Introduction

The term quality assurance is considered a new and effective management concept for all public and private institutions, especially in the countries of Iraq. This concept has contributed to the goals of enterprise management in many of the world's developed countries, so that comprehensive quality management has become the focus of attention for many institutions that wish to achieve their goals in the best possible way, in a clear and guaranteed way. This new management concept may run into the prevailing and old management values and concepts, traditional work systems and familiar ways of thinking, and this collision results in a stumbling and failure to apply this new management concept; It was therefore incumbent on institutions wishing to adopt this management concept to determine the compatibility of this concept and its principles with the values, beliefs and behaviors of those to whom this concept will be applied in order to make quality values a reality.

It is worth noting that higher education institutions are not immune to this term. They are among the most prominent sectors that need to apply such concepts, especially now that there are scientific leaps in a number of fields, most notably electronics and information technology.

Although the definitions of quality assurance differ, they agree that they focus on qualitatively and distinctly desirable characteristics and characteristics in accordance with the wishes of the beneficiaries. It may be noted that the concept of universal quality in higher education institutions is concerned with a set of standards and procedures aimed at continuous improvement in the output of the educational system, as well as with the characteristics and specifications required in the output and accompanying activities. They can be seen as achieving the satisfaction of the educational process and the overall goals in the light of a set of indicators and their own criteria. The concept of quality assurance in the higher education environment refers to a set of standards and procedures aimed at continuous improvement in the output of the educational system, and the characteristics and specifications required in the output and accompanying activities, which means focusing on the achievement of qualitative gains through the development of the outputs received by all institutions of society as the ultimate beneficiary of those outputs.

In this context, the phases of the project for the application of quality assurance in higher education institutions can be summarized in four points:
(a) The adoption of the concept of comprehensive quality by senior leaders in the educational establishment.
(b) Planning phase.
(j) Self-assessment phase.
(d) The stage of development and continuous improvement.
The two phases (A and B) were considered in the Department of Electrical and Electronic Engineering at Thi Qar University. We are now at the stages (c) and (d) of the implementation of

the quality assurance project in our educational institution, namely, the self-evaluation phase and the development and improvement phase, which is reflected in the continuous modification of this evaluation. The self-evaluation report is an important step to enter into the application of internationally recognized evaluation programs that define the standards and requirements for engineering colleges for the purpose of improving and developing the educational process and making it constantly evolve in order to graduate engineers who have the ability to interact with industrial institutions and society and to provide the best services that accompany scientific and technological development. The present report contains information on the Department of Electrical and Electronic Engineering at the College of Engineering as a first step towards implementing quality standards in education in accordance with national standards, after the establishment of the Division of Quality Assurance and University Performance at the College.

Chapter I contains the structure and administrative organization of the department within the College. Chapter II deals with the Section's strategy, objectives and ways to advance the educational process. The third chapter includes student affairs, all that students need in terms of education, training, extra-curricular activities, graduation, and follow-up after graduation. The fourth chapter includes a presentation of the individual curricula of the Engineering College, in accordance with the standards of engineering colleges and the percentages that have been determined for engineering colleges according to the requirements of the University, the College, and the Department. The fifth chapter includes a clarification for the members of the teaching staff, a summary of the experience they possess, and student-teacher ratios. It also provides a brief explanation of scientific research and how to develop the faculty's teaching staff. The sixth chapter included an explanation of the laboratories and educational facilities available in the College and the scientific departments. The chapter also included the provision of the various equipment available for use in the educational process. Finally, chapter VII contains a brief explanation of the method adopted by the Section with regard to the financial aspects of the sustainability of the educational process and how to improve and develop it according to available resources.

Chapter I
Structure and administrative management
1.1 History of the Department of Electrical and Electronic Engineering at Thi Qar University:

The Department of Electrical and Electronic Engineering is one of the five scientific departments of the College of Engineering at Thi Qar University. It was founded in 2008. The period of study in the Department is four years. Students have to pass it by covering practical and theoretical teaching hours ranging from 3,540 to 3,600 hours. In total, 156 units cover the requirements of the University, the College, and the Department, and according to the established rates in academic engineering colleges.

For the current academic year, the classroom curriculum is based on the first three grades and the fourth grade annual curriculum. The Department then grants a bachelor's degree in Electrical and Electronic Engineering.

1-2 Organizational structure of the Section within the College structure:

The organizational structure of the college in its establishment depended on the structure of Iraqi colleges and universities, which depend on the structure of British universities in terms of organization and management. The department is administratively linked to the dean, and the college council represents the supreme authority in making scientific decisions concerning the departments.

1-3 Functions of the Electrical and Electronic Engineering Section:

- Teaching of prescribed methodological materials for the four stages (practical and theoretical).
- Continuous development of curricula and school plans.
- Modernization and development of educational resources.
- Develop the educational capabilities and skills of students and motivate creative students.
- Improve and develop the abilities of teachers and staff in the department and stimulate their spirit of development and creativity.
- Develop the research capabilities of the teaching staff.
- Cooperation between faculty and community members through continuous education courses, workshops, seminars, research and joint studies.
- Follow up on educational supervision of students during the academic stages.
- Graduate specialized engineering staff.

1-4 Development of administrative staff:

- The administrative laws that are adopted at the universities were prepared by specialists and are a result of the accumulation of experience since the establishment of Iraqi universities until now. These laws often work on central administrative procedures that manage the organizational structure of the universities in a way that enables them to obtain good results in the evaluation of the administrations of the universities and colleges.
- The central government in administrative work is working to control the administration of the colleges, and therefore the departments are obliged to follow the instructions prepared by specialists in this field. In most cases, any decentralized procedures by the colleges provide solutions that may be valid for a certain period of time, and are not studied from all sides due to the lack of expertise the colleges have in the administrative aspects, if compared with the accumulated experience of the entities that enacted those laws.
- The Department is keen to develop the administrative staff by enrolling them in several development courses, whether in their field of work or in other fields related to other administrative work or computer technology courses.
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1.5 Exploring the Section's responsiveness to functions:

- The Department is exposed to a number of visits related to the evaluation of the administrative performance of the College through internal oversight

reports or various inspection committees. Agencies write a report and evaluate the College and identify negatives.

- Every year, a comprehensive evaluation of the College and the scientific departments is carried out through a number of statistics, plans, and follow-up on scientific and teaching research. The Ministry annually announces the differential grades that the colleges have obtained to evaluate their performance for an educational year. The departments strive to improve the position of the College within the general sequences by working to improve the paragraphs that led the College to achieve low grades. We note that there are some reasons that lose points of evaluation that are beyond the College's control, including:
- The shortage of teaching staff in the department leads to the fact that current teachers bear a heavy burden in theoretical and practical teaching, which leads to a lack of research by teachers.
- The lack of post-graduate studies in the department is due to the lack of teaching staff at advanced scientific levels. It also limits the department's progress and its contribution to scientific research.
- The shortage of engineering and administrative staff is significant, as the college needs the university's support in covering this aspect. Therefore, some administrative and technical matters could be better if the administrative and technical staff were integrated.

1-6 SWAT analysis:

Strengths:

- When general administrative problems arise at the university level, it is the responsibility of the university to overcome them without the colleges being preoccupied with finding appropriate solutions for them.
- The administrative laws that are adopted at the universities were prepared by specialists and are a result of the accumulation of experience since the establishment of Iraqi universities until now. These laws often work on central administrative procedures that manage the organizational structure of the universities in a way that enables them to obtain good results in the evaluation of the administrations of the universities and colleges.
- The increase in the administrative staff of the Student Affairs Division, the accumulation of experience and commitment to work have been positively reflected in the performance of the Section.
- The modernization of administrative contexts in the Department has had a positive effect on the flow of administrative work in the Department.
- The increase in the college's resources from evening study has led to an increase in the number of administrative staff in the college. This has been reflected in the administrative, service, and construction aspects of the college's departments.

Weaknesses:

- Many of the statistics are requested by the authorities, often repeatedly, but from different departments of the ministry or university. Some of them are requested more than once during the school year.

- There are no actions taken by the reviewer for statistics that have been submitted in college or university plans.
- Asking for important and accurate statistics, and requiring colleges to answer them within a few days, despite their importance, and containing information that represents a work strategy for years to come.
- Lack of administrative staff in the secretariat of the Section affects the administrative follow-up of the Section.
- Personnel do not receive appropriate training courses.
- Do not take the college's opinion on ways to develop the administrative organization and work structure within the organizational structure of the university, as it sometimes requires the creation of some units or divisions that meet the work of a specific college that is specific to a given job.
- Not giving the faculty the authority to select competent administrative or technical staff for appointment.
- First graduates not assigned to departments.
- The Ministry of Higher Education has made limited financial allocations to train administrative, technical, and teaching staff at prominent international sites and universities on a continuous basis.
- Non-inclusion of enrollees (especially employees) in development courses (computers, English) because of their connection with the nature of their work.

Opportunities:

- Improved transportation to university.

Risks:

- Enrollment of incompetent cadres, whether administrative, technical or teaching staff.
- The move of a number of faculties to the university complex led to a heavy traffic during official working hours.
- Improper paving of the road leading to the college in the university complex, which leads students to delay their first lecture.
- Continuous power outages without suitable alternatives affect the administrative and technical work in the college, despite the presence of diesel generators that lack the necessary gas allocated for them.
- Streets and aisles are not fully paved in college.
- Some of the devices and equipment for the laboratories have become extinct due to the heavy load on them by adding evening classes to the college, the increasing numbers of students, and because of austerity and the lack of financial allocations year after year, which led to confusion in the work sometimes at the laboratories.
- Contact Department:
- The department works within the organizational structure of the Engineering College at Thi Qar University, which is affiliated with the Ministry of Higher Education and Scientific Research. It is possible to communicate via the college's website

Chapter II
Strategy and objectives

2-1 I : Department strategy:
The Department's strategy is reviewed through the meetings of the Department's council and the meetings of the College's council, which include the heads of departments and the Dean's assistants. The strategy is based on the directives received by the College through the meetings of the University's council, which includes the deans of the colleges and the university's assistant presidents.
The Ministry of Higher Education and Scientific Research is concerned with the scientific and organizational aspects of Iraqi engineering colleges, in accordance with future visions that are proposed within the Council's work. The Council relies on directives issued by the higher authorities and discusses studies and proposals received from scientific programs in the various engineering colleges.

a. Education strategy: The instructor shall determine by presenting his education plan to be followed during the classroom or school year where he shall:

- Present the contents of the curriculum to the students, determining the school hours that are suitable for each subject to be discussed during the semester, and commit to apply it as much as possible in order to cover the contents of the curriculum according to the aforementioned times.
- Scheduling and orderly demanding of homework.
- Conduct surprise examinations to enable students to attend school on a regular basis.
- Set the dates for the quarterly exams by offering the university calendar to students.
- Explain to students how he will graduated during the class.
- Determine the textbook and auxiliary books a student may use, provided that the contents of the curriculum are prepared for the purposes of educational programs.

- Make adjustments to how the contents of the curriculum are explained through the results of the questionnaire for previous years to improve curriculum and teaching and student performance.
- Make annual adjustments to the curriculum to a maximum of 10% permitted.

b. Learning strategy: Teaching plays a major role in making the curriculum and the lecture it performs in a way that inspires the student to learn and makes the learning process easy, fast and more enjoyable by:

- Motivate students and highlight students' self-capabilities.
- Using modern methods and presenting the lecture in an interesting way helps attract students' attention to the scientific material through illustrations and links it to practical applications that can be understood by students.
- Engage all students in continuous discussions to tighten the lecture atmosphere.
- Non-discrimination between male and female students when they are included in the various education courses.
- Make laboratory work groups of both sexes.
- Use modern illustrations to enable students to see what may be difficult to communicate.
- Use of direct lecture delivery by a teacher while allowing students to discuss the lecture material.
- Follow up on the students' grades by taking the different exams to find out about the failures some students suffer from and try to overcome them.
- Accountability for absence to ensure consistency in the educational process.
- Strengthen the relationship between the student and the teacher so that it is not restricted to the lecture. Also, provide students with time to review the teacher at other times to clarify any problems that students may experience from not understanding some of the issues that may arise during their studies.
- The focus is on stimulating students' intellectual capacity through appropriate presentations of lectures and practical examples that serve to sharpen the focus and broaden the students' perception.

c. Research strategy:
Teaching Focus: The department will record the research presented by the department's instructors after it is presented to the scientific committee. The researcher will give a presentation explaining the essence of what he will do.
Students' theme: The scientific committees review the level of graduate research presented by teachers to determine the research papers that can be announced to students to begin with. The research is selected and focuses on practical research that can be applied to serve the community or that uses simulation with virtual programs to solve specific problems according to specialization. The committees attempt to reduce or avoid research of a traditional nature. The projects are presented to students, so that work teams are formed of two or more students, and they are distributed according to a plan prepared by the scientific section. The research is then implemented within an agenda adopted by the teacher supervising the research.

Section Axis: In order to meet the precise specializations in the Department's scientific programs, we have begun to facilitate the sending of scholarships and fellowships and granting study licenses to young staff in the College and from both genders to obtain advanced degrees in the precise specializations of the College's programs. The College has also contributed to attracting scientific cadres from outside Iraq by facilitating the promotion of re-appointment applications among the College's staff.

2-2 second: Education goals

Section objectives:

1. Prepare engineers with the technical skills necessary for a successful career in the field of design, application, manufacture, testing, documentation, operation, analysis, development, and supervision of electrical and electronic systems in order to contribute to the overall development and construction boom in the country.
2. Prepare graduates with verbal and written communication skills who are able to participate and collaborate as a team member and have the ability to advance their careers and continue professional developments.
3. To urge graduates to work ethically and in accordance with work traditions, and to encourage them to keep abreast of international developments in their field of specialization and try to transfer them to their community in a way that contributes to the development of the country.
4. Contribute to the provision of scientific and practical services and consultations to all relevant State sectors and departments and the private sector through the Advisory Office and the Engineering Cooperation Mechanism.
5. Contribute to the dissemination and development of engineering knowledge and transfer of the latest developments in the field of electrical and electronic engineering to engineers in various fields of operation through the establishment of continuing education courses and through the dissemination of scientific research in the relevant fields.
6. Participation in the dissemination and development of engineering knowledge and the transmission of the latest developments in engineering.

2.3 III. Section's letter:

The message of the Department of Electrical and Electronic Engineering (EEE) is as follows:

- Provide various high-quality academic programs that meet national standards and adopt engineering education programs in Iraq.
- The graduation of highly qualified engineers to serve the overall renaissance in the country and to be competitive domestically and internationally.
- Specialized consultations and training in electrical and electronic engineering.

2.4 Educational goals of the Department of Electrical and Electronic Engineering and their alignment with the College's and University's mission:

The curricula were prepared in accordance with the goals and mission of the Department, the College and the University. The curricula were prepared based on the curricula of reputable colleges and universities, especially Baghdad University.

Section goals						college message
6	5	4	3	2	1	
	↑				↑	**Education: Provide engineering personnel to meet the country's needs in a manner consistent with the progress made in reconstruction and economic development.**
↑				↑	↑	**Search: Conduct studies and applied research and provide engineering consultancy that would address the basic problems facing society, such as development and reconstruction.**
			↑		↑	leadership: The country provided training for teaching staff by paying attention to the development of postgraduate studies based on quality standards and academic accreditation. Work to provide precise specializations in line with technological and industrial developments.
		↑				**Community service: Develop society by holding training courses and seminars for the public and private sectors using modern scientific methods.**

2-5 years analysis

Strengths:

- The curricula of the department were prepared by benefiting from the curricula and experiences of reputable international and local colleges, such as the British and American universities and the University of Baghdad, and by selecting the scientific and specialized vocabulary that suits society's need to achieve the goals of the department and the characteristics of the graduate.
- The goals of the Department were designed to keep pace with the requirements of the era, which includes the graduation of highly qualified engineers who serve the comprehensive renaissance in our dear country and are capable of competing locally and internationally.
- Despite the department's novelty, it has helped open specialized courses to serve society and keep pace with rapid scientific development. In addition, the college has held specialized scientific seminars in all fields of scientific programs, in the presence of specialists from inside and outside the university and representatives from state departments.
- Strengthen the scientific aspect by attracting qualified individuals to work as lecturers in the department and in modern specializations.
- Benefit from the expertise of professors sent.
- The Department's achievement of a distinguished rating within the National Classification Program in the Ministry of Higher Education and Scientific Research,

which positively affected the performance of the department's staff. The Department obtained a Thank You Book from the Presidency of Thi Qar University.

Weaknesses:

- The shortage of teaching staff in the Department as a result of the travel of three teachers to complete their studies abroad and the use of external lecturers has affected many activities that contribute to the development and implementation of some of the desired goals.
- The lack of postgraduate studies in the department limits the expansion of goals.

Opportunities:

- To work for the return of expatriate scientific talent in order to transfer expertise and contribute to the process of building and progress.
- To identify young scientific talent capable of contributing to the achievement of the Goals.

Risks:

- The number of days off has increased, which affects the implementation of educational and scientific programs and plans, and consequently the output is weak and does not achieve all the goals of the department.
- Power outages are frequent, leading to heavy reliance on diesel generators, which represent a major financial burden for the college and have a negative impact on the educational process.

Chapter III
Students
3.1 Acceptance:

The department shall determine the plan for the next academic year through forms sent by the Ministry of Higher Education and Scientific Research. The forms shall determine the capacity of the colleges and determine future admission plans.

The admission plan is sent to the Central Admissions Department in the Ministry of Education, which is the central agency for distributing students to colleges in Iraqi universities and technical institutes and colleges under the Technical Education Commission. The central distribution of students depends mainly on the average of the final ministerial examination for the sixth preparatory grade, with its various branches (scientific, literary, commercial, industrial). Each college determines the qualifications of students who are qualified to accept in its different departments.

The Central Admission Department performs the distribution of students based on the following factors:

- Adoption of university plans received through determining the number of students absorbed by colleges
- Total grades for advanced students.
- Student selection
- The admission process includes males and females, without exception. Through the numbers of students to be mentioned below, we notice a convergence in the numbers of male and female students.
- The College registers admitted students and distributes them to the scientific departments of their choice according to their grades.

3.2 Student assessment method:
During the student's academic years in college, he is required to pass a number of examinations, which transfer him from one academic year to the next. His graduation and his bachelor's degree in engineering are assessed by:

First: Theoretical and practical study:
The curricula will be presented to students at the beginning of the semester by the teacher of the subject, along with the weekly schedule through which the curriculum will be covered. The teacher will record the dates on which clarification and explanation of the syllabus will be made and the days on which students will be directed to perform homework duties will be specified, along with the daily examination days to enhance the follow-up of students during the academic period. Students will also be informed of the dates of their quarterly and final exams through the presentation of the university calendar.
During the period of study of students in the scientific program during the school years, students are evaluated by:

- Daily examinations.
- The students responded by participating actively in the lecture.
- Follow up on the performance of household duties.
- First and second grade exams.

The above measures are: Students shall collect an assessment score for the annual endeavor, calculated from 40%, 50%, or 60%, depending on the nature of the subject. The grades shall be presented to students before the year-end exams and shall be submitted to the examination committees.

- Final exams are held, and the examination grade is combined with the student's yearly endeavor to reach the total grade of 100%

مقرر مادة النظري فقط				مقرر نظري وعملي				مقرر عملي فقط			
%40	الفصل الأول	%17.5	امتحان الفصل الأول	%50	الفصل الأول	%17.5	نظري	%60	الفصل الأول	%30	التقارير المختبرية والامتحانات المفاجئة والواجبات
		%2.5	التقارير المختبرية والامتحانات المفاجئة والواجبات			%7.5	عملي				
	الفصل الثاني	%17.5	امتحان الفصل الثاني		الفصل الثاني	%17.5	نظري		الفصل الثاني	%30	التقارير المختبرية والامتحانات المفاجئة والواجبات
		%2.5	التقارير المختبرية والامتحانات المفاجئة والواجبات			%7.5	عملي				
%60	الامتحان النهائي			%50	نهاية السنة	%35	نظري	%40	نهاية السنة	امتحان نهاية السنة	
						%15	عملي				
%100	المجموع			%100	المجموع			%100	المجموع		

End-of-school examination:
The students' examination is conducted according to examination schedules and with sealed notebooks handed over to the teacher of the subject after they are coded and the corner of the names is removed from the notebooks so that they can be corrected by the teacher and returned to the examination committee. The committee collects the degree of pursuit with the final examination grade and presents the results to the boards of departments and then to the boards of colleges for discussion. The results are then announced to the students based on the evaluation of each subject as follows:

التقدير	الدرجة
امتياز	100-90
جيد جدا	89-80
جيد	79-70
متوسط	69-60
مقبول	59-50
ضعيف	دون 50

Second: Summer training:
This is in addition to the summer training, which is a prerequisite for students' successful transition from the third to the fourth grades. In addition, students must train next year to ensure their transition to the fourth grade.

Third: Graduation project :
The graduation project is one of the requirements that must be met during the final year of school. Students must complete, discuss, and succeed in the first round. Students are discussed by committees comprising a number of faculty members and according to the specialization of each project.

3.3 Guidance and advice:
Instructors are required to pay attention to the performance and level of students by continuously monitoring their performance, whether through actual participation in discussions

during lectures or through daily or quarterly exams. Follow-up procedures begin by directing students who are lagging behind, identifying their scientific problems, and trying to overcome them in order to improve their performance in an optimal way by directing students and notifying them of their role in the educational process. Students are the important element in the educational process and have a major role in its success, failure, or improvement.

In addition to the role of teachers in this field, the teaching staff in the scientific departments has been assigned the role of educational guide to identify the problems of students in all their forms and to overcome those that can be dealt with. A special book will be prepared for each application, through which it will be followed up by the educational counselor and the student's situation will be followed up on a continuous basis. Problems that students suffer during the study period, which may exceed the possibility of being overcome by the educational counselor, are presented directly by the students to the head of the department or the head of the department, as well as to the dean of the college, represented by the dean of the college, or his assistants, for identification, especially if they are educational problems related to teaching a specific subject or another.

Gifts are given to the top students at the beginning of each school season to serve as an incentive for the rest of the students. In the college, simple assistance is provided to the students of dormitories by providing some of the necessities that help them to live in the dormitory.

3-4 Means of obtaining a certificate:

- A bachelor's degree in engineering is obtained after passing the theoretical and practical tests, and based on the number of units and weekly hours. Students must succeed in the four grades within a period of at least four years. Final examination results for students are received by examination committees in scientific programs. The minimum success is 50%.
- The final examination for theoretical subjects shall be 60%, the first and second grade, and other evaluations during the study period 40%.
- The final examination score for theoretical subjects, the curriculum of which contains practical materials, shall be 50%, the first and second grade and the evaluations during the study period shall be 50%.
- The final examination score for practical subjects shall be 40%, the first and second grade, and evaluations during the study period shall be 60%.
- Students must complete a 30-day summer training period in a department, factory, or company during the summer break between the third and fourth grades. This period is evaluated by the Summer Training Committee through periodic surprise visits, in addition to the evaluation form that is filled out by the trainer.
- The requirements for granting the Bachelor's degree include the student submitting an engineering graduation project during his studies in the fourth grade. Multiple cylinders will be provided to follow up on the completion of the project's paragraphs. A final examination of the student will be conducted by a specialized committee in the scientific section. The overall assessment will be calculated as follows:

40% Project supervisor's evaluation.
20% evaluation of the beacon submitted by the project student by the committee.
40% Final Examination Commission Evaluation.

- The rate of a class shall be calculated by calculating the grade of each class times the number of units, adding all grades and dividing by the number of units for each class. The final student rate shall be calculated by calculating the rates of the four classes, as follows:

¬ 10% for first grade
¬ 20% for second grade
¬ 30% for third grade
¬ 40% for fourth grade

- The system of study in the department is an annual system in the fourth stage, while it is a semester in the first, second and third stages. The study in the department is gradually being transformed into a semester. University orders are issued to graduate for the first round in July and the second round in October.

جدول 3-1: أعداد الطلبة لقسم الهندسة الكهربائية والالكتروني

العام الدراسي	عدد الطلبة												المجموع
	المرحلة الأولى			المرحلة الثانية			المرحلة الثالثة			المرحلة الرابعة			
	الذكور	الإناث	المجموع	الذكور	الإناث	المجموع	الذكور	الإناث	المجموع	الذكور	الإناث	المجموع	
2009-2008	22	21	43	-	-	-	-	-	-	-	-	-	43
2010-2009	10	20	30	21	20	41	-	-	-	-	-	-	71
2011-2010	16	21	37	12	33	45	21	19	40	-	-	-	122
2012-2011	24	31	55	28	32	60	14	32	46	21	19	40	201
2013-2012	34	37	71	29	28	57	26	32	58	11	32	43	229
2014-2013	21	25	46	32	32	64	28	33	61	25	34	59	230
2015-2014	17	19	36	18	26	44	32	34	66	23	35	58	204
2016-2015	13	16	29	16	15	31	17	24	41	30	30	60	161
2017-2016	2	15	17	12	24	36	15	26	41	17	20	37	131
2018-2017	21	17	38	2	13	15	13	24	37	15	27	42	132
2019-2018	27	24	51	10	15	25	4	11	15	15	27	42	133

3-5 Use of internal and external standards by the College in program design and implementation:

- The qualifications of students admitted to the department are determined by the central admission plan, which requires that students graduate from the preparatory school, the scientific department. The qualification rate is determined by the admission plan, the capacity of the college, and the students' desire to apply for the college.
- The curriculum articles were prepared in accordance with the standards adopted by engineering colleges, which depend on the specifications of engineering college

graduates. The number of course units during the school years ranges from 140 to 160. The department's curriculum was designed to include 156 units, which are given through 3,540 school hours. The curricula are updated in accordance with developments in the world in the field of specialization.

- Keep up with the educational process using modern methods, such as simulation software to design virtual experiences on computers and projectors (Data Show) to use as a way to present the course when needed.
- The department conducts scientific visits to industrial facilities in the province to inform students about work at institutions and facilities and to see the role of the engineer after he graduates in managing and sustaining work and production.

3-6 Learning and its results:

The learning process that students go through during their school years develops their personality and is both educational and educational. We notice the changes that have taken place in students since they entered the college and until they graduate from it, by evaluating their behavior and general performance, and ending up with an engineer who can be relied upon and whose abilities are trusted.

The teaching staff, through their graduations, seeks to build bridges between students and teachers through education, a relationship through advice and guidance, a relationship through guidance and guidance, and a relationship with a colleague at work to prepare him to deal with his subordinates when he graduates and joins an institution, company or department.

3-7 Learning outcomes:

Learning is a process in which teachers and students work together under the auspices and support of the administration of the college and its working units to produce results worthy of the amount of effort exerted by everyone. These outputs are exemplified by the students' results at the end of the school year exams, through which students are moved to the next grade or graduated to field work in factories, departments or the private sector. Some students may lag behind in moving on to the next stages with their classmates. The second round exams will be held, allowing the students to move on to the next stages. In spite of these measures, students may suffer from a failure to achieve good results in the second round exams. Therefore, the student will remain in his class according to instructions and regulations.

The final product is the graduation of engineers within the specifications that were installed in the college's goals and mission. Everyone's efforts to obtain the best product are based on achieving the standards adopted by the college, enabling the graduate to cover all aspects of the academic curriculum for theoretical and practical studies and to keep abreast of the scientific movement while joining work in various sectors.

3-8 Students' opinion:

A questionnaire for students is conducted to assess the performance of the educational process and to obtain the views of the students. It is used to evaluate performance and to develop appropriate plans and programs. The results of the questionnaire are studied and the following are drafted:

- Study the possibility of making adjustments to the curricula and the mechanism used in this area.
- Instruct teaching staff when they diagnose a weakness in the teaching process and not because of the curriculum.

3-9 Years analysis

Strengths:

- As a result of the technological revolution taking place in the world, the department is attracting many students who want to be engineers and work in engineering specializations.
- The Graduate Engineer's competence through impressions received by the college encouraged many to apply to the departments of the college.
- The department's infrastructure is good for securing a suitable atmosphere for studying and learning through classrooms, modern laboratories, and the scientific library. This is in addition to the availability of modern educational methods.
- Qualified teaching staff and young staff.
- The seriousness of the students in dealing with the lectures and also their good presence.
- The department is keen to hold scientific and recreational trips during the school year. There are also receptions for new students and graduation parties for fourth-graders.
- Establishment of a psychological counseling and educational guidance unit.
- Create a unit to monitor graduates and seek job opportunities.
- Opening of a special boarding department for engineering students.
- Provide good entertainment services to students such as a well-served student club.
- Having a good library in college.
- Provides print and copy services.
- Provision of modern classroom seats.
- Maintain classroom instruction (blackboards and Data show).

Weaknesses:

- Admission without a desire to study engineering in some, and they are accepted because of the total grades that do not qualify them to the medical colleges' branches. This has prompted some of them to transfer to parallel schools, private colleges, or medical institutes, because their appointment is centralized annually.
- The shortage of teaching and staff in the Department makes it necessary to assign them with relatively high grades. This makes their free time difficult and limits the possibility of developing some scientific aspects.
- The continuous change in the instructions and the laws that govern the students disturbs the educational process, limits the planning of the departments in providing the necessary requirements, and even disturbs the student's mind while studying.
- No reading room.
- No section library available.
- The inappropriate classroom design created an echo that minimized the scholarly value of the lecture.
- Inappropriate cooling system design and high system acoustics affect lecture flow.

Opportunities:

- Establish consistent contexts and instructions and remove all exceptions.
- Opening of a new and large dormitory for female students.
- The approval of high differentiated degrees for admission to engineering studies in subjects (English, mathematics, and physics), as well as the consideration of gender when admission to each university discipline.
- The appointment of the three first graduates of each department shall serve as an incentive for competition among students without the need for ministerial orders to appoint. The powers of appointment shall be given to the college, through the university, and in coordination with the ministry.
- Including students in the financial grant granted to them by the Ministry of Higher Education will boost students' motivation to learn, encourage commitment to work and earnestness in educational achievement, and alleviate the financial burden on their families.

Risks:

Graduate students are frustrated by the lack of opportunities to hire or work in companies, even for top students. This makes them study aimlessly and without feeling the benefit of competing for a better future.

Chapter 4
Curriculum
1-4 Four-stage curricula
The tables below show the approved curricula and all levels of education

جدول 1-4 المقررات الدراسية للمرحلة الأولى

التسلسل	الرمز	المادة: الفصل الدراسي الاول	المادة: الفصل الدراسي الثاني	الساعات الدراسية والوحدات						
				الفصل الدراسي الأول			الفصل الدراسي الثاني			عدد الوحدات
				نظري	تطبيقي	عملي	نظري	تطبيقي	عملي	
1	EG101	الرياضيات I	الرياضيات II	3	1	–	3	1	–	6
2	EE107	أسس الهندسة الكهربائية I	أسس الهندسة الكهربائية II	3	1	–	3	1	–	6
3	EE108	إلكترونيك الحالة الصلبةI	إلكترونيك الحالة الصلبةII	2	1	–	2	1	–	4
4	EE104	مبادئ الهندسة الميكانيكية I	مبادئ الهندسة الميكانيكية II	2	–	1	2	–	1	5
5	EE105	الرسم الهندسي I	الرسم الهندسي II	–	1	2	–	1	2	2
6	EE106	مختبر الهندسة الكهربائية I	مختبر الهندسة الكهربائية II	–	1	2	–	1	2	2
7	EG102	مبادئ علوم الحاسبات I	مبادئ علوم الحاسبات II	2	1	2	2	1	2	6
8	EG103	اللغة العربية	اللغة الانكليزية	2	–	–	2	–	–	4
9	EE109	التقنيات الرقمية I	التقنيات الرقمية II	2	–	1	2	–	1	5
10	EE110	الورش الهندسية I	الورش الهندسية II	–	–	2	–	–	2	2
		المجموع		16	6	10	6	10	10	42
		عدد الساعات الأسبوعية		32			32			

جدول 2- 4 المقررات الدراسية للمرحلة الثانية

التسلسل	الرمز	المادة: الفصل الدراسي الاول	المادة: الفصل الدراسي الثاني	الساعات الدراسية والوحدات						
				الفصل الدراسي الأول			الفصل الدراسي الثاني			عدد الوحدات
				نظري	تطبيقي	عملي	نظري	تطبيقي	عملي	
1	EG201	الرياضيات III	الرياضيات IV	3	1	–	3	1	–	6
2	EE208	الدوائر الكهربائيةI	الدوائر الكهربائيةII	3	–	–	3	–	–	6
3	EE207	الكترونيك I	الكترونيك II	3	1	–	2	1	–	4
4	EE204	المكائن الكهربائية I	المكائن الكهربائية II	2	1	–	2	1	–	4
5	EE205	الطرق العددية	–	1	1	–	1	1	–	2
6	EE206	نظرية المجالات الكهرومغناطيسيةI	نظرية المجالات الكهرومغناطيسيةII	2	1	–	2	1	–	4
7	EE209	مختبر الهندسة الكهربائية	مختبر الهندسة الكهربائية	–	2	4	–	2	4	4
8	EG203	حقوق الإنسان	مبادئ الديمقراطية	1	–	–	1	–	–	2
9	EG202	برمجة الحاسباتI	برمجة الحاسباتII	1	1	2	1	1	2	4
المجموع				16	8	6	16	6	8	38
عدد الساعات الأسبوعية				30			30			

جدول 3-4 المقررات الدراسية للمرحلة الثالثة

التسلسل	الرمز	المادة: الفصل الدراسي الاول	المادة: الفصل الدراسي الثاني	الساعات الدراسية والوحدات								
				الفصل الدراسي الأول			الفصل الدراسي الثاني			عدد الوحدات
				نظري	تطبيقي	عملي	نظري	تطبيقي	عملي	
1	EE301	الهوائيات والإنتشار I	الهوائيات والإنتشار II	3	–	–	3	–	–	6
2	EE302	الإلكترونيك III	الإلكترونيك IV	3	1	–	3	1	–	6
3	EE303	تحليل نظم I	تحليل نظم II	2	1	–	2	1	–	4
4	EE304	القدرة الكهربائية I	القدرة الكهربائية II	2	1	–	2	1	–	4
5	EE305	المكائن الكهربائية III	المكائن الكهربائية IV	2	1	–	2	1	–	4
6	EE306	الإتصالات والضوضاء I	الإتصالات والضوضاء II	3	1	–	3	1	–	6
7	EE307	مختبر الإلكترونيك والمكائن I	مختبر الإلكترونيك والمكائن II	–	2	4	–	2	4	4
8	EE308	معمارية الحاسبة ونظم التشغيل	–	2	1	–	–	–	–	2
9	EE309	–	اقتصاد هندسي	–	–		2	1		2
			المجموع	17	8	4	17	8	4	38
			عدد الساعات الأسبوعية	29			29			

جدول 4-4 المقررات الدراسية للمرحلة الرابعة

التسلسل	الرمز	المادة	الساعات الدراسية والوحدات								
			الفصل الدراسي الأول			الفصل الدراسي الثاني			عدد الوحدات
			نظري	تطبيقي	عملي	نظري	تطبيقي	عملي	
1	EE407	السيطرة	3	–	–	3	–	–	6
2	EE402	المشروع الهندسي	1	–	2	1	–	2	4
3	EE403	الكترونيك III	3	–	–	3	–	–	6
4	EE404	الإتصالات II	3	1	–	3	1	–	6
5	EE405	القدرة المتقدمة	2	1	–	2	1	–	4
6	EE406	المكائن والكترونيك القدرة	2	–	–	2	–	–	4
7	EE407	معالجات دقيقة	2	1	–	2	1	–	4
8	EE408	مختبر الإلكترونيك والسيطرة والمكائن والكترونيك القدرة	–	–	6	–	–	6	6
المجموع			16	3	8	16	3	8	38
عدد الساعات الأسبوعية			27			27			

جدول 4-5: عدد الساعات الدراسية لكل منهج لكافة المراحل الدراسية

نوع الساعة الدراسية	الصف الأول	الصف الثاني	الصف الثالث	الصف الرابع	المجموع	
عدد الساعات النظري/أسبوع	16	16	17	16	65	118
عدد الساعات التطبيقي/أسبوع	6	8	8	3	25	
عدد الساعات العملي/أسبوع	10	6	4	8	28	
عدد الوحدات	42	38	38	38	156	

The syllabus of the Department and of all classes summarizes in table 4.5 the number of hours of study and the number of units. The synopsis shows the Department's commitment to the proportions pertaining to the requirements of study in engineering colleges.

Total hours (118) x 30 = 3540 hours Total number of units 156

4-2 Curricula and their conformity with the objectives of the Section:

المرحلة	الرمز	المادة	اهداف القسم					
			1	2	3	4	5	6
الاولى	EG101	الرياضيات I + II	↑					
	EE107	أسس الهندسة الكهربائية I + II	↑				↑	
	EE108	إلكترونيك الحالة الصلبة I + II	↑				↑	
	EE104	مبادئ الهندسة الميكانيكية I + II	↑					
	EE105	الرسم الهندسي I + II	↑					
	EE106	مختبر الهندسة الكهربائية I + II	↑	↑				
	EG102	مبادئ علوم الحاسبات I + II	↑	↑			↑	
	EG103	حقوق الإنسان		↑	↑			
	EE109	التقنيات الرقمية I + II	↑	↑				
	EE110	الورش الهندسية I + II	↑	↑				
الثانية	EG201	الرياضيات III +IV	↑					
	EE208	الدوائر الكهربائية I +II	↑					
	EE207	الكترونيك I +II	↑					
	EE204	المكائن الكهربائية I +II	↑					
	EE205	الطرق العددية	↑					
	EE206	المجالات الكهرومغناطيسيةI +II	↑					
	EE209	مختبر الهندسة الكهربائية	↑	↑				
	EG203	مبادئ الديمقراطية وحقوق الإنسان		↑				↑
	EG202	برمجة الحاسبات I +II	↑	↑			↑	
الثالثة	EE301	الهوائيات والإنتشار	↑					
	EE302	الإلكترونيك III	↑					
	EE303	تحليل نظم	↑					
	EE304	القدرة الكهربائية I	↑			↑		
	EE305	المكائن الكهربائية III	↑			↑		
	EE306	الإتصالات والضوضاء	↑			↑		
	EE307	مختبر الإلكترونيك والمكائن		↑		↑		
	EE308	معمارية الحاسبة ونظم التشغيل	↑			↑		
	EE309	اقتصاد هندسي		↑				

المرحلة	الرمز	المادة	اهداف القسم					
			1	2	3	4	5	6
الرابعة	EE407	السيطرة	↑					
	EE402	المشروع الهندسي		↑				
	EE403	الكترونيك IV	↑					
	EE404	الإتصالات II	↑					
	EE405	القدرة المتقدمة	↑					
	EE406	المكائن والكترونيك القدرة	↑					
	EE407	معالجات دقيقة	↑					
	EE408	مختبر الإلكترونيك والسيطرة والمكائن والكترونيك القدرة		↑				

4-3 Method of review of educational programs and curricula:

At the end of each school year, the scientific departments, under the supervision of the Division of Quality Assurance and University Performance, conduct several questionnaire forms, which are discussed in chapter III.

- Prepare statistics on the grades that students obtained for each course, including the grade of pursuit, final exam and final grade statistics.
- Data on course statistics are being studied to identify failures and weaknesses, whether the success rates are too low or large, to properly assess them and to address weaknesses to avoid them in the coming school year.
- The results of the questionnaire, statistics, and study of failures are presented by obtaining different data and intersecting them with the results of the students. The educational process will be optimized for the coming year through:
- Point out the negative conditions of teaching and guide it in a way that improves university performance for the coming year.
- Instructing another course if the instructor has already been directed and the reforms that were decided by the scientific committees, the departmental councils, or the college council have not been implemented.
- Updating the curriculum in accordance with the needs of society and the developments taking place with modern technology in the departments.

4-4 Years analysis

Strengths:

- The curricula were prepared using the help of the courses offered by the corresponding departments in reputable universities, such as the American and British universities, and prestigious Iraqi universities, such as the University of Baghdad.
- The modernization of curricula is being considered in accordance with developments in the world in the field of the competence of scientific departments. Studies are being submitted by departments to make the necessary modifications to the curricula and for every four years of study.
- The learning process and learning methods coincide with the availability of modern projectors. Data Show projectors were used instead of the standard blackboard, and a number of smart blackboards were provided to be used as a way to present the curriculum. The teaching methods used are being considered to find more modern teaching methods that help students understand.
- New virtualization software is used by designing virtual reality experiments as well as traditional laboratory testing.
- Emphasize that most graduation projects for fourth-graders are practical in nature and that they are as far as possible removed from projects with a theoretical aspect.
- Wireless Internet service is available in all College facilities, allowing for faster communication and information exchange (scientific and administrative).
- The development of the Iraqi Virtual Library Service has provided many solid scientific resources.

Weaknesses:

- The delayed acceptance of first-graders prevents some vocabulary from being completed.
- Frequent interruptions also lead to non-completion of the curricula of other levels.
- Lack of teaching staff limits maneuverability in assignments assigned to instructors.

Opportunities:

- The ministry's directives are aimed at modernizing curricula and pushing for changing the school's annual system to that of curricula.

Risks:

- The inability to develop laboratories due to the difficult economic situation.
- The industrial reality has not kept pace with modern technological developments, which has reduced the incentive for scientific departments to develop their curricula, making them impossible to apply in practice.

Chapter V
Teaching staff
5-1 Teaching staff of the Electrical and Electronic Engineering Section:

جدول 5-1: اسماء التدريسيين في القسم وشهاداتهم والقابهم العلمية وتخصصاتهم

ت	الاسم الثلاثي	الشهادة	اللقب العلمي	التخصص العام	التخصص الدقيق
1	عدنان علاوي فتيت	دكتوراه	مدرس	كهرباء	قدرة ومكائن
2	علياء محسن مناتي	دكتوراه	مدرس	سيطرة ونظم	ميكاترونكس
3	حسين عبد المحسن كاظم	دكتوراه	أستاذ مساعد	كهرباء	اتصالات
4	عبدالغفار سويلم مهوس	ماجستير	أستاذ مساعد	الكترونيك	الكترونيك
5	عبدالله صيوان مجلي	ماجستير	مدرس	علوم تطبيقية	تكنولوجيا ليزر
6	امين شريف غازي	دكتوراه	مدرس	ألكترونيك وإتصالات	اتصالات
7	مصطفى جميل حميد	ماجستير	مدرس مساعد	كهرباء	قدرة ومكائن
8	احمد كريم عبد محمد	ماجستير	مدرس	كهرباء	الكترونيك وأتصالات
9	حسين ناصر وزير مخلص	دكتوراه	مدرس	كهرباء	اتصالات
10	احمد عبد الهادي فاضل	دكتوراه	مدرس	كهرباء	اتصالات
11	حسام فيصل حمود	دكتوراه	مدرس	كهرباء	سيطرة وحاسبات
12	أيمن ناصح سلمان جاسم	ماجستير	مدرس مساعد	كهرباء	الكترونيك وأتصالات
13	حيدر عبد الحسن عبد الرحيم	ماجستير	مدرس مساعد	كهرباء	قدرة و مكائن
14	وليد جبر حسن	دكتوراه	مدرس	كهرباء	قدرة و مكائن
15	علي كريم عبد الرزاق	ماجستير	مدرس	الكترونيك	الكترونيك
16	وليد عبد الرزاق	ماجستير	مدرس مساعد	كهرباء	قدرة و مكائن
17	فالح هادي عبد الحسن	ماجستير	مدرس مساعد	علوم حاسبات	تقنية معلومات
18	علي سلام كاظم	ماجستير	مدرس مساعد	كهرباء	الكترونيات القدرة
19	حيدر فاضل عباس	ماجستير	مدرس مساعد	كهرباء	قدرة و مكائن

The yellow fields are for certified teachers or other reasons.

5-2. Numbers, diplomas and experience of teachers:
Table 1.5 shows that the number of teachers in Section 19 is only 8 Ph.D. and 4 Ph.D.

5.3. Developing the capacity of teachers:
Many teachers participated in various training and development courses.

5.4 Ratio of students to professors of various degrees and degrees:
The following table shows the ratio of the number of students to the number of teachers and the academic year 2018-2019 .

كلية الهندسة	اللقب العلمي	دكتوراه			ماجستير			إجمالي القسم/ الفرع			عدد الطلبة القسم	نسبة التدريسيين إلى الطلبة
		ذكور	إناث	المجموع	ذكور	إناث	المجموع	ذكور	إناث	المجموع		
قسم الهندسة الكهربائية والالكترونية	أستاذ										133	1:10
	أستاذ مساعد	1		1	1		1	2		2		
	مدرس	6	1	7	3		3	9	1	10		
	مدرس مساعد				7		7	7		7		
	المجموع			8	10			17	1	19		

5-5 Research activity:
The Section requests teachers, when they begin to register their research and present Smener to the Scientific Committee to explain the general framework of the research plan. The members of the Committee deliberate with the researcher on the subject and observations on the research plan are sent to the School's Dean for official registration of the research. The department also has a number of resources that assist in the educational and research process, such as internet service and personal computers. In addition, it has modern teaching aids, such as modern projectors and others, in addition to a library at the college that contains most modern resources. Despite these limitations, the teaching staff is striving to follow up on the research aspect, as well as to follow up on projects that graduate students in the fourth grade. These projects have a practical and research aspect to be accomplished by students under the supervision of the teacher, as many of these research projects have been completed.

Teaching staff are evaluated annually by department heads according to special models sent to colleges by the University of Dhi Qar. These models are then circulated to universities by the Ministry of Education, Higher Education, and Scientific Research. The form includes the role of teachers during a school year, and the evaluation of their professional and research performance, as well as other aspects through which it is possible to identify the strengths and weaknesses of working to improve the teaching work in a way that improves performance and thus seeks to raise the process of learning and scientific research in the college. This works to strengthen the position of the colleges compared to the world famous colleges and universities.

5-6 Years analysis

Strengths:

- The recent support provided to higher education employees has helped attract many teachers who left Iraq in the past for economic reasons. The average salary of employees, whether administrative, technical or teaching staff, is comparable to what work provides in other countries.
- The development of teaching staff is done by emphasizing the aspect of scientific research and supervising graduate students, even if this is within the corresponding college departments.
- The College seeks to provide all the facilities for the enrollment of its staff with master's degrees to obtain a doctorate in the specializations of departments from reputable international universities.
- A library of modern and specialized books.

Weaknesses:

- Limited number of research completed by the teachers in the department.
- The lack of post-graduate studies in the department also reduces the dissemination of research that can be conducted in collaboration with graduate students.
- Iraqi researchers' lack of interest in publishing in well-established and documented scientific journals that enter such statistics.
- No college research center.

Opportunities:

- Empower the Academy to select competent administrative or technical staff in the appointment.
- Assigning top graduates to departments and profiting from them in laboratories.

Risks:

- Enrollment of incompetent cadres, whether administrative, technical or teaching staff.
- Reduction in the budget, especially in the paragraphs concerning the use of information, support for publication research and census-taking, and other matters related to the development of the research process.

Chapter VI
Laboratories and educational facilities

6-1 Level of furnishing of rooms and laboratories:
We pointed out that the college was established in 2004, and the first course was accepted in the 2004-2005 academic year. Successive university departments and the dean of the college sought to secure suitable buildings for the departments. Since 2004, the college began building buildings to be allocated for the department and department.
The building allocated for the electricity department includes classrooms, specialized laboratories, and classrooms furnished with modern and suitable furniture that meets the requirements of the educational process in terms of quantity, quality, and location. The library has a separate building that includes a reading room. Another hall for conferences and seminars is being completed, and it will be furnished with modern, suitable furniture to meet the needs.

6-2 Average area of training rooms per student:
The Section has classrooms and the following table shows:

ت	القسم		المساحة م^2	عدد الطلبة	المساحة الكلية م^2	عدد الطلبة الكلي	معدل المساحة م^2/طالب
3	قسم الهندسة الكهربائية والالكترونية	الصف الأول	86.32	51	367.84	133	2.77
		الصف الثاني	86.32	25			
		الصف الثالث	83	15			
		الصف الرابع	112.2	42			

6-3 Proportion of computers in the department and college and the number of books in the library per student:
The organizational structure of the College and the scientific departments will show the numbers of computers in the Academy, including the units associated with it, in addition to what is available in the Academy and the scientific departments. As shown in the following table:

القسم	عدد الطلبة	عدد أجهزة الكومبيوتر المخصصة لكل			عدد الكتب		النسبة	
		تدريسي	للطلبة	أخرى	تعليم مجاني	مكتبة	كومبيوتر لكل طالب	كتاب لكل طالب
قسم الهندسة الكهربائية والالكترونية	133	10	30	2	1776		0.18	8

6-4 Student Laboratories:

The department has several specialized laboratories:

- Electrical Engineering Foundation Laboratory (first phase).
- Electronic and Communications Laboratory.
- Logical design and microprocessor lab.
- Computer lab.
- Machine laboratory.

There are also several laboratories in the College that serve the educational process in the Department as well. They are as follows.

- Engineering workshops.
- Engineering protocol.

6-5 Laboratory space and average laboratory space per student:

The following table shows the laboratories for students by location and number of students.

المكان		المساحة م^2	المســــــاحة الكلية م^2	عدد الطلبة الكلي	معدل المساحة م^2/طالب
قسم الهندسة الكهربائية والالكترونية	الكهربائية والقياسات	86.3	454.1	133	3.44
	التقنيـــات الرقميـــة والمســـيطر الـــدقيق والمعالجات	86.3			
	الحاسبات والسيطرة	112.2			
	الإلكترونيـــــــــك والاتصالات	86.3			
	المكائن الكهربائية	83			

6-6 Hardware:

The Department has modern laboratory equipment, which covers many practical applications. It can be noted that the available equipment covers the College's need by 70%. The Department aims to provide other advanced devices, such as the Electrical Power Laboratory and the Control Laboratory, in addition to covering the shortage of existing laboratories. It also seeks to strengthen the laboratories with modern equipment, as required by the updates and modifications to the scientific curricula, in keeping with the evolution of society.

6-7 Years analysis

Strengths:

- The college was recently established and is considered one of the colleges that specialize in engineering specializations (civil, mechanical, electricity, biomedical, oil), which the country needs in the present and future due to its comprehensive development.
- Opening new departments in college has effectively supported the labor market
- The construction of a new building for the college and the department, which helped to create a safe and healthy environment to ensure high quality education.
- Establishment of a cafeteria for students and teachers in the department that provides services such as food, drink, and a rest area for students.
- Most of the teaching staff are young specialized staff members who specialize in science departments.
- Provide computers in appropriate numbers for teaching staff.

- A library of modern and specialized books.
- Facilitate the procedures for obtaining study leave for college members.
- The presence of modern laboratories supported by new and advanced laboratory equipment.
- The presence of sports and recreational activities and facilities (activities of the Lattakia) for students and teachers who have a role in promoting interaction between student and teacher.
- Internet service to browse and exchange information.
- The directive of the senior management in the college to develop green spaces and department facilities.

Weaknesses:

- The lack of teaching staff, which is reflected in one way or another in other fields of learning, where teachers are assigned to teach more school hours than their assigned grade.
- The lack of engineering staff in the division.
- No graduate studies.
- No specialized scientific library and reading rooms .
- The lack of support for students in projects from specialized laboratories and external relations with the relevant departments that have a role in the execution of student projects.

Opportunities:

- Having an efficient maintenance unit at the College in cooperation with lab officials helps solve technical problems and update software.
- The ministry supports the improvement of laboratory quality in terms of first aid, fire extinguishers, guidance panels and documentation.

Risks:

- The limited budget allocated for the development of scientific labs.
- Fewer permanent appointments from holders of bachelor's degrees.

Chapter VII
Financial matters

The Department is attached to the Engineering College, which has a separate Mathematical Division. It has the powers to spend, purchase and secure the necessary requirements, in accordance with the powers granted to the Dean of the Faculties.
The college is drawing up a plan in determining its need for the annual budget and requesting the university presidency to secure these allocations in accordance with the needs of the college and the scientific departments.
The university is working to distribute financial allocations to the colleges according to what they have available, taking into consideration the need for the young colleges to cover the various budget periods.
A procurement committee shall be formed every six months with the participation of a financial member. It shall be responsible for buying and securing the needs of the college and scientific departments in all materials, as required by the departments and the dean of the college, and within the financial budget paragraphs available from them.

7-1 Proportion of expenditure on scientific research:
There is a noticeable lack of scientific research in exchange clauses, which have a negative impact on the development of scientific research, especially in the field of researchers' participation in the dissemination of research, or in attending scientific conferences. Teachers are responsible for contributing the most to ensure the publication of research in scientific journals or conferences.

7-2. Level of expenditure on the development of teachers' abilities:
In order to develop teaching abilities, financial resources allocated to this aspect, including contributions to conferences and developmental courses, should be supported. These paragraphs are still poor compared to other budget paragraphs.
The College shall pay the periodic magazine subscriptions subscribed by the College as the balance is available.

7-3 Years analysis
Strengths:

- Salaries of employees, teachers, and external lecturers are secured from the annual budget.
- The college maintains a good academic standard because of the financial aspect of its work, which is experienced by the colleges whose method of study is based on the amount of money students pay to secure their studies, which leads to a low scientific level.
- The increases in the salaries of teaching staff and staff in the college have spurred many staff members, who in previous years suffered from a lack of financial returns to seek employment at universities outside the country, to return to work at Iraqi universities. A number of qualified cadres who had previously left Iraq joined the

college, and this has contributed to reducing the departure of qualified cadres from the country.

- The Ministry is responsible for providing all the students' needs, such as equipment, materials and furniture, for the educational process.
- Facilitate nomination and dispatch procedures to develop teaching staff and staff according to the allocated budget.

Weaknesses:

- The lack of financial allocations in some important areas, including scientific research, and allocations for buying modern laboratory equipment in order to keep up with the developments of the times.
- Lack of annual budget for scientific research and graduation projects for students.
- The monthly stipend for students was suspended, which impacted the incentive for students to continue their studies and excel.

Opportunities:

- Ease of securing financial resources when available to meet the College's requirements for other equipment and materials.
- Activate the joint cooperation mechanism to provide financial resources to help cover some expenses for which there is no budget or limited budget.
- An engineering consultancy office at the College provides an opportunity for all sections to work, thereby contributing to the financial resources of the Section.
- The opening and expansion of the evening study in the department provided a good financial balance to cover the various expenses.

Risks:

- The college relies entirely on the financial allocations provided by the ministry for all the paragraphs. If these allocations are not available, the work related to financial matters will stop because there is no other self-sufficient source.
- The college is unable to contract administrative, technical, or teaching staff to meet its needs due to the lack of self-financing that can be used to cover payroll expenses.
- The increase in evening tuition fees has negatively affected the number of students who wish to complete their studies in the department.