College of Engineering

Self-Assessment Report

Architectural Engineering Department College of Engineering University of Basrah Basrah- Iraq

2016 - 2017





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1. Introduction and Context

1.1 Department History

The Architectural engineering department was established in 2002-2003 to meet the emerging need of governmental and private sector agencies and companies for skilled Architectural engineers and to keep abreast of the scientific and technical progress in the world.

Since its inauguration, the department adopted a well academic program equal to the Architectural engineering departments worldwide by focusing on both theoretical and practical integrated aspects of the Architectural engineering field of study. The practical side of the program equals one third the total teaching process and the curriculum are kept updated. The undergraduate study at the department is five years in length; from the moment of receiving the freshman year students whose average grades qualify them to join it up till to the graduation of the senior year students where they get their Bachelor of Science degree in Architectural engineering.

1.2 Vision of the Department

The Architectural Engineering Department vision is to be a model department focused on the enhancement and nourishment of an academic environment conducive to excellence in teaching, research and community services. Therefore, the department will seek distinction as a leader in providing world-class architectural engineering education in Iraq and the Gulf region that is responsive to the local needs of the building industry within the socioeconomic and environmental context.

1.3 Mission of the Department

The department is devoted to (1) providing world-class education in Architectural Engineering; (2) conducting outstanding technical basic and applied research; and (3) providing professional development opportunities to practicing engineers; all through addressing the existing and evolving needs of the building industry in Iraq in view of the local, social values and global needs, and developments as well as the practice of the profession.

1.4 Strategic Objectives of the Department

The Program Educational Objectives (**PEOs**) clearly reflect the professional expectations from the graduates of the computer engineering department and prepare them to meet that challenges. **Table1.1** shows the ARE department PEOs.





Table1.1: Program Education Objectives

PEO1	Provide high quality education that prepares students to assume professional roles in architecture by offering sound knowledge in design theories and applications, building technology, social, cultural, environmental, and information technology.	
PEO2	Prepare students to work effectively in multi-disciplinary teams within the building industry by providing knowledge in built environment related disciplines relevant to ethical responsibilities and professional practice in architecture.	
PEO3	Prepare students to acquire and develop problem solving and lifelong learning skills including critical thinking, communication, and presentation.	

1.5 Consistency of the PEOs with the College Educational Objectives (CEOs)

The PEOs of the Architectural engineering department are coherent and in flow with those of the college of engineering. They are stated in accordance with the College Educational Objectives (**CEOs**); mentioned in **Table1.2**, while preserving the unique characteristics of the department of Architectural engineering.

CEO1	Prepare globally competent and socially responsible graduates who are specialists in
	engineering sciences and their applications by providing quality education.
CEO2	Encourage and support the higher degree graduate studies (master and doctorate) in all
	college departments.
CEO3	Foster research and scholarly endeavors that advance knowledge and help in solving the
CEUS	industrial and social problems.
CEO4	Contribute to the welfare of the country by establishing effective partnerships that can add
CLU4	value and contribute to college programs.
CEOE	Create an enriching supportive working environment for the college community to ensure
CEUS	the achievements of the college objectives.

Table1.2: College Education Objectives

Table1.3 establishes the links between the PEOs of the department and the major components of the CEOs of both the college of engineering.

Table1.3: Links between the PEOs of the Department and the CEOs of the College

		Program Educational Objectives (PEOs)		
		PEO1	PEO2	PEO3
Collogo of	CEO1	Х	Х	Х
College of	CEO2	Х		
Chiestives	CEO3	Х	Х	Х
(CEOc)	CEO4	Х	Х	Х
(CEOS)	CEO5	Х	Х	





1.6 Program Outcomes

The main objective of the program outcomes, POs, and program Educational Objectives, PEOs, is to measure the level of achievement of the curricular requirement of the department in preparing the graduates to meet the challenges presented to them by the fascinating Architectural industry. In other words, Architectural engineering Program outcomes, POs, and Program Educational Objectives, PEOs, are two different, but interrelated mechanisms that were developed in order to measure the level of achievement and success of the program. The ARE department has developed ten Program Outcomes (POs) as an initial set of POs. These outcomes are, in effect, what the students expected to know and achieve post graduation. **Table1.4** shows these program outcomes.

<u>Symbol</u>	Description
<u>a</u>	PO1: ability to conceptualize and coordinate designs, addressing social, cultural, environmental and technological aspects of architecture.
<u>b</u>	PO2: An ability to recognize the dialectic relationship between people and the built environment in the region
<u>c</u>	PO3: An ability to apply and integrate computer technology in design processes and products
<u>d</u>	PO4: An ability to utilize cutting edge building technology in design
<u>e</u>	PO5: An ability to apply visual and verbal communication skills at various stages of architectural design and project delivery processes
<u>f</u>	PO6: An ability to critically analyze building designs
g	PO7: An ability to employ architectural research methods including data collection, analysis to evaluate and improve the built environment.
<u>h</u>	PO8: An ability to work collaboratively with various design teams involved in the building industry.
i	PO9: An ability to recognize diversity of needs, values, behavioral norms, social patterns as they relate to the creation of the built environment
i	PO10: knowledge of contemporary issues related to engineering.
<u>k</u>	PO11: ability to use modern engineering tools, skills and design techniques necessary for the practice of engineering.

Table1.4: Architectural Engineering Program Outcomes





1.7 Relationship of the Program Outcomes to the PEOs

Mapping between the Program Outcomes and the Program Educational Objectives is shown in **Table1.5**.

	PEOs			
POs	PEO1	PEO2	PEO3	
PO-a	Х		X	
PO-b	Х		X	
PO-c	Х	Х	X	
PO-d				
PO-e		X	X	
PO-f	х	Х	X	
PO-g		Х		
PO-h	Х	Х	X	
PO-i	Х		X	
PO-j	Х	Х	X	
PO-k	Х	X	X	

Table1.5: Mapping of Program Outcomes to PEOs

Questions and Answers:

1- What is your strategy for teaching and learning, and research? Are they complementary?

Achieving excellence in teaching and learning is the major focus area of the

department. In order to achieve this goal, evaluation and process control of teaching and

learning are conducted regularly. Moreover, the department emphasizes improvement in

the method of instruction by recommending the instructors to utilize the current modern

technologies such as multimedia, audio-visual facilities, computer animations, and models.

Aspects of active learning that include student-instructor in-class and out-of-class

interaction, homework and project assignments, student presentations, peer discussions,

etc. are practiced in all of the courses. In addition, teaching effectiveness is enhanced by encouraging faculty members to attend relevant short courses, workshops, and seminars.





The processes and procedures used to ensure that teaching and delivery of course material are effective and focuses on students learning, are conducted through implementing the following practices:

1-Chairman's Role

<u>At the beginning of each academic year, the Chairman reviews faculty teaching assignments</u>

after making the necessary adjustments. Furthermore, he appoints chairs for the department's standing committees. Before approving the final grades, the Chairman reviews and discusses the course files with each instructor to ensure that the course material is fully

2-Teaching Assignment

Each semester, the Chairman of the Department defines the core courses to be offered according to the degree plan. Elective courses are offered on the basis of students' interest,

and to cover the different concentration areas in the curriculum. Scheduling is done based

on previous years assignment, taking into consideration minimizing time conflict with other courses offered by other departments. The Chairman directly assigns faculty for teaching courses according to their areas of specialization. When assigning new courses, faculty are being advised, and consulted well in advance.

3-Course Files

A course file contains the documentation of course syllabus, copies of quizzes and exams, homework assignments, copies of term projects, copies of the highest, average, and

lowest graded final exams, grader evaluation, and instructor's report is prepared by the instructor of each course. The course files are kept in the department as references.

In doing researches, each faculty member is working alone or with an assistants from other departments that have a relation with the same research.

- 2- What factors have contributed to and/or inhibited the success of the department? <u>Three factors contributed the success of the department:</u>
 - The chairman of the department and his active wise administration.
 - The curriculum that are taught to students.
 - The employed faculty members, technicians, and other staff members.

The factors inhibited the success of the department:

- <u>The inability to employ new faculty members because of the laws and rules of the</u> ministry.
- No developing workshops or programs are offered to faculty members.





- <u>There is no post graduate program at this department due to shortage in high rank</u> <u>faculty members, so the gradated people need to apply their post graduate program</u> <u>in another universities and this will be difficult on them.</u>
- No any development of ARE Ateliers and improvement to follow modern design in world.
- <u>The department has no external financial resources a drawback which needs to be</u> solved. Sometimes, when the assigned annual budget is not enough, the chairman has to cut from the expenditures.





2. Organization and Management

The Architectural engineering departments constitutes of:

- 1. The **chairman** of the department who manages the department's academic and administrative affairs, the **chairman administrative support staff** (chairman's reservist, assistant, and secretary).
- 2. The **department panel** which includes all of the faculty members of the department whose names are listed in **Table2.1**.

Nr	Rank	Full Name	
1	Lecturer	Dr.Tahssen Ali Majeed	Ph.D Architectural Engineering
2	Assist Professor	Dr. Amjad Zaki Almusaed	Ph.D Architectural Engineering
3	Assist Professor	Dr. Aqil Salih Faisal	Ph.D Arts
4	Lecturer	Dr. Asad Ghalib Hussain	Ph.D Architectural Engineering
5	Lecturer	Dr. Alwaleed Khaleed	Ph.D Architectural Engineering
6	Lecturer	Dr. Abas Abdul Kathim Tahir	Ph.d. Architectural Engineering
7	Lecturer	Dr.Sadam Khalaf Falih	PhD. Civil engineering
8	Lecturer	Dr. Fatima Abdulzahar Bader	Ph.D. Architectural Engineering
9	Lecturer	Dr.Qusay Abdulkareem Mustafa	Ph.D Architectural Engineering
10	Assist. Lecturer	Dr. Suhad Abdul-Amir	PhD. Masonry engineering
11	Assist. Lecturer	Dawod Salim Risn	MSc. Architectural Engineering
12	Assist. Lecturer	Hamed Haiab Samir	MSc. Architectural Engineering
13	Assist. Lecturer	Qaed Zqair Khalaf	MSc. Architectural Engineering
14	Assist. Lecturer	Mohammed Abdulmahdy Shinan	MSc. Architectural Engineering
15	Assist. Lecturer	Zainab Abd Alkarim	MSc. Architectural Engineering
16	Assist. Lecturer	Armin Sarkees Khorsof	MSc. Architectural Engineering
17	Assist. Lecturer	Alaa Husein Nasar	MSc. Civil Engineering
18	Assist. Lecturer	Khitam Mula Kwam	MSc. Computer Science
19	Assist. Lecturer	Satar Jabar Hashim	Msc. Mechanical Engineering
20	Assist. Lecturer	Suhad Abd Al-ameer Naeem	MSc. Civil Engineering
21	Assist. Lecturer	Ahmed Atta Feraaon	MSc. Architectural Engineering
22	Assist. Lecturer	Mehdi Fakher Yaseen	MSc. Architectural Engineering
23	Assist. Lecturer	Ahmed Sagban Khudair	MSc. Civil Engineering
24	Assist. Lecturer	Ali Muyad Kamel	MSc. Computer Engineering

Table2.1: ARE Department Faculty Members

3. The department also has engineers, technicians, and administrators employees with their names mentioned in **Table2.2**.

Table2.2: Engineers, Technicians, and administrators in ARE department





Name	Position and Specialty
Marwa Talib Rahma	Engineer – B.Sc. Architectural Engineering
Marwa Abdul Raouf	Engineer – B.Sc. Architectural Engineering
Faris Abbas Hameed	Engineer – B.Sc. Architectural Engineering
Khalid Sameer Baqir	Engineer – B.Sc. Architectural Engineering
Haneen Ali Abd Muhee	Engineer – B.Sc. Architectural Engineering
Mustafa Jawad Kadhum	Engineer – B.Sc. Architectural Engineering
Noor Abdulameer	Engineer – B.Sc. Architectural Engineering
Farah Ahmad THiab	Engineer – B.Sc. Architectural Engineering
Hala Abdulkareem Abdul Ghani	Engineer – B.Sc. Architectural Engineering
Hibatulah Ali Abdul Muneem	Engineer – B.Sc. Architectural Engineering
Alsadiq Hamed Sadiq	Engineer – B.Sc. Architectural Engineering
Taha Adnan Taha	Engineer – B.Sc. Architectural Engineering
Zainab Helejee Mohammed	Engineer – B.Sc. Civil Engineering
Shrooq Jafar Hassan	Administrator
Hadi Rzooqi yousif	Secretary
Israa Jaafar Faraj	Programmer
Jalal Abdulsahib Hussein	Engineer – B.Sc. Architectural Engineering
Riyam Rajab Finjan	MSc. Architectural Engineering

4. The department also has several committees, see Table2.3.

Table2.3: Departmental Committees





Questions and Answers:

- 1- How is the department organized? <u>The chairman of the department assigns the duties and jobs of every member in the department:</u>
 - If the member is a faculty, then s/he will be fully responsible of her/his assigned curriculum and laboratories.
 - If the member is an administrative staff, s/he does what her/his work needs and gets back to the chairman with any questions and consultation.

Students' daily issues are the responsibility of the chairman assistant.

2- Are the communication mechanisms effective? What evidence is there? Can they be improved?





The only way to contact the department is via coming personally to the department. This can be improved if the department puts a website with official emails for its employees rather than their personal ones.

- 3- Could the organization of the department be improved? Are synergies realized? <u>The department organization has a good roles ,but it can be improved by improved the</u> <u>communication and the budget for department.</u>
- 4- Are key staff roles and office functions clearly understood?
 Yes, they are; the chairman, his assistant, secretaries, faculty, committees, and board all know exactly what to do.
- 5- How do workloads in the department compare with those say, in other countries e.g. UK, Europe, USA?
 In the USA,UK. and European academic engineering departments, a more authority is given to the chairman of the department such that s/he can proceed





3. Staff and Facilities

3.1 Leadership Responsibilities

The chairman of the architectural engineering department is the most pivotal of all positions concerned with the instructional development. The policies of the college and university delegate the prime responsibility of the department daily operation to the chairman. The chairman is thus, assigned the task of running and managing the department. As the executive officer, the chairman is responsible to both the dean of the college of engineering and the department. It is the chairman who maintains daily contacts with the administration, with faculty and with students. It is in this last context where the chairman has to ensure that the department's mission and educational objectives are met. This could be achieved through the following:

- 1. Departmental affairs: developing and accomplishing departmental missions and objectives within those of the university; establishing departmental policies; conducting departmental meetings; involving faculty members and students in departmental decision making and activities.
- 2. Academic affairs: establishing departmental degree programs and curricula; evaluating, updating and improving program curricula, and the enforcing the quality of instruction.
- 3. Office management: administering departmental facilities; hiring, supervising, evaluating staff personnel (secretaries, laboratory assistants); establishing file and record systems (faculty, students, courses, academic data, correspondence); maintaining equipment and other department properties; requisitioning supplies; ordering textbooks.
- 4. Personal professional performance: providing professional leadership and setting an example in the department; demonstrating professional competence in teaching, research, and other professional activities; participating in professional associations and community service, setting academic standards; preparing term schedules of courses.
- 5. Faculty affairs:
 - Recruiting and orienting new faculty members; supporting and encouraging high performance in teaching, research, conference attendance, seminars, workshops, and other professional activities;
 - Enforcing faculty responsibilities and protecting faculty rights; evaluating faculty members and making documented recommendations to the dean for them.
- 6. Student affairs:
 - Facilitating a constructive environment to consolidate the program teaching and learning process.
 - Curricular and career advising of students.
 - Responding to student grievances and complaints.
 - Certifying students for graduation.





- 7. Program affairs:
 - Arranging meetings with faculty to decide on further steps to improve the program.
 - Managing the essential funds for laboratory equipment, day-to-day functioning, other department social activities, etc.
 - Executing the ARE Program, alteration, and improvement proposed by program constituencies.
- 8. External communications: conveying university policies and actions to the department, representing the department in the college, the university and all external agencies and communicating departmental programs and activities to students.
- 9. Budgetary affairs: preparing annual departmental budget requests; administering budgetary allocations (preparing requisitions, authorizing expenditures, maintaining budget records).

3.2 Authority and Responsibility of Faculty

Faculty members are the back bone of the department and their role in the running of the department is very crucial. It is the department senate or faculty council that makes decisions, recommendations, proposals and policy changes within the department. The approval of the majority of the council is essential prior to passing to the chairman for further action. In effect, the department's council role is not limited only to academic matters but goes beyond that to include all aspects of governing the department. Though the responsibilities could vary among individuals in the department, all members participate in the following activities:

- 1. Teaching: proposing new curriculum courses, modifying and updating existing courses; course evaluation through conducting exams, quizzes, assignments, projects, etc. In order to provide consistency in the department, faculty members in the Architectural Engineering Department are recommended to:
 - Keeping up to date with relevant changes in their related fields and carefully preparing lectures and course materials.
 - Being accessible to students for academic consultation during scheduled or prearranged office hours.
 - Informing students regarding course formats, assignments, and methods of evaluation.
 - Maintaining teaching schedules in all but exceptional circumstances.
 - Informing students of any necessary cancellation and rescheduling of instruction.
 - Adhering to the schedules for submission of grades and evaluations by the department.
- 2. Research: devote a good portion of their time to carry out research or creative work, within the constraints of the relatively heavy teaching loads. All full time faculty members are encouraged to make the results of such activities available, to other researchers and academicians, through publications, lectures, and other appropriate means.





3.3 Faculty

The Architectural engineering department has 24 full and part time faculty members, including the chairman of department. In terms of rank distribution, they are broken down as follows:

- 2 Assist Professor
- 5 Lecturers
- 17 Assistant Lecturers

Table3.1: Faculty Workload Summary for the Academic Year 2016-2017

Rank	Full Name	FT or PT		Avg. load hrs/week
Lecturer	Dr.Tahssen Ali Majeed	FT	Ph.D Architectural Engineering	30
Assist Professor	Dr. Amjad Almusaed	FT	Ph.D Architectural Engineering	27
Lecturer	Dr. Asad Ghalib	FT	Ph.D Architectural Engineering	29
Lecturer	Dr. Alwaleed Khaleed	FT	Ph.D Architectural Engineering	29
Lecturer	Dr. Abas Kathim	FT	Ph.d. Architectural Engineering	30
Lecturer	Dr.Sadam Khalaf Falih	FT	PhD. Civil engineering	20
Assist. Lecturer	Dawod Salim Risn	FT	MSc. Architectural Engineering	30
Assist. Lecturer	Qusay Abdulkareem Mustafa	РТ	MSc. Architectural Engineering	21
Lecturer	Fatima Abdulzahar Bader	FT	Ph.D Architectural Engineering	26
Assist. Lecturer	Mohammed Abdulmahdy Shinan	FT	MSc. Architectural Engineering	25
Assist. Lecturer	Zainab Abd Alkarim	FT	MSc. Architectural Engineering	24
Assist. Lecturer	Armin Sarkees Khorsof	FT	MSc. Architectural Engineering	29
Assist. Lecturer	Alaa Husein Nasar	FT	MSc. Civil Engineering	0





Assist.	Aqil Salih	FT	Msc. Arts	14
Lecturer	Faisal	11		14
Assist.	Satar Jabar	ст	Msc. Mechanical Engineering	12
Lecturer	Hashim	ΓI		15
Assist.	Sammar	DT	MSc. Architectural Engineering	20
Lecturer	Ghalib	PI		50
Assist.	Hadoor Shalal	DT	MSc. Architectural Engineering	10
Lecturer		PI		12
Assist.	Sttar Abdul-	DT	MSc. Mechanical Engineering	10
Lecturer	latiff	PI		10
Assist.	Taha	DT	MSc. Architectural Engineering	10
Lecturer	Farazdaq	PI		12
Assist.	Ahmed Atta	CT.	MSc. Architectural Engineering	20
Lecturer	Feraaon	FI		28
Assist.	Mehdi Fakher	FT	MSc. Architectural Engineering	77
Lecturer	Yaseen	FI		27
Assist.	Ahmed	F T	MSc. Civil Engineering	1.4
Lecturer	Sagban	FI		14
Assist.		CT.	MSc. Computer Engineering	15
Lecturer	All Muyau	FI	_	15

Table3.2: Faculty Involvement in Regular Committees at the Department

No.	Committee	Members
1		Dr. Tahseen Ali Majeed Dr. Asaad Ghaleb Alasady
1	Scientific Committee	Dr. Abas Abdulkadim Alhilfy Dr. Alwaleed Khalid Albaai
		Dr. Tahseen Ali Majeed
		Dr. Alwaleed Khalid Albaaj
2	Examination Committee	Dawoud Salim
		Zainab Abdul-Kareem
		Satar Jabar
		Dr. Sadam Khalaf
3	Absence Monitoring Committee	MArwa Talib
		Marwa Abdul-Rauf
		Haneen Ali
		Shorooq Jaatar
		Dr. Aqeel Salih
	Media Committee	Mahdi Yasein
4		Armeen Serkees khsrov
		Alsadiq Hamed
		Tana Adnan
-	Importation Committee	Dr. Asaad Ghaleb Alasady
5	Importation Committee	All Muyad Khalid Carsin
		knalid Samir





		Dr. Tahseen Ali Majeed Dr. Amjad Zaki
6	Quality Assurance Committee	Dr. Alwaleed Khalid
		Hala Abdul-Kareem
		Farah Ahmed
		Dr. Tahseen Ali Majeed
		Dr. Aqeel Salih
7	Educational Guidance Committee	Dr. Alwaleed Khaled
		Dawood Salim
		Dr. Qusai Abdul-Kareem
•		Dr. Abaas Tahir
8	Summer Industrial Training Committee	Anmed Atta
		Tana Adnan
		Dr. Fatima Abdul-Zanraa Mahammad Abdul Mahdi
0	Maintonanco Committoo	
9		Dr. Ousai Abdul-Kareem
		Marwa Talih
		Dr. Sadam Khalaf
		Mohammmad Abdul-Mabdi
10	Procurement Committee	Sattar Jabbar
		Khaled Samir
		Dr. Tahseen Ali Majeed
		Dr. Asaad Ghaleb Alasady
11	Scientific Plan Preparation Committee	Dr. Alwaleed Khalid Albaaj
	•	Dawood Salim
		Farah Ahmed
		Dr. Amjad Zaki
		Dr. Fatima Abdul-Zahraa
12	Gratis Education Committee	Mahdi Yaseen
		Israa Jafar
		Shorooq Jaafar
		Dr. Amjad Zaki
		Dr. Asaad Ghalib
13	Scientific Relations Committee	Armeen Sarkees
		Ali Muyad
		nala Abdul-Kareem
		Dr. Qusai Abdul-Kareem
14	Prices Monitoring Committee	Dr. Eatima Abdul-Zabraa
		Alsadia Hamid
		Mahdi Yaseen
		Hala Abdul-Kareem
15	Annual Inventory Committee	Farah Ahmed
13	Annual Inventory Committee	Alcodia Homid
		Alsauly Hallilu Taba Adnan
		Tana Aunan Device of Collins
		Dawood Salim
16	Supervision on Inventory Committee	Mohammad Abdul-Mahdi
		Khalid Samir





		Marwa Talib
		Qusai Abdul-Kareem
17	Compliance Committee	Ahmed Atta
17	compliance committee	Sattar Jabbar
		Haneen Ali
		Dr. Alwaleed Khalid
		Mahdi Yaseen
10	Pooks Inventory Committee	Farah Ahmed
10	Books inventory committee	Hala Abdul-Kareem
		Haneen Ali
		Marwa Abdul-Raauf
		Dr. Alwaleed Khalid
10	Equipment Receipt & Maintenance	Armeen Sarkees
19	Committee	Ali Muyad
		Taha Adnan
		Dr. Amjad Zaki
		Dr. Fatima Abdul-Zahraa
20	Central Library Committee	Sattar Jabbar
	-	Dawood Salim
		Farah Ahmed

3.4 Faculty Size

The total number of students in the department is 149, and the number of the ARE faculty members is 23. This data clearly indicate that, in terms of numbers, there has been no serious problem, thus far, in handling the teaching loads and current undergraduate students enrolled in the program. Thus, student to faculty ratio is approximate to 6.5:1

The number of courses assigned to each faculty member, (lecturer and above), is two courses, while it is three courses for others. During 2010-2011, the department has:

- 1. Recruit one part-time lecturer to help in teaching one course (ARE 337).
- 2. Assign ARE 133 course to Mr. Meiad Mehdi lefta since the original faculty has got PhD study leave permission.

3.5 Interaction with Students

Every faculty members in the department is requested to allocate a certain number of office hours, depending on his teaching load, per week. These office hours are mainly assigned for helping the students. S/He has the responsibility of making the students aware of the scheduling of these hours. This interaction is much more manifested in; student advising, supervising senior projects, attending senior project exhibitions, professional society advising, and coordinating industrial training. **Table3.3** shows the names of the selected faculty advisors and their number of advisees.



Table3.3: Number of Advisee per Selected Faculty Members									
Advisor Name	Advisee Year	No. of Advisee							
Dr. Qusai Abdul-Karim	5 th Year	38							
Arch . Dawoud Salim	4 th Year	25							
Dr. Aqil Salih Faisal	3 rd Year	29							
Dr. Tahseen Ali Majeed	2 nd Year	36							
Dr. Alwaleed Khalid Albaaj	1 st Year	21							

3.6 Space

ARE Department is part of the campus of the college of engineering in Qarmat Ali district, north of Basrah, Iraq. The department is a two story building that incorporates, in it, offices for the faculty members and the supporting staff together with classrooms and atelier offices:

- 1. Administrative office: the office of the chairman is located on the Ground floor of the Architectural engineering department building with approximately 35 m², in area.
- 2. Administrative Supporting Staff; this consists of full time secretary whose job is to administratively assist the chairman; this office is 15 m², in area, and is directly connected to the chairman's office.

These two offices, the chairman's and the secretary', combine to form the administrative office of the Architectural Engineering Department.

- Faculty offices are allocated in two different levels of the Department's Building. There are 17 faculty offices in the department, each of which is a 15 m² in area, each faculty (with a PhD) is assigned a separate office. Every faculty office is furnished and equipped with 1 PC and an <u>inactivated</u> link to Internet.
- 4. Storage rooms: There are a total of three storage rooms in the department. Each of these rooms is of 100 m², each.
- 5. Meeting room: this room is about 34 m², is mainly used for departmental related meetings at different levels. This room is properly furnished and is equipped with data show.
- 6. Examination Committee Room: it is located at the ground floor near the administrative office with 40 m², in area. Here is where students' records are held. It consists of one printing machine, one PC, and one photocopying/scanner machine.
- Library: it is located at the ground floor within a short walking distance from most classrooms it is allowing users free access to its resources. Reading . To encourage maximum utilization, the Library operates with a minimum of regulations and restrictions. The current collection of books and bound periodicals totals over 20000 volumes,32% in Science, 21% in Engineering, 24% in Humanities, and 23% in Social Sciences.





3.6.1 Classrooms

The Architectural engineering department contains 5 halls numbered from 1 to 5. A typical classroom in building is equipped with the following:

- 2X4 m² Whiteboard. _
- Classroom space area 7m X 10m (70m²).
- Split air conditioning units with adjustable temperature.
- Adequate classroom chairs for up to 50 chairs per classroom.

3.6.2 Ateliers

The department of Architectural engineering has five undergraduate, fully equipped, Ateliers, with a total area 1000 m², all of which are located in the building of the department. These classes are utilized to perform basic experiments needed to help the students understand the engineering concepts covered in the different courses. These classes Lab facilities could also be utilized used for building the term projects and senior projects as well. The Architectural Engineering Ateliers, however, were structured to be adaptable and upgradable to accommodate the inevitable changes in the ARE curriculum. Enough efforts are exerted sure in order to make sure that drawing equipments are kept in good operating conditions. A summary of the 5 departmental Ateliers is given, below, in Table3.4. Also, it shows the courses associated with each Drawing classes.

ables.4. Atellers tia	ses names, s	space Areas, and Associated Courses
Ateliers classes ' Nam	e Area in m ²	Associated Courses
Atelier1	200	ARE131, ARE 133, ARE132
Atelier 2	200	ARE231, ARE 232, ARE 233, ARE 234
Atelier 3	200	ARE 331, ARE 332, ARE 333
Atelier 4	200	ARE 431, ARE 432, ARE 433, ARE 434
Atelier 5	200	ARE 531, ARE532

Table3 4: Ateliers classes ' Names Snace Areas and Associated Courses

The Architectural engineering students' utilization of the Ateliers space and equipments could be measured in terms of an index representing ratio between the number of students registered in a certain Ateliers and the lab space area, at a given time slot. This is shown in Table3.5.





Fable3.5: Student Utilizing Space Area Ratio to Instructional Ateliers classes Space Area									
Lab's Name	Sunday	Monday	Tuesday	Wednesday	Thursday				
	1 st Semester								
	Open all day	Open all day		Open all day	Open all day				
Atelier 1	(34.47%)	(36.28%)	-	(36.28%)	(36.28%)				
	2 nd Semester								
	Open all day	Open all day		Open all day					
	(34.47%)	(36.28%)	-	(36.28%)	-				
	1 st Semester								
	Open all day	Open all day		Open all day					
Atelier 2	(34.47%)	(36.28%)	-	(38.1%)	-				
	2 nd Semester								
	Open all day	Open all day		Open all day					
	(34.47%)	(36.28%)	-	(38.1%)	-				
	1 st Semester								
		Open all day	Open all day	Open all day	Open all day				
Atelier3	-	(58.96%)	(34.47%)	(38.1%)	(58.96%)				
	2 nd Semester								
		Open all day		Open all day	Open all day				
	-	(58.96%)	-	(38.1%)	(58.96%)				
	1 st Semester								
		Open all day	Open all day	Open all day					
Atelier 4	-	(34.47%)	(34.47%)	(36.28%)	-				
	2 nd Semester								
		Open all day	Open all day	Open all day					
	-	(34.47%)	(34.47%)	(36.28%)	-				
	1 st Semester								
	- Open all day	Open all day		Open all day	Open all day				
Atelier 5	(34.47%)	(58.96%)	-	(38.1%)	(58.96%)				
	2 nd Semester								
	Open all day	Open all day		Open all day	Open all day				
	(34.47%)	(58.96%)	-	(38.1%)	(58.96%)				

Questions and Answers:

 How do staff keep abreast of the latest thinking in their subject, educational technology and pedagogy? Does this rely on individual motivation and interest or is there a department plan or strategy? <u>Depending on the individual motive, each staff member follow her/his own way in</u> <u>developing her/his ideas and techniques. There is also a workshop at the university</u>





called "teaching methods" which is one of the needed requirements for promoting any faculty member in her/his academic title.

2. What induction is offered to new staff?

There is a periodic program at the college called continuous learning courses where the technicians and staff can attend to develop their own skills and further their experience.

3. What professional development activities are offered to non-academic staff? <u>There is may training in computer, programs,...</u>

- 4. Are the learning resources for the programmers poor/adequate/good? How are they managed to ensure that they remain or move towards being good or excellent? It is poor/ we need inter the electronic laboratory , internet,...
- To what extent is teaching, learning and research constrained by the availability of resources and support provided at institutional level?
 <u>It very highly depended and constrained by institutional level</u>
- Are the physical facilities sufficient to support the college's research, teaching and learning activities?
 For the undergraduate students, they are more than enough for the teaching and learning process as well as doing their experiments at the ateliers.



4. Teaching, Learning and Assessment

4.1 Admission Process and Enrollment

Students are admissible to the college of engineering according to a central admission process called (grades comparison) managed by the Iraqi Ministry of Higher Education and Scientific Research / Studies, Planning, and Prosecution Office / Central Admission Department. The accepted students are coming from:

- 1. High school graduates (scientific disciplines only).
- 2. Institutions graduates (only who are in top 10% rank).
- 3. Industrial technical secondary schools (only who are in top 5% rank).

After the names of the accepted students are announced, the registration committee which contains at least ten members including the dean's assistant has only ten days to meet the accepted students and to register them at the college. They are distributed again according to their high school grades on the eight departments in the college (petroleum engineering, architecture engineering, computer engineering, civil engineering, electrical engineering, chemical engineering, mechanical engineering, and materials engineering).

For the Architectural engineering department, the number of the newly enrolled students has changed through the past five years from 35 to 47 students as seen in **Table4.1**.

Academic Year	Percentile Rank in Secondary School (% MIN)	Number of New Enrolled Students
2016-2017	91.86%	49
2015-2016	95%	50
2014-2015	94.6%	33
2013-2014	91.1%	36
2012-2013	90.8%	34
2011-2012	90.2%	23
2010-2011	91%	38
2009-2010	92%	47

Table 4.1: Records of Admissions Standards Applied over the Past 5 Years

4.2 Evaluating Students' Performance

The students of college of engineering are evaluated using the following means:

- 1. Daily, monthly, semester, and final exams.
- 2. Their laboratories reports.
- 3. Assignments.
- 4. Senior year project.
- 5. Summer industrial training reports.





4.3 Advising and Guidance

During the past years, ARE department as well as the college of engineering had an educational advising scheme where one or two advisors were assigned to give advice to one level of study $(1^{st}, 2^{nd}, 3^{rd}, 4^{th} \text{ and } 5^{th})$ year.

Starting from this year 2011-2012, the department and the college has the intention to apply a new scheme of advising with the following steps:

- 1. The chairman of the department distributes the students on the selected faculty members (advisors) such as each advisor is assigned a number of advisees from the same that the faculty member teaches. Each month the advisor meets her/his assigned advisees according to a pre-scheduled appointments.
- 2. Each advisor delivers her/his monthly report to the chairman who is responsible of arranging the work of the advisors and gives recommendations of solving any problems that may face both the advisors and the students.
- 3. These appointments can be classified as:
 - a. Evaluation meeting: assess the student's readiness and abilities and accordingly determine the best advising approach to follow.
 - b. Diagnostic meeting: usually is used to make tests and answering questions to reach an accurate diagnosis in order to lay out the work plan of advising.
 - c. Guidance/Treatment meeting: where the treatment is applied according to the plan set in the previous meeting. This treatment depends a lot on the skills and abilities of the advisor.

4.4 Graduation Requirements

In the AE department, the student has to complete **197** credit hours in order to get a Bachelor of Science degree; these credit hours are divided across four years of study as:

For the 1st year:

1. 27/39 credits (69.25%) are of Architectural Engineering courses requirements.

2. 8/39 credits (20.5%) are of College courses requirements.

3. 4/39 credits (10.25%) are of university courses requirements.

For the 2nd year:

1. 36/44 credits (81.82%) are of Architectural Engineering courses requirements.

2. 4/44 credits (9.09%) are of College courses requirements.

3. 4/44 credits (9.09%) are of university courses requirements.

For the 3rd year:

1. 36/40 credits (90%) are of Architectural Engineering courses requirements.





- **2.** 4/40 credits (10%) are of College courses requirements.
- **3.** 0/40 credits (0%) are of university courses requirements.

For the 4th year:

- 1. 40/40 credits (100%) are of Architectural Engineering courses requirements.
- 2. 0/40 credits (0%) are of College courses requirements.
- **3.** 0/40 credits (0%) are of university courses requirements.

For the 5th year:

- 1. 34/34 credits (100%) are of Architectural Engineering courses requirements.
- 2. 0/34 credits (0%) are of College courses requirements.
- **3.** 0/34 credits (0%) are of university courses requirements.

Overall percentile during five years:

- 1. 173/197 credits (87.8%) are of Computer Engineering courses requirements.
- 2. 16/197 credits (8.12%) are of College courses requirements.
- 3. 8/197 credits (4.08%) are of university courses requirements.

Table4.2 shows the records, over the past five academic years, of the total number of full time students enrolled in the program and the corresponding number of graduates each year.

	2011-2012	2012–2013	2013–2014	2014-2015	2015-2016	2016-2017
enrollment	23	34	36	26	50	49
Graduates	31	19	33	25	21	37

Table 4.2: Total enrollment and graduates trends for the past five years

Fig.4.1, Fig4.2 is a chart representation of the data tabulated in Table1.2; also it includes the number of the new students accepted in the department in each year.





Fig.4.1: New students History



Fig.4.2: Graduates students History

4.5 Transfer Students

Each year, the Iraqi Ministry of Higher Education and Scientific Research issues the regulations of transferring succeeded students from/to all colleges and universities in Iraq. It also issues the nomination's modifications for the deferred and failed students. The college of engineering





carries out the ministry instructions using a form given by the ministry plus other needed documents. The Students Affairs Department at the University of Basrah keeps following the transferring process that happens during summer holidays, i.e., July – August.

Each transferred student undergoes what is called the scientific reprise executed by the department if the curriculum and credit hours of the two colleges are similar in more than 80%. **Table4.3** shows the numbers of the transferred students from/to the department over the past five years.

Acadomic Voor	Number of Transferred Students							
Academic rear	From the department	To the department						
2016-2017	6	1						
2015-2016	4	0						
2014-2015	3	0						
2013-2014	30	0						
2012-2013	9	0						
2011-2012	0	0						
2010-2011	2	0						
2009-2010	4	0						
2008-2009	2	0						

Table4.3: The number of students transferred from/to the department over the last five years

Questions and Answers:

- How could the department be sure that the used teaching methods reinforce the students' learning? What are your evidences? <u>According to their ranks in 1st semester and 2nd semester, which it looks within the</u> <u>acceptable ranges by compare it with another departments.</u>
- 2. What evidence is there that teaching is of a high standard? What mechanisms are employed to collect feedback questionnaires? Peer Review? How is feedback on teaching quality processed? By compare our process with a high classified university, and also checking the students feedback on a specific questions regarding the teaching processes
- 3. What do the student programmed statistics tell you about the match between intake profile, assessment criteria and student achievement? If they show areas of concern what action has been taken (or will be taken)?





<u>The department start analyze the results of the surveys and students result to find a</u> <u>comfortable solutions if any problems appear.</u>

- 4. Does the assessment criteria demonstrate the achievement of the intended learning outcomes? What evidence is there to support this? <u>ves</u>
- 5. How are students informed about assessment requirements, submission deadlines, etc. <u>Yes, they are informed at the beginning of each academic year about.</u>
- 6. Are the academic and other supports given to students satisfactory? If so, explain why if not, what is being done to improve it? <u>According to the previous used advising method, there were not much understanding of the students' problems. With the new advising scheme, students' academic problems as well as social ones are manageable.</u>
- If things go wrong in a course or programmed how and when would this be known? <u>We directly call the civil defense department that available at the nearest area</u> <u>according to the emergencies type.</u>
- 8. What does the department consider to be good practice in it's provision? What evidence is there? Is there evidence that programmers have been enhanced by the sharing of good practice?
- 9. How does the college consider feedback from external bodies (e.g. Ministry & University)?

Where factual, descriptive information is necessary – e.g. samples of questionnaires or student work, this is best presented in annexes, along with statistical data on the student profile. Essential statistical data would include

- a- Staff-student ratio? <u>Yes.</u>
- b- Intake profile age, gender, entry qualifications/points? Yes, in our statistics we have exactly how many students are admitted to the department, how many of them are males and how many are females.
- c- Level of applications for entry against acceptances? <u>Usually, the two numbers are equal</u> <u>unless some students decide to be transferred to other departments.</u>
- d- Progression statistics number of students progressing, repeating, transferring, withdrawing and completing at each level for all taught and research programmes? <u>Yes.</u>



For example: **ARE432 Interior Spaces Design** means that this is an architectural engineering department course that is given to the **fourth year**; it is the **second course** within the **department requirement** curriculum.

- 2. Required or elective: whether it is required course for the program or an elective one.
- 3. Course description: defines what the course is designed for and why it is given to the students.
- 4. Recommended Textbook(s): what the used textbook(s) or internet articles to teach this course.
- 5. Prerequisites (if any): these have been established to assure an adequate and uniform background for students in advanced classes.
- 6. Course Topics: detailed syllabus of the course.
- 7. Course Outcomes: they are the key points that the students have learned.







	Table5.1: ARE Curricu	ulum Re	equiremen	its						
Total CoE Requirements: 197 credit hours / 44 courses										
Requirements	i	Credit Hours								
University Requirements 8										
College Requirements 16			16							
Department R	equirements	173								
Total		197								
University Red	quirements: 8 credit hours / 2 courses	;								
Course No.	Course Title		Credit Ho	urs	Weekly	Hours				
ARE211	Democracy and Freedom Concepts		4		2					
	Total		8		4					
College Requi	rements: 24 credit Hours / 5 courses									
					Weekly	Hours				
Course No.	Course fille		Credit Ho	urs	Lec.	Tut.	Lab.			
ARE121	Mathematics I		4		2					
ARE122	Engineering Drawing using Computer	r (I)	4		1		2			
ARE221	Engineering Drawing using Computer	r (II)	4		1		2			
ARE321	Engineering Drawing using Computer	r (III)	4		1		2			
ARE123	Physics		2		2					
ARE124	Chemistry		2		2					
	Total		20			1	6			
Department Peruirements: 116 credit hours / 24 courses										
Department R	equirements: 116 credit hours / 24 co	ourses	20							
Department R	equirements: 116 credit hours / 24 cc	ourses	20	Crodit	Week	ly Hou	rs			
Department R Course No.	equirements: 116 credit hours / 24 cc Course Title	ourses		Credit	Week	ly Hou	rs Ateli			
Department R Course No.	equirements: 116 credit hours / 24 cc Course Title	ourses		Credit Hours	Week	ly Hou Tut.	rs Ateli er			
Department R Course No. ARE131	equirements: 116 credit hours / 24 co Course Title Architectural Design	ourses		Credit Hours 10	Week Lec. 2	ly Hou Tut.	rs Ateli er 8			
Department R Course No. ARE131 ARE 132	Course Title Architectural Design Architectural Graphics	Durses		Credit Hours 10 4	Week Lec. 2 1	tly Hou Tut.	rs Ateli er 8 2			
Department R Course No. ARE131 ARE 132 ARE 133	Course Title Architectural Design Architectural Graphics Hand Sketch	ourses		Credit Hours 10 4 3	Week Lec. 2 1 3	Tut.	rs Ateli er 8 2			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 134	Course Title Architectural Design Architectural Graphics Hand Sketch Arch. & Art Fundamentals	Durses		Credit Hours 10 4 3 4	Week Lec. 2 1 3	Tut.	rs Ateli er 8 2 2 3			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 134 ARE 135	Course Title Architectural Design Architectural Graphics Hand Sketch Arch. & Art Fundamentals Building Construction I	ourses		Credit Hours 10 4 3 4 4	Week Lec. 2 1 3	ly Hou Tut.	rs Ateli er 8 2 3 3 3			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 134 ARE 135	Architectural Design Architectural Graphics Hand Sketch Arch. & Art Fundamentals Building Construction I	ourses		Credit Hours 10 4 3 4 4	Week Lec. 2 1 3	Tut.	rs Ateli er 8 2 2 3 3 3			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 134 ARE 135 ARE 231	Architectural Design Architectural Graphics Hand Sketch Arch. & Art Fundamentals Building Construction I Architectural Design	Durses		Credit Hours 10 4 3 4 4 4 12	Week Lec. 2 1 3 2 2	Tut.	rs Ateli er 8 2 3 3 3 3 8			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 134 ARE 135 ARE 231 ARE 232	Architectural Design Architectural Graphics Hand Sketch Arch. & Art Fundamentals Building Construction I Architectural Design	Durses		Credit Hours 10 4 3 4 4 4 12 4	Week Lec. 2 1 3 3 2 2 1 2 1	Tut.	rs Ateli er 8 2 3 3 3 3 8 2			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 134 ARE 135 ARE 231 ARE 232 ARE 233	Architectural Design Architectural Graphics Hand Sketch Architectural Design Architectural Graphics Hand Sketch Arch. & Art Fundamentals Building Construction I Architectural Graphics Hand Sketch Architectural Graphics Hand Sketch Architectural Design Architectural Graphics Hand Sketch	Durses		Credit Hours 10 4 3 4 4 4 12 4 3	Week Lec. 2 1 3 3 2 1 2 1	Tut.	rs Ateli er 8 2 3 3 3 3 8 8 2 3			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 133 ARE 134 ARE 135 ARE 231 ARE 231 ARE 233 ARE 233 ARE 234	Architectural Design Architectural Graphics Hand Sketch Architectural Design Architectural Graphics Hand Sketch Arch. & Art Fundamentals Building Construction I Architectural Graphics Hand Sketch Architectural Design Architectural Construction I Building Construction (II)	Durses		Credit Hours 10 4 3 4 4 12 4 3 5	Week Lec. 2 1 3 3 2 1 2 1 1 1	Tut.	rs Ateli er 8 2 3 3 3 3 8 8 2 3 3 3 3 3			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 134 ARE 135 ARE 231 ARE 231 ARE 232 ARE 233 ARE 234 ARE 235	Architectural Design Architectural Graphics Hand Sketch Architectural Design Architectural Graphics Hand Sketch Architectural Construction I Architectural Graphics Building Construction I Architectural Graphics Hand Sketch Architectural Osign Architectural Graphics Hand Sketch Building Construction (II) Arch. History	Durses		Credit Hours 10 4 3 4 4 4 12 4 3 5 5 4	Week Lec. 2 1 3 3 2 1 2 1 1 2 1 2	ly Hou Tut.	rs Ateli er 8 2 3 3 3 3 8 2 3 3 3 3			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 134 ARE 134 ARE 135 ARE 231 ARE 231 ARE 232 ARE 233 ARE 234 ARE 235 ARE 236	Architectural DesignArchitectural DesignArchitectural GraphicsHand SketchArch. & Art FundamentalsBuilding Construction IArchitectural GraphicsHand SketchArch. & Art FundamentalsBuilding Construction IArchitectural GraphicsHand SketchArchitectural GraphicsHand SketchBuilding Construction (II)Arch. HistoryDesign Methodology (1st Semester or	nly)		Credit Hours 10 4 3 4 4 4 12 4 3 5 4 2	Week Lec. 2 1 3 3 2 1 2 1 2 1 1 2 1 2 2 2	ly Hou Tut.	rs Ateli er 8 2 3 3 3 3 8 2 3 3 3 3 3 3			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 133 ARE 134 ARE 135 ARE 231 ARE 231 ARE 233 ARE 233 ARE 234 ARE 235 ARE 236 ARE 237	Architectural Design Architectural Graphics Hand Sketch Architectural Design Arch. & Art Fundamentals Building Construction I Architectural Graphics Hand Sketch Arch. & Art Fundamentals Building Construction I Architectural Graphics Hand Sketch Building Construction (II) Arch. History Design Methodology (1 st Semester or Structural Analysis (I)	nly)		Credit Hours 10 4 3 4 4 4 12 4 3 5 4 3 5 4 2 4	Week Lec. 2 1 3 3 2 1 2 1 1 2 1 2 2 2 2 2	Iy Hou Tut.	rs Ateli er 8 2 3 3 3 8 2 3 3 3 3 3 3			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 134 ARE 134 ARE 135 ARE 231 ARE 231 ARE 232 ARE 233 ARE 234 ARE 235 ARE 236 ARE 237 ARE 238	Architectural Design Architectural Graphics Hand Sketch Architectural Design Architectural Graphics Building Construction I Architectural Graphics Hand Sketch Architectural Design Architectural Graphics Hand Sketch Building Construction I Architectural Graphics Hand Sketch Building Construction (II) Arch. History Design Methodology (1 st Semester of Structural Analysis (I) Survey (2 nd Semester only)	nly)		Credit Hours 10 4 3 4 4 4 12 4 3 5 4 2 4 2 4 2	Week Lec. 2 1 3 3 2 1 2 1 1 2 1 2 2 2 2 1	ly Hou Tut.	rs Ateli er 8 2 3 3 3 3 8 2 3 3 3 3 3 3 3 3 3 2 3 3 3 3			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 133 ARE 134 ARE 135 ARE 135 ARE 231 ARE 231 ARE 233 ARE 233 ARE 235 ARE 236 ARE 237 ARE 238	Architectural Design Architectural Graphics Hand Sketch Arch. & Art Fundamentals Building Construction I Architectural Graphics Hand Sketch Building Construction (II) Architectural Graphics Hand Sketch Building Construction (II) Arch. History Design Methodology (1 st Semester on Structural Analysis (I) Survey (2 nd Semester only)	nly)		Credit Hours 10 4 3 4 4 4 12 4 3 5 4 2 4 2 4 2 2	Week Lec. 2 1 3 3 2 1 2 1 1 2 1 2 2 2 2 1 1 2 1 1 2 1 2	ly Hou Tut.	rs Ateli er 8 2 3 3 3 3 8 2 3 3 3 3 3 3 3 2 3 3 3 2 3 3 3 3			
Department R Course No. ARE131 ARE 132 ARE 133 ARE 133 ARE 134 ARE 135 ARE 231 ARE 231 ARE 233 ARE 233 ARE 234 ARE 235 ARE 236 ARE 237 ARE 238 ARE 238	Architectural Design Architectural Graphics Hand Sketch Architectural Obsign Architectural Graphics Hand Sketch Arch. & Art Fundamentals Building Construction I Architectural Graphics Hand Sketch Architectural Graphics Hand Sketch Building Construction I Architectural Graphics Hand Sketch Building Construction (II) Arch. History Design Methodology (1 st Semester or Structural Analysis (I) Survey (2 nd Semester only) Architectural Design	nly)		Credit Hours 10 4 3 4 4 4 12 4 3 5 4 2 4 2 4 2 4 2 14	Week Lec. 2 1 3 3 2 1 2 1 1 2 1 2 2 2 1 2 1 2 1 2	ly Hou Tut.	rs Ateli er 8 2 3 3 3 3 8 2 3 3 3 3 3 3 3 3 2 3 3 3 3			
Department R Course No. ARE131 ARE 132 ARE 132 ARE 133 ARE 134 ARE 135 ARE 135 ARE 231 ARE 231 ARE 232 ARE 233 ARE 234 ARE 235 ARE 236 ARE 237 ARE 238 ARE 238 ARE 331 ARE 332	Architectural Design Architectural Graphics Hand Sketch Architectural Graphics Building Construction I Architectural Graphics Hand Sketch Architectural Design Architectural Oraphics Building Construction I Architectural Graphics Hand Sketch Building Construction (II) Arch. History Design Methodology (1 st Semester or Structural Analysis (I) Survey (2 nd Semester only) Architectural Design Building Construction (III)	purses		Credit Hours 10 4 3 4 4 4 12 4 3 5 4 2 4 2 4 2 4 2 4 2 14 6	Week Lec. 2 1 3 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	ly Hou Tut.	rs Ateli er 8 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			





ARE 334	Principles of Planning (1 st Semester only)	2	2	
ARE 335	Urban Design (2 nd Semester only)	2	2	
ARE 333	Sanitary Engineering (1 st Semester only)	2	2	
ARE 337	Air-conditioning Services (2 nd Semester only)	2	2	
ARE 338	Structural Design	4	2	
ARE 431	Architectural Design	14	2	10
ARE 432	Interior Spaces Design	2	1	4
ARE 433	Exterior Spaces Design	2	1	4
ARE 434	Housing Planning (1 st Semester only)	2	2	
ARE 434"	Housing (2 nd Semester only)	2	2	
ARE 435	Islamic Architecture	4	2	
ARE 436	Architectural Theory	4	2	
ARE 437	Climate & Arch. (1 st Semester only)	2	2	
ARE 438	Acoustic Architectural (2 nd Semester only)	2	2	
ARE 439	Building Technology	4	2	
ARE 531	Architectural Design	8	3	9
ARE 532	Theses	14	2	4
ARE 533	Architectural History (III)	4	2	
ARE 534	Architectural Criticism (1 st Semester only)	2	2	
ARE 535	Architectural Philosophy (2 nd Semester only)	2	2	
ARE 536	Estimating & Specifications (1 st Semester only)	2	2	
ARE 537	Engineering Applications (2 nd Semester only)	2	2	
	Total	173	65	79

5.3 Mapping of Course Learning Outcomes to Program Outcomes

An academic program is, in effect, the superposition of a set of courses, somehow, linked together to achieve program outcome. This means that courses in any academic program represent the building blocks of that program. Assessment of the program would only be possible if the course learning outcomes are mapped to the program outcomes. Course learning outcomes of individual program courses are listed in the detailed course syllabus which are prepared by faculty teaching that particular course and submitted to the student in the beginning of the year. Each year, immediately after tallying the final grades of all courses, mapping between the courses and program outcomes is also established. Mapping of all the courses offered by the ARE department is given below in **Table5.2**.

	Course Title	Program Outcomes										
Course No.		Α	В	С	D	Е	F	G	Н	T.	J	Κ
First Year												
ARE131	Architectural Design	Х	Х	Х	Х	Х	Х			Х	Х	Х
ARE 132	Architectural Graphics	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х

Table5.2: Mapping of the ARE Core Courses to the Program Outcomes





ARE 133	Hand Sketch	Х	Х		Х	Х		Х	Х		Х	Х
ARE 134	Arch. & Art Fundamentals	Х	Х		Х	Х	Х		Х	Х	Х	Х
ARE 135	Building Construction I	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE121	Mathematics I	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE122	Engineering Drawing using Computer (I)	х	х	х	х	х	х	х	х	x	х	х
ARE111	Principles of Human Rights							Х	Х		Х	
Second Year												
ARE 231	Architectural Design	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE 232	Architectural Graphics	Х	Х	Х	Х			Х	Х	Х	Х	Х
ARE 233	Hand Sketch	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE 234	Building Construction (II)	Х		Х	Х	Х	Х	Х			Х	Х
ARE 235	Arch. History	Х	Х	Х	Х		Х	Х	Х	Х		
ARE 236	Design Methodology (1 st Semester only)	х	х	х	х	х	х	х	х	x	х	х
ARE 237	Structural Analysis (I)	Х	Х		Х	Х	Х	Х	Х		Х	Х
ARE 238	Survey (2 nd Semester only)	Х	Х	Х	Х		Х		Х	Х	Х	Х
ARE221	Engineering Drawing using Computer (II)	х	х	х	х		х	х	х	х	х	х
Third Year												
ARE 331	Architectural Design	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE 332	Building Construction (III)	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE 333	Arch. History (II)	Х	Х	Х	Х		Х	Х	Х	Х		
ARE 334	Principles of Planning (1 st Semester only)	х	х	х	х	х	х	х	х	х	х	x
ARE 335	Urban Design (2 nd Semester only)	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE 333	Sanitary Engineering (1 st Semester only)	х	х		х	х	х	х	х	х	х	х
ARE 337	Air-conditioning Services (2 nd Semester only)	х		х		х	х			x	х	х
ARE 338	Structural Design	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE321	Engineering Drawing using Computer (III)	х	х		х	х	х		х		х	x
Fourth Year	•							-	-	-		
ARE 431	Architectural Design	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE 432	Interior Spaces Design	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х
ARE 433	Exterior Spaces Design	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х
ARE 434	Housing Planning (1 st Semester only)	х	х	х		х	х	х	х	x	х	х
ARE 434"	Housing (2 nd Semester only)	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE 435	Islamic Architect	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE 436	Architectural Theory	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х
ARE 437	Climate & Arch. (1 st Semester only)	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х
ARE 438	Acoustic Architectural (2 nd	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х





	Semester only)											
ARE 439	Building Technology	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Fifth year												
ARE 531	Architectural Design	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE 532	Theses	Х	Х	Х		Х				Х	Х	Х
ARE 533	Architectural History (III)	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ARE 534	Architectural Criticism (1 st	x	х	х	х	х	х	x	х	х	х	х
	Semester only)											
ARE 535	Architectural Philosophy (2 nd Semester only)	х	x	х	х	х	Х	х	х	х		
ARE 536	Estimating & Specifications (1 st Semester only)			х	х	х	х	х	х	х	х	х
ARE 537	Engineering Applications (2 nd Semester only)	x	x	х	x	х			х	х	х	x

Questions and Answers:

- 1. Why is the curriculum constructed and presented in this way? Does it promote progression in student learning? Does it facilitate the achievement of intended learning outcomes?
- 2. What evidence does the college have that standards of the programme are appropriate?
- 3. Has the department mapped together the curriculum, learning outcomes, and assessments? Are there any gaps or significant overlaps? If so, what changes are planned and when? As our department are opened recently, so we depend on another university ARE department (Baghdad university) curriculum for our departments which is meet the country need
- 4. Does the college have a formal process to evaluate and review courses/programmes? How have these processes improved provision? <u>No</u>





6. Management of Quality and Enhancement

6.1 Enhancement

For the main three activities at the department: teaching, learning, and research; there are no available followed mechanism of improvement, rather, the department tries to enhance the three activities whenever it is possible, for example:

• Teaching enhancement:

- Based on the personal motive, each faculty member uses new updated material within the context of the department curriculum.

- Based on the gotten students' exam results, each faculty member tries to improve their own curriculum.

• Learning and Research enhancement:

- Each year, the department buys new stuff and laboratory instruments that help in boosting the students' learning.

6.2 Monitoring

The only thing that the department does to monitor the teaching and learning processes is that the department chair semesterly follows up each curriculum progressive, i.e., what is the percentage of completion for the assigned curriculum? What is the percentage of students who has successfully passed their exams? The above-mentioned points can be enhanced further if there are quality-training workshops where the department selects some of its faculty and staff to participate in these training programs. By the experience they might get, when they come back, they would be beneficial for the department and help it to build more robust qualityreviewing and monitoring mechanism.

6.3 What should be done to improve the ARE education at Basra University Engineering college

To improve the ARE program, new students admitted in the program should be well-informed about their future prospectus as architectural Engineers. Students should be exposed to the architectural engineering major fields, the objectives of the program and the capabilities an ARE student can acquire during his education at Basra University Engineering college. For the purpose

of giving students adequate field experience, practical training programs should be





emphasized and supported with courses related to professional practice. More field trips should be organized during the course work. ARE students are exposed to a large variety of subjects during the program however; focus on a particular major specialization should be encouraged and documented before one year of graduation. Additional design courses that deal with real-life problems and building technological aspects should be offered in the program

Questions and Answers:

- How are the various quality processes (e.g. reports, course evaluation, staff/student consultative committees, etc) integrated to enhance provision? <u>The students' examination results (percentage of those who passed exams) are used to focus on the related curriculum. Hence, the department tries to enhance that curriculum progress.</u>
- 2. Discuss how good practice is identified and disseminated within the college and identify any particular elements of good practice in teaching and learning within the department. When something good is realized, the department council is held and the matter is discussed to see its positive and negative aspects and how it can be adapted to be used in other curricula. For example, a curriculum has the highest percentage of success.





7. Support Services

7.1 Software Support

Table7.1 shows the software facilities that have been made available to the Architectural engineering students. The table also shows the courses in which these software resources are being applied. In general, the applications of a particular software could be very broad and vary from one subject to another.

Software	Course(s)
AutoCAD	ARE 122, ARE 221
3DMax	ARE 321
Microsoft Office Package 2007, 2003	General
Microsoft Windows XP Professional	General

Table7.1: Software Applications for Different Courses

7.2 Ateliers

As mentioned before, there are five major Ateliers, in the department of Architectural engineering, that are fully utilized in Architectural engineering courses, term projects and senior design projects as well. Drawing classes are air conditioned and room temperatures are regularly monitored and controlled in order to ensure an acceptable working temperature, in the normally hot climate of Basrah.

The ARE Ateliers are well maintained and properly run by a designated Ateliers maintenance committee and the technical supporting team of Engineers The most recent load distribution among the Engineers staff is shown in **7.2**

Technician	Drawing classes Name			
Taha Adnan Taha	Atelier1			
AlSadiq Hamid Sadiq	Atelier 2			
Faris Abbas Hameed	Atelier 3			
Khalid Sameer Baqir	Atelier 4			
Jalal Abdulsahib Hussein	Atelier 5			

Table8.2: Engineers Assigned Responsibilities for the Operation of the Ateliers

7.3 Sources of Financial Support

The college of engineering is a governmental institution that funds its activities from:

- 1. General governmental funds which represents the greatest portion of the budget.
- 2. Higher education fund which includes:





- a. Laboratorial tests: 65% of funds for test team, 15% for university, 16% for bonuses, and 4% for maintenance.
- b. Shops rent: 15% for university, 68% for bonuses, and 17% for maintenance.
- c. Continuous learning courses: 65% for course trainers, 15% for university, 16% for bonuses, and 4% for maintenance.
- d. Special courses: 65% for course trainers, 15% for university, 16% for bonuses, and 4% for maintenance.
- e. Industry cooperation: 80% for work team, 10% for university, 8% for bonuses, and 2% for maintenance.
- f. Internet Center: 15% for university, 68% for bonuses, and 17% for maintenance.
- g. Student registration fees: 80% for bonuses and 20% for maintenance.
- h. Exams results objections fees: 80% for bonuses and 20% for maintenance.
- i. Self-funding study master and doctorate fees: 50% for students, 25% for lectures, and 25% for other stuff.
- j. Water desalination plant: 15% for university, 68% for bonuses, and 17% for maintenance.

Table7.3 shows a sample of sources and their income.

Item	Revenue				
laboratories Tests	739549000				
Shop Rents	6850000				
Continuous Learning Courses	11125000				
Special Courses	9448000				
Industry Cooperation	42693000				
Internet Center	4625000				
desalination Plant	2275000				
Total	816565000				

Table8.3: Sources and Revenue Sample

7.4 Community Service

The ARE department participates through the engineering consultation office in the college in giving consultation services in all fields for governmental and private sector agencies inside and outside Basrah.

7.5 Faculty Professional Development Support

The office of chancellor's assistant for scientific affairs, office of chancellor's assistant for management affairs, department of planning and continuation, and the cultural affairs office in the University of Basrah participate in developing the college of engineering by offering short and long term scholarships for its master and doctorate students. Also, it offers deputations for faculty members. **Table7.4** lists the ARE deputation summary for the academic year 2010-2011.





Table7.4: ARE Deputation Summary in 2016-2017

Faculty Name	Date and Location	Activity				
Mr.Hamid Heab Sameer	February , 2011, UK	Training teaching methods				

Questions and Answers:

1. What is the acquisition and updating policy for texts and journals?

At the department, the gratis textbooks are not updated on regular basis. Instead, each faculty member is responsible for updating the references s/he uses to teach her/his assigned curriculum.

2. How does the department work with the Library/IT to match texts, periodicals and IT support to the needs of the curriculum and the overall teaching strategy?

There is no such cooperation between the department and the college library or the IT center.

3. Are the arrangements for the training and induction of students adequate? Is there scope for improvement?

No, they are not. The college can set arrangements to let students participate in academic visits to universities and workshops within the Basrah and/or inside Iraq. This will help in building their experience and give them new prospects.

4. How effective are the central support services in supporting the activities of the department? Are there any improvements that could be made?

When the department has an activity, the college supports it to some extent by facilitating any difficulties that may face the department.





8. External Relations

The office of chancellor's assistant for scientific affairs, office of chancellor's assistant for management affairs, department of planning and continuation, and the cultural affairs office in the University of Basrah participate in developing the college of engineering by offering short and long term scholarships for its master and doctorate students. The mechanical engineering department external relations limited to individual research scholarships ,there is no students in external unvirsty.

 Are there satisfactory arrangements for participation by staff and students in external training and visit programmes with international universities?
 No, there are not such arrangements.

2. Are there satisfactory arrangements for monitoring placements? <u>Placements at the department are not done by the department itself, rather</u> <u>they are done by the college.</u>

3. If appropriate, do international advisors have an input to curriculum development? <u>No,they do not have.</u>





9. Summary of SWOT Analysis and Recommendations for Improvement

9.1 Strengths

- 21% of the faculty members are of academic title higher than or equal to lecturer.
- 16% of the faculty members currently are completing their PhD studies.
- The department vision, mission, and objectives focus on the graduates and the overall knowledge they get to apply in their future carrier.
- The 197 total credit hours are equal to the number of credit hours at other ARE departments in Iraq and worldwide.
- The used textbooks are updated by the faculty member her/himself using the internet. Thus, no outdated textbooks are used.
- Student to faculty ratio is 6:1 which is considered optimal.
- Most faculty members have teaching or working experience outside the university for a period of time.
- The department building area is adequate. Also, the number of classrooms/ Ateliers and their area are adequate.
- Classrooms have data show devices.
- The department has library of its own.
- Due to the process of assigning budgets to universities and colleges, the department receives a guaranteed annual budget.

9.2Weaknesses

- 79% of the faculty members hold academic title of assistant lecturer.
- 47% of the faculty staff is specialists in Architectural department, so it needs to increase there percent.
- Many items from CEO does not meet the PEOs and its need to repair our department PEOs to comply all the CEOs.
- There are no elective courses, which are in fact not elective since the students have no choice in studying this type of courses.
- The department is more tilted towards teaching rather than research and other scholarly activities.
- 36% of the faculty members are teaching courses in fields other than their own area of interest.
- The department is more tilted towards teaching rather than research and other scholarly activities.





- 36% of the faculty members are teaching courses in fields other than their own area of interest.
- The department has an Internet connection which doesn't work well.
- The department has no external financial resources a drawback which needs to be solved. Sometimes, when the assigned annual budget is not enough, the chairman has to cut from the expenditures.

9.3 Opportunities

- 15% of the faculty members have the intention to pursue their PhD degree.
- 5% of the faculty members sent to the out of country for 1 month to get a training to improve their ability for teaching.
- By continuously updating the PEO and PO, all the present threats would be vanished.
- By opening the graduate studies at the department, the weaknesses will be gotten rid of.
- If each faculty member well writes and updates her/his curriculum outcomes, s/he will definitely help in improving the overall POs of the program.
- The new adopted advising scheme will definitely improve the interaction between students and faculty members.
- The department has assigned part of its building to establishing the "Avisina Virtual University". The center has promised to provide the department with an optic link internet connection.
- The department has established a partnership relationship with the Civil Engineering Department,

9. 4Threats

- The inability to employ new faculty members because of the laws and rules of the ministry.
- There is no post graduate program at this department due to shortage in high rank faculty members, so the gradated people need to apply their post graduate program in another universities and this will be difficult on them.
- Each faculty member can only change 20% of the curriculum content.
- The inability to include new curriculum since the ministry rules doesn't allow such change.
- The teaching load on most faculty members prevents them from assigning enough time for scientific research.
- No any development of ARE Ateliers and improvement to follow modern design in world.
- Deputations are only assigned to professors and persons in charge.