1. Basic Information

Program Tile	Architectural Engineering
Department offering the Program	Architectural Engineering
Department Responsible for the Course	Architectural Engineering
Course Title	Executive Design 1*
Course Code	ARE7312
Year/ Level	Third Year – First Semester
Specialization	Major
Authorization date of course specification	2005

Teaching Hours	Lectures	Tutorial	Practical
	1	5	0

2. Course Attributes:

No.	Attribute
05	Use the techniques, skills, and appropriate engineering tools, necessary for engineering practice and project management.
12	Design robust architectural projects with creativity and technical mastery.
13	Demonstrate investigative skills, attention to details, and visualize/conceptualize skills.
17	Recognize the new role of architectural engineer as the leader of design projects— who has the ability to understand, assemble, and coordinate all of the disciplines— to create a sustainable environment.

3. Intended Learning Outcomes (ILOs):

a. Knowledge and Understanding:

No.	Knowledge and Understanding
A_{08}	Principles of architectural design, and the preparation and presentations of design projects in a variety of contexts, scales, types and degree of complexity.
A_{14}	Principles of building technologies, structure & construction methods, technical installations, properties of materials, and the way they may influence design decisions.
A_{15}	Fundamentals of building acquisition, operational costs, and of preparing construction documents and specifications of materials, components, and systems appropriate to the building.

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$_{12}$	Create systematic and methodic approaches when dealing with new and advancing technology.
B$_{13}$	Integrate different forms of knowledge, ideas from other disciplines, and manage information retrieval to create new solutions
B$_{17}$	Integrate relationship of structure, building materials, and construction elements into design process.

c. Professional Skills

No.	Professional Skills
C$_{02}$	Professionally merge the engineering knowledge, understanding, and feedback to improve design, products and/or services.
C$_{14}$	Produce professional workshop and technical drawings using traditional drawing and computer-aided drawings' techniques.
C$_{15}$	Use appropriate construction techniques and materials to specify and implement different designs.
C$_{16}$	Participate professionally in managing construction processes.

D. General Skills

No.	General Skills
D$_{02}$	Work in stressful environment and within constraints.
D$_{03}$	Communicate effectively.
D$_{04}$	Demonstrate efficient IT capabilities.
D$_{06}$	Manage tasks and resources efficiently.
D$_{08}$	Acquire entrepreneurial skills.

4. Course Contents:

No.	Topics
1	Introduction
2	Design Modification
3	Working Design (Plans)
4	Working Design (Elevations)
5	Working Design (Sections)
6	Working Details (Stairs)
7	Working Design (Layout)
8	Working Design (Plumbing& Electric)

5. Teaching and Learning Methods:

5.1 Normal Students:

No.	Teaching Method	Choice
1	Lectures	√

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_{08}, A_{14}, B_{03}, B_{10}, D_{02}
2	Oral Examination	√	D_{03}, D_{04}
3	Practical Examination	×	-
4	Semester work	√	A_{14}, C_{02}, C_{15}, C_{16}, D_{06}
5	Other types of assessment	×	-
6	Final Term Examination	√	A_{14}, A_{15}, B_{12}, B_{13}, B_{17}, C_{14}, D_{06}, D_{08}

6.2 Assessment Schedule:

No.	Assessment Method	Weeks
1	Mid Term Examination	8
2	Oral Examination	12
3	Practical Examination	×
4	Semester work	Weekly
5	Other types of assessment	×
6	Final Term Examination	14

6.3 Weighting of Assessments:

No.	Assessment Method	Weights
1	Mid Term Examination	20%
2	Oral Examination	20%
3	Practical Examination	-
4	Semester work	60%
5	Other types of assessment	-
6	Final Term Examination	-
Total		100%

7. List of References

No.	Reference List
1	Arabian Group for Develop, "Inter Build Specification Catalogue", Cairo, Egypt, 2003.
2	Architect's Working Details, London, Vol. 1-8, 1955- 1961.
3	مجدى موسى و نبيل سراج، "التصميمات التنفيذية فى العمارة" دار الراتب للنشر، ١٩٩٥

8. Facilities Required for Teaching and Learning:

No.	Facility	Choice		No.	Facility	Choice
1	Lecture Classroom	√		7	Wireless Board	×
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	Introduction	5	A_{08}, A_{14}	B_{03}	C_{02}, C_{14}	D_{02}
2	Design Modification	5	A_{08}, A_{14}	B_{10}	C_{14}, C_{15}	D_{02}, D_{03}
3	Working Design (Plans)	5	A_{08}, A_{14}	B_{12}	C_{15}	D_{02},

						D_{03}
4	Working Design (Elevations)	5	A_{15}	B_{12}	C_{14}, C_{15}, C_{16}	D_{04}
5	Working Design (Sections)	12	A_{15}	B_{13}	C_{14}, C_{15}	D_{04}
6	Working Details (Stairs)	12	A_{15}	B_{13}	C_{16}	D_{06}
7	Working Design (Layout)	13	A_{15}	B_{17}	C_{16}	D_{06}
8	Working Design (Plumbing& Electric)	17	A_{15}	B_{17}	C_{16}	D_{06}, D_{08}

Course Coordinator: **Dr. Wael Seddiq Abel-Latif**

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

Date of Approval: