



Course Specifications: ARE7221 - Architectural Design 4

1. Basic Information

Program Title	Architectural Engineering
Department offering the Program	Architectural Engineering
Department Responsible for the Course	Architectural Engineering
Course Title	Architectural Design 4
Course Code	ARE7221
Year/ Level	Second Year – Second Semester
Specialization	Minor
Authorization date of course specification	2005

Teaching Hours	Lectures	Tutorial	Practical
	2	5	0

2. Course Attributes:

No.	Attribute
12	Design robust architectural projects with creativity and technical mastery.
13	Demonstrate investigative skills, attention to details, and visualize/conceptualize skills.
14	Adopt a holistic problem solving approach for complex, ambiguous, and open-ended challenges and scenarios.

3. Intended Learning Outcomes (ILOs):

a. Knowledge and Understanding:

No.	Knowledge and Understanding
A ₁₃	Principles of architectural design, and the preparation and presentations of design projects in a variety of contexts, scales, types and degree of complexity.
A ₂₃	Principles of sustainable design, climatic considerations, and energy consumption and efficiency in buildings and their impacts on the environment.

b. Intellectual Skills

No.	Intellectual Skills
B ₀₃	Think in a creative and innovative way in problem solving and design.
B ₁₀	Incorporate economic, societal, environmental dimensions and risk management in design.
B ₁₃	Integrate different forms of knowledge, ideas from other disciplines, and manage information retrieval to create new solutions.
B ₁₆	Reconcile conflicting objectives and manage the broad constituency of interests to reach optimum solutions.



B ₁₇	Integrate community design parameters into design projects.
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c. Professional Skills

No.	Professional Skills
C ₀₂	Professionally merge the engineering knowledge, understanding, and feedback to improve design, products and/or services.
C ₁₇	Demonstrate professional competence in developing innovative and appropriate solutions of architectural and urban problems.
C ₁₈	Display imagination and creativity.
C ₁₉	Respect all alternative solutions; changes in original plan of the project, differences in style, culture, experience and treat others with respect.

d. General Skills

No.	General Skills
D ₀₁	Collaborate effectively within multidisciplinary team.
D ₀₂	Work in stressful environment and within constraints.
D ₀₃	Communicate effectively.
D ₀₆	Manage tasks and resources efficiently.

4. Course Contents:

No.	Topics
1	مقدمة عامة
2	المشروع الثاني (مبنى رأسى متعدد الادوار : برج ادارى - مجمع خدمى - مبنى حكومى - ...)
3	المعايير التصميمية لعناصر الحركة الرأسية - النظريات -
4	بحث تطبيقي (أمثلة لمشروعات ، نظريات انشاء المباني العالية)
5	متابعة وتصحيح (اسكيز فكرة وموقع عام)
6	متابعة وتصحيح (مساقط أفقية)
7	متابعة وتصحيح (مساقط أفقية)
8	مناقشة عامة ومفتوحة للمرحلة السابقة (اسكيز ٢)
9	متابعة وتصحيح (واجهات وقطاعات)
10	متابعة وتصحيح (واجهات وقطاعات)
11	تبييض المشروع
12	المناقشة

5. Teaching and Learning Methods:

5.1 Normal Students:

No.	Teaching Method	Choice
1	Lectures	√



Course Specifications: ARE7221 - Architectural Design 4

2	Discussion Sessions	√
3	Information Collection from Different Sources	×
4	Practical	×
5	Research Assignment	√
6	Field Visits	√
7	Case Studies	×
8	Smart Sessions	√

5.2 Disable Students:

No.	Teaching Method	Reason
1	Presentation of the course in digital material.	Better access any time.
2	Web communication with students	Better communication with certain cases.
3	Asking small groups to do assignments; each composed of low, medium, and high performance students.	Knowledge and skills transfer among different levels of students.
4	Asking disabled students to do PowerPoint/Poster presentations.	Encouraging disabled students' engagement and interaction.

5.3 Excellent Students:

No.	Teaching Method	Reason
1	Developing course materials gradually to allow excellent students to receive teaching that meets their needs	Excellent students rely on excellent teaching
2	Encouraging students to participate in competitions with rewarded bonus marks.	Increasing excellent students' competitiveness

6. Student Assessment:

6.1 Student Assessment Methods:

No.	Assessment Method	Choice	ILOs
1	Mid Term Examination	√	A ₀₇ , A ₁₂ , A ₁₃ , B ₀₃ , B ₁₀ , B ₁₃ , C ₀₂ , C ₁₄ , D ₀₁
2	Oral Examination	√	D ₀₁ , D ₀₂ , D ₀₃ , D ₀₆
3	Practical Examination	×	-
4	Semester work	√	A ₁₃ , B ₁₆ , B ₁₇ , C ₁₇ , C ₁₈ , C ₁₉ , D ₀₆



Course Specifications: ARE7221 - Architectural Design 4

5	Other types of assessment	×	-
6	Final Term Examination	√	A ₁₃ , B ₁₉ , C ₁₉ , C ₁₇ , D ₀₄ , D ₀₆

6.2 Assessment Schedule:

No.	Assessment Method	Weeks
1	Mid Term Examination	08 th
2	Oral Examination	14 th
3	Practical Examination	×
4	Semester work	2 nd -7 th ; 09 th – 13 th
5	Other types of assessment	×
6	Final Term Examination	15 th

6.3 Weighting of Assessments:

No.	Assessment Method	Weights
1	Mid Term Examination	10
2	Oral Examination	8.5
3	Practical Examination	-
4	Semester work	30
5	Other types of assessment	-
6	Final Term Examination	51.5%
Total		100%

7. List of References

No.	Reference List
1	Neufert, Ernst, Architects' Data.
2	Architectural GRAPHIC Standards. NY: John Wiley & Sons, Inc., 2004.
3	Course Notes: Architectural Principles
4	http://www.designbasics.com/

8. Facilities Required for Teaching and Learning:

No.	Facility	Choice
1	Lecture Classroom	√

No.	Facility	Choice
7	Wireless Board	×



Course Specifications: ARE7221 - Architectural Design 4

2	Lab Facilities	×		8	Presenter	√
3	White Board	√		9	Sound System	√
4	Data Show System	√		10	Wire-Internet	×
5	Visualizer	×		11	Wireless Internet	√
6	Smart Board	√		12	...	-

9. Matrix of Knowledge and Skills of the Course:

No.	Topic	Attributes	Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
1	المشروع الثانى (مبنى رأسى متعدد الادوار : برج ادارى - مجمع خدمى - مبنى حكومى -)	12, 13	A ₁₃	B ₀₃	C ₀₂	D ₀₁
2	المعايير التصميمية لعناصر المشروع- النظريات -	12, 13	A ₁₃	B ₁₀	C _{17, C₁₈}	D _{02, D₀₃}
3	بحث تطبيقى (أمثلة لمشروعات ، نظريات معمارية)	12, 13	A ₁₃	B ₁₃	C _{18, C₁₉}	D ₀₆
4	متابعة وتصحيح (اسكيز فكرة وموقع عام)	13	A ₂₃	B _{13, B₁₆} , B ₁₇	C _{18, C₁₉}	D _{02, D₀₃} , D ₀₆
5	مناقشة عامة ومفتوحة للمرحلة السابقة (اسكيز ٢)	13	A ₂₃	B ₁₇	C _{18, C₁₉}	D _{02, D₀₃} , D ₀₆
6	متابعة وتصحيح (واجهات وقطاعات	13	A ₂₃	B ₁₇	C _{18, C₁₉}	D _{02, D₀₃} , D ₀₆
7	تبييض المشروع	12, 13, 14	-		C _{18, C₁₉}	D _{03, D₀₆}

Course Coordinator: Associate Professor Dr. Alaa Shams El-Deen Al-Eishy

Head of Department: Professor Dr. Mohammad Mohammad Taha Al-Azab

Date of Approval: