Rules for Managing Methods of Implementation and Evaluation of Graduation Projects in Engineering Departments

Abstract: Graduation projects are the final product of what university students have acquired from the sciences and knowledge during their academic period of study during the academic years, which range in most Iraqi universities between 4 to 5 years in engineering colleges. In the last year during which the student to implement the engineering graduation project, which begins by choosing the subject or problem that will be dealt with as a research title and ends with the development of all stages of implementation. And the importance of graduation projects for students of engineering departments to study the bachelor's degree and the role it plays in participating effectively to achieve the goals of development and development of Iraq during this period, which suffers from many problems and most important infrastructure and urban planning, Based on the importance of these projects and the need to guide them to solve the real problems in the Iraqi society in government departments and institutions and the private and private sector, this study has been prepared to include the rules of management of the methods of implementing graduation projects in the engineering departments and assess their relevance to the objectives of development plans and advancement of Iraq, to benefit from the results of those projects. The methodology of this study was based on the collection, analysis and discussion of the information on academic and office methods and linking them to the opinions of the applied engineers in the field of work, in addition to many experiences and studies of neighboring countries and countries of the world from previous literature, which included articles, research and scientific reports as well as a questionnaire to collect the most important proposals for preparing And the development of administrative rules at the academic and practical levels to ensure successful implementation and evaluation to achieve the desired results. During this research, a detailed list of the method of implementation of the project from the beginning of the selection of the address until the final delivery and completion of the requirements and included the study forms in all aspects of implementation and the writing system in all its details. In terms of evaluation of graduation projects, there is no fixed standards for all departments in engineering colleges as well as the division of the degree of the project, but depends on the opinion of the scientific committee and the project committee in each section in the way of evaluation of the graduation project and division of degree between the supervisor and the discussion committee. In the previous research, standard and standard criteria for evaluation were established by the supervisor and the discussion committee, which ensures the right of the student to obtain the degree that he deserves and which should be circulated to all departments in all faculties in Iraq.

Keywords: Graduation Projects, Implementation of Graduation Project, Evaluation of Graduation Project, Engineering Education

1. Introduction

Graduation project is the educational outcome of the methodology and directed to the general specialization first (or special in some sections) for the student to obtain a degree Bachelor of Science in the departments of engineering colleges, whether those sections according to the system annual or quarterly. The graduation project is an independent work carried out by each student in an independent and independent manner, which is carried out according to a specific timetable of one full academic year (or
two semesters) during which the student prepares a research / project on one of the main subject areas of study. One of its professors, and is presented in its final form printed, and is discussed by a committee formed by the Council of the Department, in which the supervisor is a member. This course is of great importance in the labor market. All the faculties in its various engineering departments and the other in all countries of the world are working on the continuous development of their plans and educational approaches and methods of managing them to implement and evaluate the graduation projects of the students and considered them as one of the most important sources of qualitative and especially in Iraq, which needs to be promoted by his citizens, that is achieved by making engineering graduation projects vital projects, whether effective planning or design or in the form of specialized study in the field of what is looking for finding a solution to a specific problem through diagnosis and study and find appropriate solutions to them. It is necessary to give legal value to the project graduation from the rest of the courses because it has a great impact on the personality of the student, which is the direct executor of the project is acquired through the engineering project self-confidence and self-reliance through access to the information needed during the period of work in the graduation project through the enhancement of its ability to scientific research in a single and independent and to demonstrate its mental and intellectual potential and to express it and show its vision. On the other hand, the graduation project in the engineering departments allows students to show them through the practical application embodied by the implementation process to know the extent Acquired theoretical knowledge that represents the cognitive outcome of all courses during his long study trip in his field of specialization. Therefore, the role and importance of graduation projects in the engineering departments should be shown. It is necessary to show double interest in the last year of the study before graduation through the development of administrative rules that will help to improve the level of implementation of these projects by setting several points necessary to evaluate these projects according to plans A well thought out strategy during the project's duration of one year, along with other courses. On the other hand, it is necessary for the scientific section to examine the scientific outputs of the graduation projects through periodic and continuous evaluation to know their potential to achieve the desired goals and to identify the strengths and weaknesses in the performance of their tasks, and to provide the labor market with the necessary expertise and skills are renewed and growing and able to solve problems Which suffers from Iraq in terms of engineering aspects.

2. Research Problem
The specialization of the Engineering Departments in Engineering Education in Iraq is one of the important scientific and academic disciplines. The number of graduates has expanded to a large number of public and private universities after 2003. The progress of countries and their development is measured through the outputs of technological and scientific and other outputs related to engineering specialties The first is a standard reference for the implementation of graduation projects according to a specific timetable, and second, to enable the scientific sections to evaluate and evaluate graduation projects and thus evaluate the outputs of graduate students and to identify their experiences and knowledge in the application Practical, find out how much of the goals of engineering education from the opening of these colleges in all scientific departments starting, in order to develop these outputs in the future. The lack of these two rules, ie the rules of implementation and evaluation of graduation projects, is the problem of this study.

3. The Importance Of Research
The importance of this study comes from the lack of research that dealt with the criteria for the implementation and evaluation of engineering graduation projects in Iraq, so it is expected that this research will contribute to the following:
1. Establishing standard scientific rules for those concerned with the engineering education of all the engineering colleges in Iraq, with their branches and departments, as a standard reference for the implementation and evaluation of undergraduate graduate projects in the various disciplines of engineering education.
2. Assisting students in organizing the implementation of graduation projects according to a time scale specified in paragraphs on the one hand, and on the other hand, knowing the requirements of producing their graduation projects and evaluating them periodically through the evaluation points they receive periodically.

4. Research Goals
This study aims at building rules for the management of the methods of implementation and evaluation of engineering graduation projects to be considered and approved by the department
of scientific departments through the committee responsible for projects graduate students in Iraqi universities during the last academic year of the study period. To achieve these goals, the following questions were asked:
1. What are the rules for the implementation of graduate engineering projects (at the undergraduate level) in Iraqi universities?
2. What are the criteria for evaluation and evaluation of engineering graduation projects and the degree to which these standards are available in Iraqi universities?

5. Research limits
1. In terms of subject the research discusses the study methods of implementation and evaluation of engineering graduation projects in Iraqi universities.
2. In terms of geographical scope, the research focuses on the boundaries of the engineering faculties with their departments and engineering branches, which award bachelor's degrees in Iraq.

6. Research Methodology
The study was based on the following scientific research tools:
1. Studies and previous academic publications in addition to data, documents and university reports through the guidance of the relevant development results and recommendations.
2. Questionnaire: A questionnaire was designed for relevant categories, including labor market owners, academics, engineers and engineering students in the graduation year in engineering colleges and universities in Iraq. These included Babil University (Engineering College and Materials Engineering College), Al Qasim Green University (Faculty of Water Resources Engineering) and Al-Mustaqbal College (All its engineering departments) about answering the questions of research objectives.
3. Observation and personal monitoring: through the direct observation and personal monitoring of researchers during their work in the chairmanship of the committee projects graduate students for more than three consecutive years as academics in the field of engineering education and a member of the committees to discuss the projects of graduate students in addition to the educational guidance through which researchers were in contact with the problems that students suffer from it, which is one of the graduate projects.

7. Previous Studies
There have been numerous studies, researches and reports that dealt with the subject of students' graduation projects in the preliminary studies, namely, obtaining a bachelor's degree, identifying its problems and obstacles, and the importance of linking it with the development plans and the labor market in the general specialties in the Arab and international world in the recent period, thus developing the process of university education. Some studies were divided into two directions. Some were concerned with the method of implementation and methodology of writing the graduation project, while others tended to study their evaluation and evaluation. Khalil and Ahmed, [1] prepared a guide to graduation projects in the field of chemistry, dealing with the project procedures, the role of the supervisor, the responsibility of the student, the rules and elements of the requirements of the graduation projects and methods of implementation and evaluation.
Vernon [2] a special booklet of Etisalat University College in Sharjah for computer engineering students about the final year project for the methodology of the project and how to implement it from the proposal and planning and implementation according to the program prepared depending on the number of units for this course. A guide for writing research and graduation projects was prepared as general rules and methodological foundations for students of the Faculty of Law at the University of Jordan by the Steering Committee in 2008, based on the book "The Foundations of Scientific Research: A Student's Guide to Writing Research and Scientific Treaties" with the abbreviation and the addition of some important detective from the book (methodology of legal thinking of the stadium on the stages), which included several axes for the implementation of the graduation project from the methods, pillars, sources and the recording of information and project data (3). Kablan et al. [4] presented at the German-Jordanian University the Applied Science School a guide on the preparation and implementation of graduation projects. These guidelines are designed to introduce students to the Faculty of Applied Sciences regulations regarding graduation projects. The graduation project consists of two phases: the first graduation project (project proposal) and the second graduation project, which represents (project implementation). The goal is to help the student prepare a professional report and make the results accessible to readers.
One of the studies on the method of implementation of the graduation project, which was prepared by [5] is to provide an educational mediator entitled: How to write a graduation
project in the field of social education to enable students to know the basics of scientific research and write graduation projects in the social specialization. The method of implementation. In a guide prepared by the Department of Architecture/Faculty of Engineering at the Islamic University in Azza in 2013 on general instructions on the preparation of research projects, graduation by the Special Committee for graduation projects, including the method of implementation of the project according to paragraphs included research methodology for the graduation project [6].

Hamza and Jijan [7] in the Department of Mechanical Engineering at the University of Technology in Iraq, circulated the instructions of writing the graduation project in terms of the order of paragraphs in the sequence required with an appendix as an example depends only in the section mentioned, and the methodology of the engineering graduation project in the mechanics, it depends on the arrangement between the supervisor and the student and later is evaluated according to a form prepared for this by the scientific section depends on the assessment of the supervisor and the committee for the discussion. In the same year, the Department of Mechanical Engineering at the State University of San Jose presented a book as a guide for undergraduate and postgraduate studies by researcher [8]. The Department of Mechatronics Engineering at the University of Jordan also presented a similar study in 2016, after one year of study, as a guide for the projects of graduate students [9].

Zamil et al. [10] publishing an educational mediator in how to write the graduation project in the primary school stage in the Faculty of Educational Sciences at Al-Quds Open University in the field of Education, Science, Sociology, Mathematics, and the method of project implementation and submission in Arabic and English. The College of Computer and Informatics at Cardiff University has provided a comprehensive guide to the implementation of graduation research for a final year or master's thesis, advising on how to collect relevant resources, how to organize them appropriately and how to transform them into a written project report or dissertation. It also describes conventions that should govern the structure of a report or thesis, and suggests some descriptive devices that can be used to make research more effective. The guidelines are then presented in the end. Lists the footer and rules governing display details, including print quality, font sizes, etc. [11].

From the local studies in Iraq on the methodology of graduation research, Abdullah [12] applied application form for writing graduate research for students of preliminary studies to obtain a Bachelor of Arts degree. The media department started from the title page until the end of the research. The picture of some of the applied examples explained the basic steps to write the graduation research in the field of literature.

Evaluation is another expression of the evaluation. The latter depends on the first, as it is a basic process in any system. It is defined as the process of applying scientific methods to collect qualitative and quantitative evidence that has the truth about the nature of certain activities or certain products [13]. It is also a systematic and organized way to collect, interpret and analyze information using different means and tools to establish and determine the degree to which desired objectives are achieved [14].

The Evaluation is also a process intended to give a certain phenomenon or something tangible material or personal behavior value and a certain degree according to special criteria with accurate means and tools or refer to determinants and standards are often the result of long experiences [15].

Concerning the evaluation studies of the graduation projects, Abbas and others. [16] published a research in the Journal of Al-Aqsa University in the manner of evaluation and evaluation of graduation projects for students of educational technology at Jadra University in light of the standards of educational software. The aim of the research is to build educational software standards that must be considered in the design and production of educational software, and to verify the extent to which these standards are respected in the projects of graduate students of educational technology at Jadra University in the second semester of the academic year 2010-2011. In a recent study conducted by Mrabet, et al. [17], the method of evaluation of graduation projects in software engineering for the purpose of continuing to evaluate and develop student projects in Saudi universities, which shows through the skills, knowledge and behaviors acquired by students during their presentation. The research also explained how this assessment can be mandatory and must be conducted systematically in the context of the software engineering program. Where he provided a data table dedicated to the graduation project that provides effective guidance to faculty on assessing the results of students for the graduation project and shows how the results of this
assessment leads to efforts to continuous improvement through the outcome of the student. In a guide submitted by the committee for graduation projects for students of information technology at the University of Palestine in the same academic year 2017, as a guide to the student to write a project graduation included instructions for the implementation of a series of project proposal paragraph until the delivery of the project. The Committee also pointed out the method of evaluating projects according to specific paragraphs. Certain degree [18].

We find from the foregoing that most of the studies and research submitted are for humane terms. The studies available to some engineering disciplines, ie, branches of engineering education are few and limited to a specific specialization and restricted by the norms and laws governed by the instructions of one department. There is no study so far to implement and evaluate the graduation projects in engineering education. Hence the importance of conducting this research to be a comprehensive guide to the method of implementation and evaluation of projects graduate students to obtain the degree of Bachelor of Science in the specialization occupied by taking into account the inclusion of the most important recommendations and observations useful to students to overcome the difficulties and to avoid some of the usual methods of some of the method of indoctrination and dependence to the supervisor by a large percentage and the proposal of the subject of the project by him without taking into account the need of the labor market and the problems experienced by the Iraqi society, which need to study and find solutions to them, encouraging the use of subjects for projects graduate students is necessary guiding students to lead the reins of the project and implemented the way they cultivate knowledge and skills, making them able to cope with the difficulties and solve problems in the labor market after graduation.

8. Method of Implementation of the Graduation Project

I. Choose the topic (title) graduation project

Graduation project is a specific idea designed to innovate or solve a problem in engineering, taking into account that the idea is a new topic and that the analysis is innovative and carried out in accordance with the steps of the measured capabilities and time and effort. The graduation project is also a test for the student as he reveals his abilities in analyzing the data and knowledge of the innovative applications. The title of the project must not exceed the number of words about 20 words and that the language of the title is a clear professional language and does not carry several interpretations to go to the subject of study specifically and be. It is essential that the title contains some of the key words that refer to the field of research and its variables so that it provides realistic solutions to the problem that is considered applicable in the field of work and provides new and innovative ideas or completes the idea of a previous project that has been stopped to certain limits and is not taken from the idea of duplicate so that the project student benefit from the experiences gained after graduation through the stages of implementation of the project.

There are three ways to choose the graduation project title:

- Proposed by the council of advisers in the province and annexed by the State Departments and branches or even by the private sector or the joint indexed and organized for each department of engineering depending on the specialization to which the subject is intended.

- Suggested by the teaching supervisor and preferably be a specialist in the field of the project.

- Suggested by the student in the subjects of his courses to solve a problem or study a topic desired by the student as a graduation project by engaging in practical life and collecting observations and information appropriate to the problem or the subject matter that needs to be developed.

In all cases, it shall be submitted in accordance with Form No. (1) to the Graduation Projects Committee in the Scientific department, which consists of three members. Its Chairman is the Head of the Scientific Department. A meeting on the proposed addresses shall be held in cooperation with the Scientific Committee in the Department in order to choose another title.

As for the method of selection of the project by the student or the group, it will be after the announcement of the titles of the proposed projects with the names of the supervisors (the titles proposed by the students announced after the approval of one of the teachers who holds the subject matter) and submission in all cases according to Form No. (2) depending on the competition at the rate of the group, which must not exceed three students, except for some cases that are excluded after the approval of the head of the scientific department based on the nature of the project and the effort necessary to achieve it.
Form 1: Submit a proposal for a graduation project for the academic year 2018-2019

<table>
<thead>
<tr>
<th>Supervisor or organization name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of the proposed project</td>
<td>English Arabic</td>
</tr>
<tr>
<td>Project Type</td>
<td>□ Laboratory □ theoretical □ Manufacture of a device □ Other</td>
</tr>
<tr>
<td>The specialization of the project</td>
<td></td>
</tr>
<tr>
<td>Project summary no more than 100 words</td>
<td></td>
</tr>
<tr>
<td>The beneficiary of the project, if any</td>
<td></td>
</tr>
<tr>
<td>Decision of the Graduation Projects Committee</td>
<td>□ Approval □ Disagree □ Conditional approval of amendment</td>
</tr>
<tr>
<td>Notes ..........................................................</td>
<td></td>
</tr>
</tbody>
</table>

Member | Member | Chairman

Form 2: Selecting a graduation project for the academic year 2017-2018

<table>
<thead>
<tr>
<th>No.</th>
<th>The student's triple name</th>
<th>Average score at 3rd stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Seal of the Examination Committee Average listed the desired graduation projects title

No. | Project Title | Name of supervisor |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select by the Project Committee

No. | Project Title | Name of supervisor |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: A student (or group) after the approval of the scientific committee and the project graduation committee may not change the idea of the project or the group of work at all after the end of the sixth week of approving the projects. In the case of failure of the project for any reason and the inability of the student (or group) to complete it, they must submit a request to the head of the department after the approval of the supervisor includes the reasons for change is referred to the request of the Scientific Committee and the graduation projects in the department.

II. Project implementation schedule (project plan)

contains a detailed explanation of the stages of implementation of the project documented in clear scientific methods and presented in the form of a report containing the title of the project in Arabic and English with the names of the students and the name of the scientific supervisor and the general objective of the legislator and a summary of the project, as shown in Form No. (3).

Form 3: Project Plan (Schedule)

<table>
<thead>
<tr>
<th>English Title</th>
<th>Arabic Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Supervisor name</td>
</tr>
<tr>
<td>1</td>
<td>Students names</td>
</tr>
<tr>
<td></td>
<td>Description of the research with the latest developments of the field of research</td>
</tr>
<tr>
<td></td>
<td>Plan of Action and Timetable (by Months)</td>
</tr>
<tr>
<td>N</td>
<td>Events from To</td>
</tr>
<tr>
<td>1</td>
<td>2018-10 2018-11</td>
</tr>
<tr>
<td>2</td>
<td>2018-11 2018-12</td>
</tr>
<tr>
<td></td>
<td>........  ........</td>
</tr>
<tr>
<td>6</td>
<td>2019-3 2019-4</td>
</tr>
</tbody>
</table>

Member | Member | Chairman

It also includes the inclusion of the activities that will be carried out by the group according to the months and fixing the percentage of achievement for each activity. This form is completed by the supervisor and delivered to the Projects Committee for conservation with a copy to be kept by the supervisor. This form is to confirm the dates of delivery of the project reports according to the plan prepared for this purpose for the purpose of evaluation by the supervisor and correction by the students later.

III. Attendance schedule for students

The Form No. (4) Annex 4 contains list of follow-up students absenteeism for each month divided weekly, as there must be a weekly meeting between students and supervisor to prove the progress of work. This form is kept by the supervisor and kept with him. Students must be monitored periodically for each month, and in the end, prior to delivery, this form is submitted to the Project Committee to take the necessary steps in respect of students' grades.
IV. Writing graduation project

The graduation project in the engineering departments is preferred in English language because most of the sources, standards and international codes are available in English. On the other hand, the possibility of participating in the graduation research in local, Arab or international competitions is usually in English as well as twinning between Iraqi universities and their counterparts outside Iraq. On the basis of this, the annual school system has been converted into a system of courses, which must be in English language. In case of writing the project in Arabic for certain reasons, the same arrangement should be used in Arabic. The scientific terms in Arabic should be written with the English equivalent in parentheses. A summary of the project should be written in English with the title in English as well English references are written in English language.

V. Sequence of project paragraphs

For the purpose of standardizing all graduation projects of students in one department and to facilitate the evaluation task, the projects must take into account the same sequence of parts mentioned below or components as follows:

1. Title in English
2. Ayah from the Holy Quran
3. Dedication
4. Acknowledgement
5. Certificate of the Supervisor
6. Certificate of the Examining Committee
7. Abstract in English
8. List of Contents
9. Notation
10. List of Figures
11. List of Plates
12. List of Tables
13. Chapters
14. References
15. Abstract in Arabic
16. Appendices
17. Title in Arabic

VI. Graduation Project Writing System

A. General shape

The project shall be printed on A4 white paper and on one face only and shall be free of grammatical, spelling, typographical and non-written errors, which shall be verbally checked if necessary. You must start the main project titles in a new page as well as start each chapter. Add Tab at the beginning of each paragraph after the main title of 1 cm.

B. Line, footnotes, spaces and margins:

<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>The font size in the project board includes references and annexes</td>
<td>14 and smaller to 12 within the tables</td>
</tr>
<tr>
<td>The font size in the headlines</td>
<td>Bold 16</td>
</tr>
<tr>
<td>Font size in subheadings of level 1 and 2 (no third level may be used)</td>
<td>The first level is 14 bold and the second level is 12 bold below the line</td>
</tr>
<tr>
<td>Font size in mathematical relations and equations</td>
<td>12 but in long equations, 9 can be used</td>
</tr>
<tr>
<td>Font type</td>
<td>English: Times New Romans Arabic: Simplified Arabic</td>
</tr>
<tr>
<td>Spacing between the lines in the body of the text</td>
<td>A line and a half</td>
</tr>
<tr>
<td>Spacing between paragraph</td>
<td>8 points before and after</td>
</tr>
<tr>
<td>Spacing between lines in references</td>
<td>one line</td>
</tr>
<tr>
<td>Paper margins</td>
<td>The margin of the paper is 3 cm from the side of the installation and the rest is 2.5 cm.</td>
</tr>
<tr>
<td>Table title and line spacing</td>
<td>14 bold and one line</td>
</tr>
<tr>
<td>Title of images and shapes</td>
<td>14 bold</td>
</tr>
</tbody>
</table>

C. Icons and shortcuts

The use of symbols and abbreviations in scientific terms within the text after having used their full text in their first appearance and to be mentioned in the list of symbols may be permitted with the meaning of a scientific term.

D. Page numbering

Greek numbering is used for pre-chapters (I, II, III, IV, ...) and Arabic numbering (1, 2, 3) is used from beginning to end of project chapters. Annexes The pages of each attachment are
serialized with sequential numbers associated with a sequential alphabet character that symbolizes each extension individually (A1, A2, A3, ...). Write the page number at the bottom of the page and at the middle and at a height (2 cm) from the bottom edge of the paper.

E. Numbering main heading and subheading
The main titles in each chapter are numbered according to the chapter number. For example, the first main title in the first chapter (1-1), the subtitle for the first level, followed by (1.1.1), the subheading of the second level (1-1-1-1). This level cannot be exceeded.

F. Numbering tables, shapes and images
Each table has a serial number linked to the chapter in which it is written. The title is written on the top of the table. For example, the first table in the first chapter is written Table 1-1. If the rows are completed in a new paper, the title is not written again, but only the table number and the reference to its (continued). The shapes and images are like the table and the title is written at the bottom of them. For example, Figure 3-1 refers to Figure 1.

G. Mathematical relations and equations if any
Mathematical relations and equations are written between paragraphs and each is referred to as a serial number placed in parentheses that links them to the chapter that contains them and allows the writing of equations and mathematical relationships in more than one line.
The equation should be mediated and the equation number or mathematical relationship should be placed at the far left end of the equation.

H. Plates and Plaques
Large diagrams are preferred to be smaller to match the size of the project page if possible. If this is not possible, as in the design panels, for example, it is folded into a paper size and if a large number of large drawings are placed in a separate file attached to the project.

I. Number of project pages
A minimum of 40 pages and no more than 80 pages. The title page, the list of contents, the abstract, the list of abbreviations, the list of sources, the list of drawings, the lists of words and the names of the appendices should not be counted. Do not exceed 100 pages in any way.

J. Number of copies of the project

Three final copies of the project have been received after correction and finalization of the discussion, a copy of the supervisor, two copies of the members of the discussion committee according to Form No. (5).

Form 5: Submit the graduation project for the purpose of discussion

<table>
<thead>
<tr>
<th>Supervisor name</th>
<th>Title of project</th>
<th>English</th>
<th>Arabic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students names</th>
<th>1-</th>
<th>2-</th>
<th>3-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor Notes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date of delivery of the project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>And the supervisor's signature</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Evaluation of the graduation project by the supervisor and the discussion committee

The majority of Arab and international universities depend on the lowest degree of success for the graduation project is 60% for the purpose of increasing attention by graduates because of its great importance. The distribution of the degree of projects graduated from the fourth stage between the supervisor and the discussion committee adopted by most Iraqi universities Alrzina is 40% for the supervisor and 60% for the discussion committee.
The evaluation process will be throughout the year of graduation at the first seminar 3 months after the approval of the projects and a second seminar after another 3 months and then the final discussion either before the final exam of the first trial or after the final examination. As with the rest of the courses for a student who did not achieve the degree of success is considered the second trial of the project graduation.
The evaluation of the scientific supervisor of the student shall be according to Form No. (6). The evaluation of the discussion committee shall be in accordance with Form No. (7) for each Seminar and Form No. (8) in the final discussion.
All these forms are reserved by the Chairman of the Projects Committee. The grades shall be fixed by the dry pen and shall not be written off or altered or changed in any case.
### Form 6: Evaluation of the Graduation Project (especially the supervisor)

<table>
<thead>
<tr>
<th>No.</th>
<th>Property</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Commitment to weekly attendance</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Adhering to the instructions and instructions of the supervisor</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Commitment to goals and assumptions</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Use the scientific method in presenting and discussing the results</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Conclusions and recommendations</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Diversity of references</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Writing and finalizing the project</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>The student's position when discussing</td>
<td>6</td>
</tr>
</tbody>
</table>

Total of 40%

Supervisor signature  
Chairman of the Projects Committee signature  

---

### Form 7: Evaluation of the graduation project (For seminars)

<table>
<thead>
<tr>
<th>No.</th>
<th>Property</th>
<th>Degree</th>
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<tbody>
<tr>
<td>1</td>
<td>The scientific content of the project</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Writing and directing the project</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Display the seminar</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Answer questions when discussing</td>
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</table>

Total of 12%

Member  
Member  
Chairman

---

### Form 8: Evaluation of the graduation project (for final discussion)

<table>
<thead>
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<th>No.</th>
<th>Property</th>
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</thead>
<tbody>
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<td>Fit the title to the content of the project</td>
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</tr>
<tr>
<td>2</td>
<td>Adhere to the directives and instructions of the Committee</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Commitment to goals and assumptions</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Use the scientific method in presenting and discussing the results</td>
<td>4</td>
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<tr>
<td>5</td>
<td>Conclusions and recommendations</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Diversity of sources and reference</td>
<td>4</td>
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<tr>
<td>7</td>
<td>Writing and finalizing the project</td>
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</tr>
<tr>
<td>8</td>
<td>The student's position when discussing</td>
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</tr>
</tbody>
</table>

Total of 36%

Member  
Member  
Chairman

---

### 10. Final delivery of the graduation project and completion of project requirements

Delivery of three corrected copies after final discussion according to Form No. (9): Annex 1 with three CDs. A copy with a disk for the supervisor, another for the library of the department and the third for the library of the college, thus completing the requirements of the graduation project.

### Form (9) Completion of graduation project requirements

<table>
<thead>
<tr>
<th>No.</th>
<th>Requirement</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Students completed all graduation project requirements</td>
<td></td>
</tr>
</tbody>
</table>

Supervisor Notes:……………………………………….  
Supervisor's Notes:………………………………………

Signed by the Chairman of the Projects Committee...
References


