural, social, economic, environmental, and ethical aspects.
		Clo8	Achieve the principles of design within the principles and contexts of sustainable design and development.
Plo13	Preparing environmentally responsible designs to preserve and rehabilitate the environment through an understanding of urban renewal	**Clo26**	Prepare environmentally responsible designs to preserve and rehabilitate the environment

Title	Name	Signature
Course coordinator	**Dr. Yasmin Talaat Ismail**	
Head of Department	**Assoc Prof. Dr. Reham Othman**	
Date of Approval	**7/10/2024**	

Course Specification

Course Code: HUM 4231 **Course Title: Environmental Impact of Projects**

1. Basic information

Program Title	Architecture Engineering			
Department offering the program	Architecture Engineering			
Department offering the course	Architecture Engineering			
Course Code	HUM 4231			
Year/level	Forth year / Fifth Level			
Specialization	**Minor**			
Teaching Hours	Lectures	Tutorial	Practical	Total
	2	1	0	3

2. Course Aims

No.	Aim
1	Prepare project documents; submit the environmental report of the architectural projects to obtain approval to build the project. (AM5.2)

3. Course Learning Outcomes (CLOs)

Clo26	Prepare environmentally responsible designs to preserve and rehabilitate the environment
Clo27	choose the structural design, construction, technology used

4. Course Contents

Topics	Week
An introduction to the objectives of the environmental impact of projects	1
Important definitions of the environmental impact of projects	2
The environmental impacts of projects during the operation phase and how to address them + an introduction to the required research	3
Classification of projects according to their environmental impact + follow-up to the first phase of the research (Part 1)	4
Classification of projects according to their environmental impact + follow-up to the first phase of the research (Part 2)	5
Project classification forms and how to apply them	6
Discuss the first stage of the research	7
Steps to apply for an environmental impact assessment (Part 1)	8
Steps to submit an environmental impact assessment (Part 2)	10
Steps to submit an environmental impact assessment (Part 3)	11
Discuss the second stage of the research	12
Methods of studying environmental impact assessment + follow-up to the third phase of the research (Part 1)	13

Methods of studying environmental impact assessment + follow-up to the third phase of the research (Part 2)	14
General review + final submission and discussion of the research	15

5. Teaching and Learning methods

Course learning Outcomes (CLOs)	Teaching and Learning Methods											
	Lectures	Assignment	Labs	Research and Reports	Projects	Presentation	Site Visits	Discussion and Debates	Brain storm	E-Learning	Self-learning	Modeling and Simulation
Clo26	√	√	-	√	-	√	-	√	√	-	-	-
Clo27	√	√	-	√	-		-			√	-	-

6. Students' Assessment

6.1 Students' Assessment Method

No.	Assessment Method	CLOs
1	Written exam	**Clo26, Clo27**
2	Discussions	**Clo26**
3	Mid Term Exam	**Clo26, Clo27**
4	Class works	-
5	Projects	-
6	Researches	**Clo26, Clo27**
7	Reports	-
8	Presentations	**Clo26**
9	Quiz	**Clo26, Clo27**
10	Skiz	-

6.2 Assessment Schedule

No.	Assessment Method	Weeks
1	Written exam	16
2	Discussions	7&11
3	Mid Term Exam	8
4	Class works	-
5	Projects	-
6	Researches	7&11&15
7	Reports	-
8	Presentations	7&11
9	Quiz	6
10	Skiz	-

6.3 Weighting of Assessments

	Assessment Method	Weights%	Weights	Weights%	Weights

Teacher Opinion	Researches	50	50	5	5
	Assignments			10	10
	Presentations			5	5
	Quiz			10	10
	Mid-term exam			20	20
Final Exam	Written exam	50	50	50	50
Total		100	100	100	100

7. List of References

[1] عبدالله بوعجيلة، (2019)، "تقييم الأثر البيئي للمشروعات التنموية: دراسة حالة الأردن"، تم النشر بواسطة المعهد العربي للتخطيط، الكويت، ISBN: 24843130.

[2] ذكريا عيسى آسيا، (2019)، "تقييم الآثار البيئية للمشاريع حماية للبيئة الحضري"، مجلة تشريعات التعمير والبناء – العدد السابع، جامعة سيدي بلعباس، ISSN : 2543-3970.

8. Facilities required for teaching and learning

Lecture/Classroom
White board
Data show

9. Matrix of Course Content with Course LO's

Topics	Aim	CLO's
An introduction to the objectives of the environmental impact of projects	1	**Clo26**
Important definitions of the environmental impact of projects	1	**Clo26**
The environmental impacts of projects during the operation phase and how to address them + an introduction to the required research	1	**Clo26, Clo27**
Classification of projects according to their environmental impact + follow-up to the first phase of the research (Part 1)	1	**Clo26, Clo27**
Classification of projects according to their environmental impact + follow-up to the first phase of the research (Part 2)	1	**Clo26, Clo27**
Project classification forms and how to apply them	1	**Clo27**
Discuss the first stage of the research	1	**Clo26**
Steps to apply for an environmental impact assessment (Part 1)	1	**Clo26, Clo27**
Steps to submit an environmental impact assessment (Part 2)	1	**Clo26, Clo27**
Steps to submit an environmental impact assessment (Part 3)	1	**Clo26, Clo27**
Discuss the second stage of the research	1	**Clo26, Clo27**
Methods (methods) of studying environmental impact assessment + follow-up to the third phase of the research (Part 1)	1	**Clo26, Clo27**

Methods (methods) of studying environmental impact assessment + follow-up to the third phase of the research (Part 2)	1	**Clo26, Clo27**
General review + final submission and discussion of the research	1	**Clo26, Clo27**

10. Matrix of Program LOs with Course LOs

Program LOs		**Course LOs**	
Plo13	Preparing environmentally responsible designs to preserve and rehabilitate the environment through an understanding of the structural design, construction, technology used and associated engineering problems Building designs	**Clo26**	Prepare environmentally responsible designs to preserve and rehabilitate the environment
		Clo27	choose the structural design, construction, technology used

Title	**Name**	**Signature**
Course coordinator	**Associa. Prof. Reham Othman**	
Head of Department	**Associa. Prof. Reham Othman**	
Date of Approval	**7 - 10 - 2024**	