



**Ministry of Higher Educations
Mansoura Higher Institute for Engineering
and Technology**

Architectural Engineering B.Sc. Program Specification

Architectural Engineering B.Sc. Program Specification

1. Introduction:

1.1. Basic Information:

- Program Title: [Architectural Engineering](#)
- Program Type: [Joint Program](#)
- Academic standard: [NARS](#)
- Department: [Architectural Engineering](#)
- Coordinator: [Assoc.Prof. Wael Sedik](#)
- Assistant Coordinator:
 - a. [Assoc. Prof. Ibrahim Rizk](#)
 - b. [Dr. Saad Makram](#)
 - c. [Eng. Aliaa Abbas](#)
- Date of Program Specification Approval: 31/8/2016
- Last Date of Program Specification Update Approval: 3/9/2017

1.2. Staff Members:

The Architectural Engineering Program is taught by highly qualified staff members and assistant staff. **(Attachment 1)** shows the staff members' names, resume and the subjects taught by each of them. **(Attachment 2)** shows the staff members' part and full time decisions and also the staff assistants' Ministerial decisions.

1.3. Internal Evaluators:

The program was evaluated by committee of 6 internal members. Their evaluation showed that the program specification agrees with the National Academic Reference Standards, **(Attachment 3)**, **(Attachment 4)**.

1.3. External Evaluators:

The program was evaluated by two external evaluators. Their evaluation showed that the program specification agrees with the National Academic Reference Standards, **(Attachment 5)**, **(Attachment 6)**.

2. Professional Data:

2.1. Preamble

Architecture is considered one of the essential disciplines necessary in Mansoura Higher Institute of Engineering and Technology with references to buildings, city development, and urbanization. Designing in Architecture normally includes all that add artistic, philosophical, and psychological dimensions to buildings. The department of Architecture was established in Fall 2012. (**Attachment 7**)

Hereby, the architectural program curriculum has a wide strong base of science, humanities and engineering fundamentals upon which intensive specialization courses, graduation projects, and professional training are built to complement this strong educational foundation.

At the Department of Architectural Engineering, we believe that the academic educational process is a joint team effort and cannot be achieved through individualized inputs. Teaching is a cooperative integrated effort of institute staff to offer integrated knowledge base that is directed towards students' learning by doing, experimentation and teamwork.

A B.Sc. degree in the Architectural Engineering is designed for students who seek careers as engineers in consulting firms and private and governmental agencies. This degree is also appropriate for students who plan to be researchers or who intend to pursue an advanced degree in engineering. A typical program curriculum incorporates analytical tools, creative thought and diversity of skills as well as the state of the art of the profession, (**Attachment 8**)

2.2. Program Vision, Mission, Strategy Goals, and Attributes:

2.2.1. Program Vision

The vision of the Bachelor of Science in The Architectural Engineering program is to ensure the leadership and uniqueness locally and regionally. The Architectural Engineering program is to provide a multidisciplinary professional education that prepares the graduate to help communities manage change, (**Attachment 9**)

2.2.2 Program Mission

The mission of the Bachelor of Science in The Architectural Engineering program is to prepare the graduates to compete the other architectural programs graduates locally and regionally.

The program trains students to define issues, solve problems, and implement solutions for the purpose of improving the quality of the built environment, while, simultaneously, anticipating social change and promoting social coherence. Working with people with an eye on the future, Architecture graduates will be capable of providing research, reasoned analysis and recommendations on buildings, urban, regional, environmental, and social issues. Student education at the Architectural Engineering program will be rooted in basic professional ethical standards and high moral values, (**Attachment 9**)

2.2.3 Strategy Goals

The strategy goals of the Bachelor of Science in The Architectural Engineering program is, (**Attachment 9**):

1. Preparing well-trained cadres according to the criteria of the National Authority for Quality Assurance and Accreditation of Education (NAQAEE) to take over the engineering and the technological responsibilities of the different specialties in the Institute.
2. Preparing a generation of sufficient engineers and qualified researchers so as to recognize the vital specialists which the society is looking forward to keeping up with global flow so as to get benefit from them.
3. Carrying out research projects, providing occupational consults, holding meetings and training programs that play a role in enriching the knowledge and developing the performance.

2.2.3 Program Attributes

According to NARS, the graduates of architecture program should be able to (**Attachment 9**):

- a. Apply knowledge of mathematics, science and engineering concepts to the solution of engineering problems.
 - a1. Apply knowledge of science and engineering concepts to the solution of engineering problems.*
- b. Design a system; component and process to meet the required needs within realistic constraints.
- c. Design and conduct experiments as well as analyze and interpret data.
- d. Identify, formulate and solve fundamental engineering problems.
 - d1. Identify, formulate engineering problems.*
 - d2. solve fundamental engineering problems.*
- e. Use the techniques, skills, and appropriate engineering tools, necessary for engineering practice and project management.
- f. Work effectively within multi-disciplinary teams.
- g. Communicate effectively.
- h. Consider the impacts of engineering solutions on society and environment.
- i. Demonstrate knowledge of contemporary engineering issues.
- j. Display professional and ethical responsibilities; and contextual understanding.
- k. Engage in self- and life- long learning.
- l. Design robust architectural projects with creativity and technical mastery.
- m. Demonstrate investigative skills, attention to details, and visualize/ conceptualize skills.
- n. Adopt a holistic problem-solving approach for complex, ambiguous, and open-ended challenges and scenarios.
- o. Demonstrate knowledge of cultural diversity, differences and the impact of a building on community character and identity.
- p. Address urban issues, planning, and community needs through design work.
 - p1. Address urban issues, planning, and community needs*
- q. Recognize the new role of the 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.

2.3. Intended Learning Outcomes (ILO's):

2.3.1. Knowledge and Understanding:

According to NARS, on completing this program the graduates of the architectural engineering program should demonstrate knowledge and understanding of (**Attachment 9**):

- A1. Concepts and theories of mathematics and sciences, appropriate to the discipline.
A1₁. Concepts and theories of sciences, appropriate to the discipline.
- A2. Basics of information and communication technology (ICT).
- A3. Characteristics of engineering materials related to the discipline.
- A4. Principles of design including elements design, process and/or a system related to specific disciplines.
- A5. Methodologies of solving engineering problems, data collection and interpretation.
- A6. Quality assurance systems, codes of practice and standards, health and safety requirements and environmental issues.
A6₁. Health and safety requirements and environmental issues.
- A7. Business and management principles relevant to engineering.
- A8. Current engineering technologies as related to disciplines.
- A9. Topics related to humanitarian interests and moral issues.
- A10. Technical language and report writing.
- A11. Professional ethics and impacts of engineering solutions on society and environment.
- A12. Contemporary engineering topics.
- A13. Principles of architectural design, and the preparation and presentations of design projects in a variety of contexts, scales, types and degree of complexity.
A13₁. Principles of preparation and presentations of design projects in a variety of contexts, scales, types and degree of complexity.
- A14. Principles of building technologies, structure & construction methods, technical installations, properties of materials, and the way they may influence design decisions.
A14₁. Principles of building technologies, structure & construction methods.
A14₂. Principles of building technologies, structure & construction methods, technical installations, properties of materials.
A14₃. Principles of building technologies, properties of materials, and the way they may influence design decisions.
A14₄. Principles of building technologies, technical installations, properties of materials, and the way they may influence design decisions.
- A15. Fundamentals of building acquisition, operational costs, and of preparing construction documents and specifications of materials, components, and systems appropriate to the building.
A15₁. Fundamentals of building acquisition, and of preparing construction documents and specifications of materials, components, and systems appropriate to the building.
- A16. Theories and legislations of urban and regional planning.
- A17. The processes of spatial change in the built and natural environments; patterns and problems of cities; and positive & negative impacts of urbanization.
- A18. The significance of urban spaces and the interaction between human behavior built environment and natural environment.

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- A19. Theories and histories of architecture, planning, urban design, and other related disciplines.
A19₁. Theories and histories of architecture.
A19₂. Theories and histories of planning and urban design.
- A20. Physical modeling, multi-dimensional visualization, multimedia applications, and computer-aided design.
A20₁. Physical modeling, multi-dimensional visualization.
- A21. The role of the architecture profession relative to the construction industry and the overlapping interests of organizations representing the built environment.
- A22. Various dimensions of housing problem and the range of approaches, policies, and practices that could be carried out to solve this problem.
- A23. Principles of sustainable design, climatic considerations, and energy consumption and efficiency in buildings and their impacts on the environment.

2.3.2. Intellectual Skills

According to NARS, the graduates of the architectural engineering program will be able to **(Attachment 9)**:

- B1. Select appropriate mathematical and computer-based methods for modeling and analyzing problems.
- B2. Select appropriate solutions for engineering problems based on analytical thinking.
- B3. Think in a creative and innovative way in problem-solving and design.
- B4. Combine, exchange, and assess different ideas, views, and knowledge from a range of sources.
B4₁. Combine and exchange different ideas, views, and knowledge from a range of sources.
- B5. Assess and evaluate the characteristics and performance of components, systems and processes.
- B6. Investigate the failure of components, systems, and processes.
- B7. Solve engineering problems, often on the basis of limited and possibly contradicting information.
- B8. Select and appraise appropriate ICT tools to a variety of engineering problems.
- B9. Judge engineering decisions considering balanced costs, benefits, safety, quality, reliability, and environmental impact.
- B10. Incorporate economic, societal, environmental dimensions and risk management in design.
B10₁. Incorporate economic, environmental dimensions in design.
- B11. Analyze results of numerical models and assess their limitations.
- B12. Create systematic and methodic approaches when dealing with new and advancing technology.
- B13. Integrate different forms of knowledge, ideas from other disciplines, and manage information retrieval to create new solutions.
- B14. Think three-dimensionally and engage images of places & times with innovation and creativity in the exploration of design.
B14₁. Think three-dimensionally.
- B15. Predict possible consequences, by- products and assess expected performance of design alternatives.

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- B16. Reconcile conflicting objectives and manage the broad constituency of interests to reach optimum solutions.
 - B17. Integrate relationship of structure, building materials, and construction elements into design process.
B17₁. Integrate relationship of building materials into design process.
 - B18. Integrate community design parameters into design projects.
 - B19. Appraise the spatial, aesthetic, technical and social qualities of a design within the scope and scale of a wider environment
 - B20. Discuss, search and formulate informed opinions appropriate to specific context and circumstances affecting architecture profession & practice.
 - B21. Analyze range of patterns and traditions that have shaped & sustained cultures & the way that they can inform design process.

2.3.3. Professional and Practical Skills:

According to NARS, on successful completion of the program the graduates of the architectural engineering program should be able to **(Attachment 9)**:

- C1. Apply knowledge of mathematics, science, information technology, design, business context and engineering practice integrally to solve engineering problems.
- C2. Professionally merge the engineering knowledge, understanding, and feedback to improve design, products and/or services.
- C3. Create and/or re-design a process, component or system, and carry out specialized engineering designs.
- C4. Practice the neatness and aesthetics in design and approach.
- C5. Use computational facilities and techniques, measuring instruments, workshops and laboratory equipment to design experiments, collect, analyze and interpret results.
- C6. Use a wide range of analytical tools, techniques, equipment, and software packages pertaining to the discipline and develop required computer programs.
- C7. Apply numerical modeling methods to engineering problems.
- C8. Apply safe systems at work and observe the appropriate steps to manage risks.
- C9. Demonstrate basic organizational and project management skills.
- C10. Apply quality assurance procedures and follow codes and standards.
- C11. Exchange knowledge and skills with engineering community and industry.
- C12. Prepare and present technical reports.
- C13. Produce and present architectural, urban design, and planning projects using an appropriate range of media and design-based software.
C13₁. Produce and present architectural projects using an appropriate range of media.
- C14. Produce professional workshop and technical drawings using traditional drawing and computer-aided drawings' techniques.
C14₁. Produce professional workshop and technical drawings using traditional drawing.
C14₂. Produce professional workshop and technical drawings using computer-aided drawings' techniques.
- C15. Use appropriate construction techniques and materials to specify and implement different designs.
C15₁. Use appropriate materials to specify and implement different designs.
- C16. Participate professionally in managing construction processes.

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- C17. Demonstrate professional competence in developing innovative and appropriate solutions of architectural & urban problems
 - C18. Display imagination and creativity.
 - C19. Respect all alternative solutions; changes in original plan of the project, differences in style, culture, experience and treat others with respect.
C19₁. Respect all alternative solutions; differences in style, culture, experience and treat others with respect.
 - C20. Provide leadership and education to the client particularly with reference to sustainable design principles.
 - C21. Respond effectively to the broad constituency of interests with consideration of social and ethical concerns.
 - C22. Contribute positively to the aesthetic, architecture and urban identity, and cultural life of the community.

2.3.4. General and Transferrable Skills:

According to NARS, the graduates of the architectural engineering program should be able to **(Attachment 9)**:

- D1. Collaborate effectively within multidisciplinary team.
- D2. Work in stressful environment and within constraints.
- D3. Communicate effectively.
- D4. Demonstrate efficient IT capabilities.
- D5. Lead and motivate individuals.
- D6. Effectively manage tasks, time, and resources.
- D7. Search for information and engage in life-long self-learning discipline.
- D8. Acquire entrepreneurial skills.
- D9. Refer to relevant literatures.

2.4. Curriculum Structure and Contents:

2.4.1 Studying Program:

The studying program has been designed so that there will be chances for diversity and achieving excellence, the following tables describe the graduation requirements with total 165 credit hours at least, then pointing out the requirements on the basis of; general cultural requirements, Engineering and Technology Institute requirements, Specialty requirements and Department requirements. The requirements tables will define both the required compulsory and elective credit hours.

- General Knowledge Requirements: 23 credit hours (13 hours' compulsory +10 hours' elective), it represents 14% of the degree requirements. Humanities, social science, and general knowledge courses are required for improving the student's personality and abilities.

- Engineering and Technology Institute Requirements:47 credit hours (39 hours' compulsory+8 hours' elective), it represents 27% of the degree requirements and covers the minimum of the mutual engineering sciences that all the graduates have to study.

- Specialty Requirements: not less than 64 credit hours (compulsory and elective that are changeable according to the specialty), it represents 39% of the degree requirements and represents the minimum of the mutual courses in all other engineering departments.

- Department Requirements: not more than 33 credit hour (compulsory and elective according to the department), it represents 20% of the degree requirements and covers the courses that would help the student to choose a specific department belongs to the main specialty, (**Attachment 10**)

Table 1: Scientific Departments and Specialties codes that are required for teaching courses

Department / Specialty	Dept. Code
Basic Sciences	BAS
Structure Engineering	CIS
Public Works	CIW
Architectural Engineering	ARC
Electrical Power Engineering	ELP
Electronics & Communications Engineering	ELE
Computers & Systems Engineering	ELC
Design & Manufacturing Engineering	MED
Mechanical Power Engineering	MEP
Mechatronics	MET
Industrial Engineering	IEN
Chemical Engineering	CHE
Humanities & Social Sciences	HUM

The department code consists of three letters on the far left; the scientific department code (according to the previous table) and three numbers on the far right. The first number represents (on the left) the proper level for the course (from 0 to 4), and the middle number represents the specific specialty (from 1 to 9), and the third number represents the serial number of the course of every department (from 1 to 9).

General Cultural Requirements:

Table 2: General Cultural Requirements (Compulsory)

Code	Course Title	Cr.Hrs	Lec	Ex	Lab	Prerequisite
HUM 011	Arabic Language	2	2			
HUM 012	English Language 1	2	1	2		
HUM 013	English Language 2	2	1	2		HUM 012
HUM 352	Human Rights	1	1			
HUM 081	Computer Skills		1		4	
HUM 181	Communication & Presentation Skills	2	1	2		
HUM 182	Analysis & Research Skills	2	1	2		
HUM 381	Principles of Negotiation	2	2			
	Total Credit Hrs	13				

Table 3: General Cultural Requirements (Elective A)

Code	Course Title	Cr.Hrs	Lec	Ex	Lab	Prerequisite
HUM x62	Music Appreciation	2	2			
HUM x71	Introduction to the History of Civilizations	2	2			
HUM x72	Trends in Contemporary Arts	2	2			
HUM x73	Recent Egypt's History	2	2			
HUM x74	Heritage of Egyptian Literature	2	2			
HUM x75	Arabic & Islamic Civilization	2	2			
HUM x76	Literary Appreciation	2	2			
	Select 8 Credit Hrs.					

Table 4: General Cultural Requirements (Elective B)

Code	Course Title	Cr.Hrs	Lec	Ex	Lab	Prerequisite
HUM 121	Introduction to Accounting	2	2			
HUM 221	Business Administration	2	2			
	Select 2 Credit Hrs.					

Table 5: Engineering & Technology Requirements (Compulsory)

Code	Course title	Cr.Hrs	Lec	Ex	Lab	Prerequisite
291	Field Training 1	0			6	
391	Field Training 2	0			6	
BAS 011	Mathematics 1	3	2	2		
BAS 012	Mathematics 2	3	2	2		BAS 011
BAS 212	Statics & Probability Theory	3	2	2		
BAS 021	Physics 1	3	2	1	2	
BAS 022	Physics 2	3	2	1	2	BAS 021
BAS 031	Mechanics	4	3	2		
BAS 041	Engineering Chemistry	3	2	1	2	
CIW 331	Environmental Impact of Projects	1	1			
MED 011	Engineering Drawing & Projection	3	1	3	3	
MED 021	History of Engineering & Technology	1	1			
MED 022	Principles of Manufacturing Engineering	2	2	1	1	
IEN 314	Project Management	2	2	1		
IEN 131	Monitoring & Quality Control Systems	1	1			
IEN 351	Engineering Economics	2	2	1		
HUM 111	Technical Report Writing	2	1	2		HUM 013
HUM 351	Professional Ethics	1	1			
	Total Credit Hrs	37				

Table 6: Engineering & Technology Requirements (Elective A)

Code	Course title	Cr.Hrs	Lec	Ex	Lab	Prerequisite
CIS 111	Principles of Construction & Building Engineering	2	2	1		
ARC 111	Arts & Architecture	2	2	1		
ELP 111	Principles of Electrical Engineering	2	2	1		BAS 022
ELE 121	Principles of Electronic Engineering	2	2	1		
MED 111	Principles of Design & Manufacturing Engineering	2	2	1		
MEP 111	Principles of Mechanical Power Engineering	2	2	1		BAS 022, 031
Select 8 Credit Hrs.						

Requirements for all the students of the Architectural Engineering specialty:

Table 7: Architectural Engineering

Major Requirements (Compulsory)

Code	Course title	Cr.Hrs	Lec	Ex	Lab	Prerequisite
CIS 112	Structural Analysis 1	3	2	2		
CIS 222	Reinforced Concrete & Foundation	3	2	2		
CIS 231	Design of Steel Structures 1	3	2	2		CIS 112
CIS 141	Behavior of Materials	3	2	1	2	
CIW 121	Engineering Surveying	3	2	1	1	
CIW 232	Sanitary Installation in Buildings	2	2	1		
ARC 112	Visual Training & Freehand Drawing	3	1	4		
ARC 113	Sciagraphy & Perspective	3	1	4		
ARC 121	History & Theory of Architecture 1	2	2			
ARC 122	History & Theory of Architecture 2	2	2			ARC 121
ARC 223	History & Theory of Architecture 3	2	2			ARC 122
ARC 224	History & Theory of Architecture 4	2	2			ARC 223
ARC 131	Building Constructions 1	3	1	4		
ARC 132	Building Constructions 2	3	1	4		ARC 131
ARC 233	Building Constructions 3	3	1	4		ARC 122
ARC 331	Working Drawings 1	3		6		ARC 233
ARC 332	Working Drawings 2	3		6		ARC 331
ARC 241	Environmental Control	3	2	2		

ARC 242	Acoustics & Illumination	2	1	2		
ARC 151	Architectural Design 1	3		6		ARC 112
ARC 252	Architectural Design 2	3		6		ARC 151
ARC 253	Architectural Design 3	3		6		ARC 252
ARC 354	Architectural Design 4	3		6		ARC 253
ARC 355	Architectural Design 5	3		6		ARC 354
ARC 261	Landscape & Urban Design	3	1	4		
ARC 262	History & Theory of Planning	2	2			
ARC 463	Housing	3	2	2		
ARC 371	Architectural & Urban Legislations	2	2			
ARC 472	Execution Documents	3	2	2		ARC 332
ARC 491	Project 1	1		2		ARC 355
ARC 492	Project 2	5		10		ARC 491
MEP 342	Air Conditioning in Buildings	2	2	1		
	Total Credit Hrs	87				

Table 8: Architectural Engineering

Minor Requirements (Elective A)

Code	Course title	Cr.Hrs	Lec	Ex	Lab	Prerequisite
ARC 327	Architectural Criticism & Project Evaluation	2	2			
ARC 334	Building Economics	2	2			
ARC 335	Advanced Technical Installations	2	2			
ARC 336	Maintenance of Buildings	2	2			
ARC 372	Feasibility Studies of Urban Projects	2	2			
	Select 4 Credit Hrs.					

Table 9: Architectural Engineering

Minor Requirements (Elective B)

Code	Course title	Cr.Hrs	Lec	Ex	Lab	Prerequisite
ARC 411	Computer Applications in Architecture	3	1	2	3	
ARC 457	Interior Design	3	1	4		
ARC 458	Sustainable Architecture	3	1	4		
ARC 464	Urban Renewal	3	1	4		
ARC 481	Conservation of Urban Heritage	3	1	4		
	Select 6 Credit Hrs.					

2.4.2 Program Contents:

The program duration is five years, 10 semesters. The following are the subjects taught during this program.

- **Level (000):**

Table 10: Course Details of Level (000); teaching hours, marking, and subject area

Code	Course Name	Teaching Hours				Wr. Exam Dur.	Marking					Subject Area						
		Lectures	Exercises	Practical	Total Hours		Year Work	Midterm	Exp./ Oral	Final Exam	Total	Hum. & Soc. Sc.	Math. & B. Sc.	B. Eng. Sc.	App. Eng. & Des.	Comp. App. & ICT	Proj. & Practice	Discretionary
BAS 011	Mathematics-1	2	2	0	3	2	20	20	0	60	100	0	3.0	0	0	0	0	0
BAS 021	Physics-1	2	1	2	3	2	15	20	15	50	100	0	2.0	1.0	0	0	0	0
BAS 013	Mechanics	3	2	0	4	2	20	20	0	60	100	0	3.0	1.0	0	0	0	0
MED 022	Principles of manufacturing eng.	2	1	1	2	2	20	20	10	50	100	0.5	0	1.5	0	0	0	0
BAS 016	English-1	1	2	0	2	2	20	20	0	60	100	2.0	0	0	0	0	0	0
HUM 011	Arabic	2	0	0	2	2	20	20	0	60	100	2.0	0	0	0	0	0	0
HUM 081	Computer skills	1	0	4	0	0	20	20	10	60	100	0	1.0	0	0	2.0	0	0
MED 021	History of eng. and technology	1	0	0	1	1	20	20	0	60	100	0.5	0	0.5	0	0	0	0
BAS 021	Mathematics-2	2	2	0	3	2	20	20	0	60	100	0	3.0	0	0	0	0	0
BAS 022	Physics-2	2	1	2	3	2	15	20	15	50	100	0	2.0	1.0	0	0	0	0
BAS 041	Engineering Chemistry	2	1	2	3	2	15	20	15	50	100	0	2.0	1.0	0	0	0	0
HUM 013	English-2	1	2	0	2	2	20	20	0	60	100	1.5	0	0.5	0	0	0	0
HUM x72	Trends in Contemporary Arts	2	0	0	2	2	20	20	0	60	100	0.5	0	1.0	0.5	0	0	0
HUM x74	Heritage of Egyptian Literature	2	0	0	2	2	20	20	0	60	100	2.0	0	0	0	0	0	0
MED 011	Engineering drawing & projection	1	3	3	3	2	30	20	0	50	100	0	0	0.5	0.5	2.0	0	0
Total		26	17	14	35	27	295	300	65	850	1500	9.0	16	8.0	1.0	4.0	0	0

▪ **Level 100:**

Table 11: Course Details of Level (100); teaching hours, marking, and subject area

Code	Course Name	Teaching Hours				Wr. Exam Dur.	Marking					Subject Area						
		Lectures	Exercises	Practical	Total Hours		Year Work	Midterm	Exp./ Oral	Final Exam	Total	Hum. & Soc. Sc.	Math. & B. Sc.	B. Eng. Sc.	App. Eng. & Des.	Comp. App. & ICT	Proj. & Practice	Discretionary
ARC 112	Visual training	1	4	0	3	3	30	20	0	50	100	0	0	0.5	1.0	0	0	1.5
ARC 131	Building construction 1	1	4	0	3	3	30	20	0	50	100	0	0	1.5	1.0	0	0.5	0
ARC 113	Sciagraphy & perspective	1	4	0	3	3	30	20	0	50	100	0	0	1.0	1.0	0	0	1.0
ARC121	History &Theory of Architecture 1	2	0	0	2	2	30	20	0	50	100	0.5	0	1.5	0	0	0	0
CIS 141	Behavior of Materials	2	1	2	3	2	15	20	15	50	100	0	1.5	1.0	0.5	0	0	0
CIS 111	Principle of construction & building engineering	2	1	0	2	0	20	20	0	60	100	0	1.0	0.5	0.5	0	0	0
HUM X73	Recent Egypt History	2	0	0	2	2	20	20	0	60	100	2.0	0	0	0	0	0	0
ARC 151	Architecture design 1	0	6	0	3	3	30	20	0	50	100	0	0	0.5	1.5	0	0.2	0.8
ARC 132	Building construction 2	1	4	0	3	3	30	20	0	50	100	0	0	1.5	1.0	0	0.5	0
ARC 122	History &Theory of Architecture 2	2	0	0	2	2	30	20	0	50	100	0.5	0	1.5	0	0	0	0
CIW 121	Engineering Surveying	2	1	1	3	0	20	20	10	50	100	0	1.0	0.5	1.0	0	0.5	0
CIW 112	Structural Analysis 1	2	2	0	3	2	20	20	0	60	100	0	1.5	0.5	1.0	0	0	0
HUM121	Introduction to Accounting	2	0	0	2	2	20	20	0	60	100	0	1.0	0	0	1.0	0	0
ELP111	Principles of Electrical	2	1	0	2	2	20	20	0	60	100	0	0.5	0.5	1.0	0	0	0
Total		22	28	3	36	29	345	280	25	750	700	3.0	6.5	11.0	9.5	1.0	1.7	3.3

▪ **Level 200:**

Table 12: Course Details of Level (200); teaching hours, marking, and subject area

Code	Course Name	Teaching Hours				Wr. Exam Dur.	Marking					Subject Area						
		Lectures	Exercises	Practical	Total Hours		Year Work	Quizzes	Exp./ Oral	Final Exam	Total	Hum. & Soc. Sc.	Math. & B. Sc.	B. Eng. Sc.	App. Eng. & Des.	Comp. App. & ICT	Proj. & Practice	Discretionary
ARC 252	Architecture design 2	0	6	0	3	3	30	20	0	50	100	0	0	0.5	1.0	0.3	0.2	1.0
ARC 233	Building construction 3	1	4	0	3	3	30	20	0	50	100	0	0	1.0	1.2	0.3	0.5	0
ARC 261	Landscape & Urban design	1	4	0	3	3	30	20	0	50	100	0	0	0.5	1.5	0.3	0.2	0.5
ARC 223	History & Theory of Architecture 3	2	0	0	2	2	30	20	0	50	100	0	0	1.0	0.5	0	0.5	0
CIS 222	Reinforced concrete & Foundations	2	2	0	3	0	20	20	0	60	100	0	1.5	0.5	1.0	0	0	0
HUM352	Human Rights	1	0	0	1	1	20	20	0	60	100	1	0	0	0	0	0	0
IEN131	Monitoring & Quality C	1	0	0	1	2	20	20	0	60	100	0	0	0.5	0	0	0.5	0
ARC 253	Architecture design 3	0	6	0	3	3	30	20	0	50	100	0	0	0.3	1.0	0.5	0.2	1.0
ARC 262	History & Theory of planning	2	0	0	2	2	30	20	0	50	100	0	0	1.5	0.5	0	0	0
ARC 224	History & Theory of Architecture 4	2	0	0	2	2	30	20	0	50	100	0	0	1.0	0.5	0	0.5	0
ARC 241	Environmental Control	2	2	0	3	2	30	20	0	50	100	0	0.5	0.5	1.0	0	0.5	0.5
ARC 242	Acoustics & Illumination	1	2	0	2	2	30	20	0	50	100	0	0	0.2	0.3	1.5	0	0
CIS 231	Design of Steel Structure 1	2	2	0	3	2	20	20	0	60	100	0	1.5	0.5	1.0	0	0	0
BAS212	Statistics and Probability theory	2	2	0	3	2	20	20	0	60	100	0	3	0	0	0	0	0
291	Field Training	0	0	6	0	0	50	0	50	0	100	0	0	0	0.5	0	0.5	0
Total		19	30	6	34	29	420	280	50	750	1500	1.0	6.5	8.0	10.0	2.9	3.6	3.0

▪ **Level 300 :**

Table 13: Course Details of Level (300); teaching hours, marking, and subject area

Code	Course Name	Teaching Hours				Wr. Exam Dur.	Marking					Subject Area						
		Lectures	Exercises	Practical	Total Hours		Year Work	Quizzes	Exp./ Oral	Final Exam	Total	Hum. & Soc. Sc.	Math. & B. Sc.	B. Eng. Sc.	App. Eng. &	Comp. App. &	Proj. & Practice	Discretionary
ARC 354	Architecture design 4	0	6	0	3	3	30	20	0	50	100	0	0	0.1	1.0	0.5	0.4	1.0
ARC 331	Working Drawing 1	1	4	0	3	3	30	20	0	50	100	0	0	0	1.5	0.5	1.0	0
ARC 372	Feasibility Studies of Urban Projects	2	0	0	2	0	30	20	0	50	100	0	0	0.8	0.5	0	0.5	0.2
CIW331	Environmental Impact of Project	1	0	0	1	2	20	20	0	60	100	0	0	0.3	0.2	0	0.5	0
HUMx75	Arabic and Islamic Ci	2	0	0	2	2	20	20	0	60	100	2	0	0	0	0	0	0
HUM181	Communication and presentation	1	2	0	2	2	20	20	0	60	100	0	0	0	0	1.0	1.0	0
MEP342	Air Conditioning in Building	2	1	0	2	2	20	20	0	60	100	0	0	0.5	1.0	0	0.5	0
HUM111	Technical Report Writing	1	2	0	2	2	20	20	0	60	100	0.5	0	0	0.5	0.5	0.5	0
ARC 355	Architecture Design 5	0	6	0	3	3	30	20	0	50	100	0	0	0.1	1.0	0.5	0.2	1.2
ARC 371	Architectural & urban legislations	2	0	0	2	2	30	20	0	50	100	0.2	0	0.5	0.8	0	0.5	0
ARC 334	Building Economics	2	0	0	2	2	30	20	0	50	100	0.2	0.7	0.5	0	0.3	0.3	0
HUM381	Principle of navigation	2	0	0	2	2	20	20	0	60	100	1.0	0	0	0	1.0	0	0
HUM182	Analysis & Research Skills	1	2	0	2	2	20	20	0	60	100	1.0	0	0.5	0.5	0	0	0
CIW232	Sanitary Installation	2	1	0	2	2	20	20	0	60	100	0	0	1.0	0.5	0	0.5	0
IEN351	Engineering Economics	2	1	0	2	2	20	20	0	60	100	0.5	1.0	0	0	0	0.5	0
HUM351	Professional Ethics	1	0	0	1	1	20	20	0	60	100	0.5	0	0.5	0	0	0	0
IEN314	Project Management	2	1	0	2	2	20	20	0	60	100	0	0	1	0.5	0	0.5	0
Total		24	26	0	35	34	400	340	0	960	1700	5.9	1.7	5.8	8.0	4.3	6.9	2.4

▪ **Level 400 :**

Table 14: Course Details of Level (400); teaching hours, marking, and subject area

Code	Course Name	Teaching Hours				Wr. Exam Dur.	Marking					Subject Area						
		Lectures	Exercises	Practical	Total Hours		Year Work	Quizzes	Exp./ Oral	Final Exam	Total	Hum. & Soc. Sc.	Math. & B. Sc.	B. Eng. Sc.	App. Eng. & Des.	Comp. App. & ICT	Proj. & Practice	Discretionary
ARC 332	Working Drawing 2	0	6	0	3	3	30	20	0	50	100	0	0	0.2	1.5	0.5	0.4	0.4
ARC 463	Housing	2	2	0	3	3	30	20	0	50	100	0	0.5	0.5	1.0	0.4	0.5	0.1
ARC 491	project 1	0	2	0	1	0	50	0	50	0	100	0.1	0	0	0	0.3	0.4	0.2
ARC 472	Execution Documents	2	2	0	3	2	30	20	0	50	100	0	1.5	0.5	0.5	0	0.5	0
ARC 111	Arts & Architecture	2	1	0	2	2	30	20	0	50	100	.2	0	.3	.3	0	.1	.1
ARC 457	Interior Design	1	4	0	3	3	30	20	0	50	100	0	0	0.5	0.6	0.5	0.4	1.0
ARC 458	Sustainable Architecture	1	4	0	3	2	30	20	0	50	100	0	0	0.5	0.8	0.5	1.0	0.2
ARC 492	project 2	0	10	0	5	0	50	0	50	0	100	0	0	0	1.5	1.0	0.5	2.0
391	Field Training 2	0	0	6	0	0	50	0	50	0	100	0	0	0	0.5	0	0.5	0
MED111	Principle of Mechanical Power Engineering	2	0	0	2	2	20	20	0	60	100	0	0.5	1.0	0.5	0	0	0
Total		6	30	6	25	13	300	100	150	250	800	0.3	2.5	3.5	7.2	3.2	4.3	4.0

2.4.3 Curriculum Mapping

The following table gives the contribution of the individual courses to the program Intended Learning Outcomes in a matrix form. This matrix was developed by the program coordinator, assistant coordinators and professional staff members. The mapping matrix shows that the program courses present balanced contribution to the program ILO's includes also two tables summarizing the program ILO's contributed by the individual courses and the courses contributing to the individual ILO's.

- **Total teaching hours and subjects' distribution over the subject areas:**

Table 15: The agreement of subject area of years with NARS requirements.

Semester	Teaching Hours				Wr. Exam Dur.	Marking					Subject Area						
	Lectures	Exercises	Practical	Total Hours		Year Work	Quizzes	Exp./ Oral	Final Exam	Total	Hum. & Soc. Sc.	Math. & B. Sc.	B. Eng. Sc.	App. Eng. & Des.	Comp. App. & ICT	Proj. & Practice	Discretionary
Level 000	26	17	14	35	27	295	300	65	850	1500	9.0	16	8.0	1.0	4.0	0	0
Level 100	22	28	3	36	29	345	280	25	750	700	3.0	6.5	11.0	9.5	1.0	1.7	3.3
Level 200	19	30	6	34	29	420	280	50	750	1500	1.0	6.5	8.0	10.0	2.9	3.6	3.0
Level 300	24	26	0	35	34	400	340	0	960	1700	5.9	1.7	5.8	8.0	4.3	6.9	2.4
Level 400	6	30	6	25	13	300	100	150	250	800	0.3	2.5	3.5	7.2	3.2	4.3	4.0
Total of Five Years	97	131	29	165	132	1760	1300	290	3560	6200	19.0	33.2	36	35.4	15.4	16.4	12.6
% of Five Years											11.8	20.1	21.8	21.4	9.3	9.9	7.6
% NARS											9-12	20-26	20-23	20-22	9-11	8-10	6-8

2.4.4. Courses Specifications

The detailed program courses specifications are shown in the Curriculum Mapping. These courses specifications were revised and approved on 2016. The contribution of each course to the program ILO's were considered during this revision, (**Attachment 11**)

3. Program Admission Requirements

The institute accepts students who have high school diploma (Scientific Dept./Maths) or an equivalent according to the rules set by the supreme councils of higher education and approved by the Minister of Higher Education. (**Attachment 10**)

4. Regulations for Progression and Program Completion

4.1 Study:

Studying in the institute is following the Credit Hours system (**Attachment 10**):

- 1- The Minimum of the total credit hours for graduation is 165 hours including all the requirements of general knowledge, specialties and departments. There are also compulsory and elective courses (check out the requirements lists).
- 2- The institute grants the B.Sc. of Engineering and Technology in one of the specialties provided that the student passes all the mentioned courses, covers all the requirements (both compulsory and elective requirements) and the Bachelor project and completes the practical training with a GPA of all the studying years at least 2.0 (C)

4.2 Semesters:

Studying in the Institute is according to the semesters system, the academic year is divided into three semesters as follows (**Attachment 10**):

- 1- The first semester: starts at Sep. and last for 15 weeks at least.
- 2- The Second semester: Starts at Feb. and lasts for 15 weeks at least.
- 3- The Summer Semester: starts at Jul. and lasts for 7 weeks at least, as the weekly studying hours for each course will be doubled.

4.3 Studying Levels:

The student will move from a certain level to a higher one according to the following table (**Attachment 10**):

Academic Level	Student Title	The total number of credit hours achieved by the student.	
		More than	Less than or =
000	Freshman	0	33
100	Sophomore	33	66
200	Junior	66	99
300	Senior-1	99	132
400	Senior-2	132	165

4.4 Distribution of the students on Specialties:

The distribution of the students from (level 000) to (level 100) on the different specialties depends on the rules set by the board of directors of the institute annually, according to the educational capabilities of each department, and the rules set by the ministry of higher education. **(Attachment 10)**

4.5 Students Registration:

The registration procedures have to be stopped before the beginning of each semester (except the summer course). The board of directors of the institute has the right to decide in backlogged cases during the allowed period. **(Attachment 10)**

4.6 Rules and Mechanisms of Registration, Adding and Deleting Courses:

1. The fresher has the right to register in courses in both the first and the second semesters with total credit hours of 18 hours and not less than 15 credit hours.
2. The student can register in the summer course with a maximum of 6 credit hours, and the board of directors of the institute has the right to raise the maximum value if this leads to move the student to a higher level or to complete a number of the requirement, as the student can only register in three courses during the summer course.
3. After registration the student is able to add or delete a certain course according to the rules and the mechanism set by the institute's board of directors. In case of not completing the deleting procedures of any course, the student will fail to pass this course.
4. The student who got 3.00 or more of the GPA has the right to register in more than 18 credit hours with a maximum of 21 credit hours in the following main semester after getting this GPA, starting with level 100.
5. The student with a GPA not more than 2.00 is not allowed to register in more than 14 credit hours in the following main semester after getting this GPA.
6. The student is able to delete a course without any harm till the end of the third week of both the two semester, and till the second week of the summer course. Afterwards, he can withdraw from this course. This deleted course will not appear in the grades form, and after that date the student will get (W) grade (withdrawal) in that course.
7. If the student wants to withdraw from a certain course or from the semester due to an acceptable excuse approved by the institute's board of directors, he has to apply for students affairs and get the approval of the board of directors, and then he can repeat the courses again.
8. The warned student by the academic supervision can register again in a certain course which he studied before. The grade will be counted with the grade (B+) as a maximum. All the grades will be mentioned in the student's academic record and, when it comes to count the GPA, only the last grade will be counted.
9. When the student repeats a certain course which he failed to pass it and got (F), he has to repeat its studying period and its examination. The grade which he achieves will be counted with a maximum of (B). All the grades will be mentioned in the student's

academic record and, when it comes to count the GPA, only the last grade will be counted.

10. The student will get (F) if he stopped attending his courses without deleting them.

11. The student will be put under academic observation if he got lesser than 1.70 of the GPA at the end of any semester.

4.7 Timing of deleting or adding a course:

At the suggestions of the academic advisor, the student can delete a certain course or register in another one during the first two weeks of any semester. The student can also withdraw from a certain course during the first six weeks without registering in other courses, then that would decrease the number of the required credit hours for this semester to be lesser than its minimum. **(Attachment 10)**

4.8 Repeating Courses:

The academic advisor can ask the student to repeat a number of courses which the student has passed before or ask him to add and register in new courses (not more three courses during studying in the institute). **(Attachment 10)**

4.9 Timing of Registration:

The institute's board of directors will announce the time of registration before the beginning of every semester, so the students has to revise their choices with the academic advisors. The approval of both the academic advisor and the board of directors is a must when it comes to add or delete a certain course. **(Attachment 10)**

4.10 Examinations:

The student will have the required examinations at the end of every semester in the courses he registered in. The student will not enter the required examinations if there is a decision made by the board of directors. If the student's attendance is less than 75% of the total credit hours, in this case the student will fail the examinations. **(Attachment 10)** ,**(Attachment 12)**

4.11 Assessment of the student's performance:

The assessment of the student's performance will be according to total grades of both written and oral examinations. The grades of the written examination have to be not less than 50% of the total grade of the course. The student has to achieve 25% of the grade of written examinations. As for the graduation project, 50% of the total grade will be divided between the final report and the seminar. **(Attachment 10)** ,**(Attachment 13)**

4.11.1 Assessments grades:

Students are assessed according to the following table:

Percentage	Points	Grade with the GPA system
95% or more	4.0	A+
90% to less than 95%	4.0	A
85% to less than 90%	3.7	A-
80% to less than 85%	3.3	B+
75% to less than 80%	3.0	B
71% to less than 75%	2.7	B-
68% to less than 71%	2.3	C+
65% to less than 68%	2.0	C
60% to less than 65%	1.7	C-
55% to less than 60%	1.3	D+
50% to less than 55%	1.0	D
Less than 50%	0.0	F

4.11.2 Student Assessment (Methods and rules for student assessment)

Method (tool)	Assessed ILO's
1- Written exam	A, B & C
2- Quizzes and reports	A, B & C
3- Oral exams	A, B & C
4- Practical	A & C
5- Project applied on a practical field problem	A, B, C & D

4.12 Assessment of special Cases:

The following letters is used to represent the special cases of the student's performance:

Description of the case	Grade Title	Grade in letters
Force majeure with the approval of the board of directors.	Withdrawal	W
Fulfilling all the requirements of a certain course, and without having examination.	Passed	P
Not fulfilling the requirements of a certain course, and without having examination.	Not Passed	NP

4.13 Summer Training:

The student will have a summer course during the study period for four weeks at least in one of the companies or the industrial institutions that is suitable to the student's specialty. The student has to apply the training certificate to the institute. The training will be under the observation of the academic advisor.

4.14 Account the cumulative average:

The course points will be counted according to the following rules:

1. The total number of the points achieved by the student in every semester will be counted as the total number of all the courses he has studied in the institute.
2. The grades of the course are counted as the multiple of the number of the credit hours and the points of the course.
3. The GPA for any semester is counted as the result of division of the points which the student got in this semester divided into the credit hours for these courses.
4. The student will be granted the honor degree in case he got a GPA of 3.30 in each semester in the institute.

4.15 Fulfilling Courses Requirements:

When the student registers in a number of courses, he has to pay attention to the courses requirements. The student is not allowed to study a course and its requirement in the same semester unless his graduation will depend on this.

4.16 Studying Courses outside the Institute:

The student can study a number of courses in one of the Egyptian or Foreign universities, with the approval of the institute's board of directors and the accreditation of the ministry of higher education. The number of the credit hours of these courses will be added to the graduation requirements without adding its grades when it comes to count the average of the total GPA. The total number of these courses has to be not more than 30 hours.

4.17 Report of the Academic Record:

The students who get the degree or withdraw from the studying program has the right to get a report of their academic record. They will get this record after the payment of the fees.

4.18 Suspend Enrollment:

The board of directors of the institutes has the right to suspend the enrollment of any student for an academic year and not more than two years if the student applied an acceptable excuse that is approved by the ministry of higher education.

4.19 Dismissals:

The dismissal cases depend on the following:

-
1. The student whose GPA is lesser than 2.00 from 4.00 in six main consecutive semesters.
 2. The student who does not fulfill the requirements of graduation during 20 main semesters except the semesters where the enrollment of the student was stopped for an acceptable excuse approved by the board of director.

The board of directors of the institute can give other chances – after the approval of the ministry of higher education- with a maximum of four semesters for the student who was dismissed after getting 135 credit hours.

4.20 Studying Expenses:

The student has to pay the studying expenses set by the minister of higher education, as the student will not be considered a freshman unless he pays the due expenses. The student is not able to subscribe in transportation or to borrow books without paying expenses. Expenses for special services will not be paid for from recruited, imprisoned and detained students.

4.21 Scholarships

The institute allocates 5% of the total number of the students as absolving of expenses according to the rules set by the institute's board of directors, putting into consideration the superior students and the cases of social disasters.

9. Education, learning and assessment strategy

Strategy is based on four axes for optimization of teaching methods and means of modern assessment to increase the effect of the educational process and provide students with the required information and skills.

5.1 The first axis: The integration between branches of architecture, scientific theories and application to projects that bring the curriculum integration as follows:

- Investing of theories in various branches of architecture and applications on architectural projects, whether design or planning.
- Using variety of teaching methods in order to achieve the goals in teaching courses and achieve the gradient of the fundamentals of design theory into practical application and requirements of the application in practice, therefore integration of the knowledge and skills to these methods are:
 1. Lectures
 2. Practical applications
 3. Workshops
 4. Field Visits
 5. Seminars
 6. Education based on of solving problems

- There are other methods of interactive teaching small groups of students on the level:
 1. Research projects.
 2. Summer training.

5.2 The second axis: Holistic assessment methods for students where they are evaluating the student level in multiple ways, including:

1. Problem solving and case study
2. Practical architectural projects
3. Delivery of architectural models
4. Periodic examinations
5. Written examinations
6. Oral jury (discussion of design projects verbally)
7. field training & providing a comprehensive report on the training field and review the content and sanctioned by the supervisor

5.3 The third axis: Rehabilitation of the labor market, which is done through:

- Architectural design information and techniques that cover efficiently the courses in the academic program.
- Courses contain Ethics and integrity are training students to work under pressure and complete the tasks in time.
- Containment decisions on applications eligible for the labor market process, both at the level of the core architecture or implementation of architectural designs.
- Attend workshops and training sessions and scientific communities, which sit through the Institute, in which students learn the different architectural schools and the requirements of the labor market.

5.4 The forth axis: Self and Continuing Education:

Experience gained by the graduate on a personal and professional level of practical study and practice of architecture serving applied professional development and continuing in the profession of architecture in various specializations.

List of Attachments

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Attachment 1

(Staff and Staff Assistants Members)

- Teaching Staff Members:

Table 16: Teaching Staff Members details

	Name	Department	Scientific Degree				
					Part Time	معار	Full Time
١	Wael Seddik Abd-ellatif	Architecture Department	Asso. Professor	Architecture		✓	
٢	Ibrahim Rizk Hegazy	Architecture Department	Asso. Professor	Architecture		✓	
٣	Saad Makram	Architecture Department	Lecturer	Architecture		✓	
٤	Mohamed Yussef	Architecture Department	Lecturer	Architecture	✓		
5	Abdo Abd Elfattah Abd-elsamad	Basic Science Department	Professor	Production & Mechanical Design	✓		
6	Mohamed Mahmoud Mahgoub	Basic Science Department	Professor	Mechanical Power	✓		
7	Fayez Wanis Zaki	Communication & Electronical Engineering	Professor	communication & Electronical Engineering	✓		
8	Abd-elmeniem Bakr Al-oraby	Civil Engineering	Lecturer	Civil Engineering	✓		
9	El-saeid Abd-elsalam Maaty	Civil Engineering	Asso. Professor	Civil Engineering		✓	
10	Walid Ezzat Raslan	Basic Science Department	Lecturer	Mathematical Engineering		✓	
١١	Shaban Saliem Ibrahim El-shahat	Civil Engineering	Lecturer	Civil Engineering		✓	
١٢	Ahmed Mahmoud Mohamed El-gamal	Civil Engineering	Lecturer	Constructions			✓
١٣	Fatma Zien Abd-elhalem Abd-elmagid	Communication & Electronical Engineering	Lecturer	Communication & Electronical Engineering			✓
١٤	Emad El-dien Morsy Esmail	Civil Engineering	Lecturer	Civil Engineering			✓
١٥	Karam Zakarya Ali Yeihya	Civil Engineering	Lecturer	Civil Engineering			✓
١٦	Sameh Farouk El-batal	Civil Engineering	Lecturer	Civil Engineering			✓
١٧	Fathy Nazmy Hassan El-said	Civil Engineering	Lecturer	Soil & Foundation			✓
١٨	Rabab Ramadan Ahmed Lashin	Basic Science Department	Lecturer	Chemistry			✓
١٩	Rania Moustafa Mahmoud	Basic Science Department	Lecturer	Production & Mechanical Design	✓		
٢٠	Hamdy Ahmed Ahmed Elmekaty	Communication & Electronical Engineering	Professor	Communication & Electronical Engineering	✓		
21	Hamdy Kamal Abd-elrahman El-mounir	Communication & Electronical Engineering	Lecturer	Communication & Electronical Engineering	✓		
22	Hamdy Mohamed Shahien	Basic Science Department	Asso. Professor	English Language	✓		

23	Samir Abo-elfetouh Saleh Ahmed	Basic Science Department	Professor	Accounting	✓		
24	Samir El-saied Ali Hasson	Basic Science Department	Professor	Arabic Language	✓		
25	Tarek Abd-elhamid El-Shehawy	Basic Science Department	Lecturer	Law	✓		
26	Adel Elsayed Nasr Dief	Civil Engineering	Professor	Soil & Foundation	✓		
27	Fekry Abdo Mahmoud Salem	Civil Engineering	Lecturer	Steel Structure	✓		
28	Kassem Salah Abd-elwahab El-alfi	Civil Engineering	Professor	Irrigation	✓		
29	Ibrahim Lutfi Hassa EL-Kalla	Basic Science Department	Professor	Mathematical Engineering	✓		
30	Nabil Saad Mohamed Balat	Civil Engineering	Lecturer	Constructions		✓	
31	Hamed Shaker Hassan Askar	Civil Engineering	Asso. Professor	Constructions	✓		
٣٢	Mohamed El-adawy Khalil El-adawy	Communication & Electronical Engineering	Lecturer	Electrical Engineering		✓	
33	Asmaa mohmed El-saied El-sayed	Communication & Electronical Engineering	Lecturer				✓
٣٤	Hamdy El-mekaty	Communication & Electronical Engineering	Professor	Communication & Electronical Engineering	✓		
٣٥	Emad El-saied Esmail El-beltagy	Civil Engineering	Professor	Constructions		✓	
٣٦	Kamal El-hasanin Radwan	Civil Engineering	Asso. Professor	Civil Engineering		✓	
٣٧	Talal Mohamed Mahmoud Abo El-meaaty	Basic Science Department	Asso. Professor	Mechanical Power		✓	
٣٨	Adel Rashad Ibrahim Hadhod	Basic Science Department	Lecturer	Mathematics			✓
٣٩	Mohamed Medhat Abd El-hefez Gad	Basic Science Department	Lecturer	Physical Chemistry			✓
٤٠	Ibrahim Abd-elghaffar Badran	Communication & Electronical Engineering	Asso. Professor	Communication & Electronical Engineering	✓		
٤١	Ahmed Mohamed Elsayed Tahawya	Civil Engineering	Asso. Professor	Civil Engineering	✓		
٤٢	Hossam El-dien Salah Moustafa	Communication & Electronical Engineering	Lecturer		✓		
٤٤	Hassan Husien Soliman	Communication & Electronical Engineering	Asso. Professor		✓		
٤٥	Ryad Mohamed El-Sayed El-refaaie	History	Lecturer		✓		
٤٦	Sheiref Masoud Ahmed El-badry	Civil Engineering	Asso. Professor		✓		
٤٧	Mohamed El-saied Mohamed El-zoghieby	Civil Engineering	Asso. Professor		✓		
٤٨	Mohamed Abd-elaziem Mohamed	Communication & Electronical Engineering	Asso. Professor		✓		
٤٩	Mohamed Mahmoud Elgamal	Civil Engineering	Professor		✓		

- Teaching Assistant Staff Members:

Table 17: Teaching Staff Members details

	Name	University /Institute	Settle	Part Time	Full Time	Scientific Degree
1	Karim Mohamed El-dali	Mansoura University	✓		✓	Lecturer Assistant
2	Abd El-rahman Ahmed El-lawendy	MET Academy	✓		✓	Lecturer Assistant
3	Aliaa Abaas Mahmoud	Mansoura University	✓		✓	Lecturer Assistant
4	Aya Atef El-sayed El-tawel	Mansoura University			✓	Demonstrator
5	Rowan Mohamed Mansour	Mansoura University			✓	Demonstrator
6	Nourhan Mohamed Sobhi	Mansoura University	✓		✓	Demonstrator
7	Mohamed Sallam El-meinofy	Delta University			✓	Demonstrator
8	Shorouk Adel El-kot	Mansoura University			✓	Demonstrator
9	Basma Mokbel Ghanem	Mansoura University			✓	Demonstrator
10	Shaimaa Ahmed Omar	Mansoura University			✓	Demonstrator
11	Aya Khalil El-Hendy	Mansoura High Institute of engineering and science			✓	Demonstrator
12	Abir Tarek Galal	Mansoura High Institute of engineering and science			✓	Demonstrator
13	Marina Reda Sama'n	Mansoura University			✓	Demonstrator
14	Zeinb Abdelhay	MET Academy			✓	Demonstrator

Attachment 2

**(staff members' part and full time decisions - the staff assistants'
Ministerial decisions)**

Attachment 3

(Internal Evaluators Selection and their C.Vs)

Attachment 4

(Internal Evaluators Reports)

Attachment 5

(External Evaluators Selection and their C.Vs)

Attachment 6

(External Evaluators Reports)

Attachment 6

(External Evaluators Reports)

Attachment v

**(The decision to establish the institute –
change the name of the institute)**

Attachment [^]

(Regulation)

Attachment 9

(Department Acceptance of Vision, Mission, Strategy Goals and Academic Standard)

Attachment 1

(Student Guide)

Attachment 11

(Curriculum Mapping)

Attachment ۱۲

(2017-2018 Midterm and Final Exams)