Department of Physics
قسم الفيزياء

Guides, Regulations, and Procedures for Academic Supervision System on theses in Master Program.

This manual complies postgraduate studies bylaw at KSA universities and executive rules at King Abdulaziz University.

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1. Introduction

This manual provides comprehensive guidelines, regulations, and procedures for the supervision of theses at Physics' Master Program. It is intended for use by faculty, staff, and students engaged in thesis research.

2. Regulations and Responsibilities of the supervisor and student

2.1 Eligibility for Thesis Supervision

A supervisor is a Faculty staff member who supervises/guides thesis/dissertation of a postgraduate student till successful completion of research work. According to the Ministry of Education's postgraduate regulations, the supervision of thesis is subject to the following regulations:"

a)   Professors and Associate Professors among the University staff members who can supervise the postgraduate students.

b)   Assistant Professors can supervise a master's degree if two years have passed since being appointment in her/ his rank and have written at least two refereed papers in her/his major, whether published or accepted for publication.

c)   Qualified and distinguished staff members from outside the University may supervise dissertations through resolution by the University Council based on recommendations by the Department and the Deanship of Graduate Studies Councils.

d)   A staff member from other departments may co-supervise a dissertation depending on the nature of the work, provided that the main supervisor is from the department in which the student is studying.

e) A supervisor, whether solely or in collaboration with others, can concurrently supervise a maximum of **seven thesis**.

f) Each thesis supervision is equivalent to an hours in the staff member's teaching load if she/he is the only supervisor or a co-supervisor main one.

g) In case the main supervisor is unable to continue supervising the student's thesis, such as leaving the university or any other valid reason, then the program proposes a substitute supervisor to continue supervising the student's thesis.

2.2 Supervisor's Roles and Responsibilities

1- Guidance: Provide regular and timely guidance on the research topic, methodology, conducting experiments, analyzing results, and writing.

2- Feedback: a) Offer constructive feedback on drafts and regular assessments of the student's work.

b) By the end of each semester the supervisor should submit an electronic report to evaluate the students to the head of department/female supervisor and then to the Deanship of postgraduates.

c) By the end of each semester, the supervisor should submit a Follow-up report to the program regarding the progress of thesis.

3- Ethical Oversight: Ensure that the research is conducted ethically and responsibly.

4- Progress Monitoring: Keep track of the student's progress and help them stay on schedule.

5- Regular Check-Ins: Scheduled meetings to discuss progress, review drafts, and address any issues.

6- Writing up thesis: helps the student prepare their thesis according to the University's regulations.

7- Defence Preparation : helps students with any required defence or presentation.

2.3 Roles and Responsibilities of Student

Students enrolled in a master's program in Physics have several key roles and responsibilities, which are crucial for their academic success and overall development. These roles and responsibilities include:

1- **Engagement in Learning:** Students are expected to actively engage in the learning process. This involves attending lectures, participating in seminars and lab sessions, and completing assigned coursework.

2- **Research Involvement:** students are required to conduct research. This involves formulating research questions, conducting experiments or theoretical work, analyzing data, and drawing conclusions.

3- **Thesis Writing:** students must write and submit a thesis that presents their research findings. This process includes literature review, methodology design, data analysis, and synthesis of findings into a coherent narrative.

4- **Publication:** Students before applying for forming the VIVA committee must publish their research results in a journal or a conference.

5- **Communicate the Research results:** student must present his/her research results during the department weekly seminar. The presentation will be evaluated by two faculty members according to a rubric.

Moreover, the student should also participate in the poster day arranged by the faculty of science to share their research findings in a poster.

6- **Ethical Conduct:** Students should Adhere to ethical guidelines in research and academic integrity is paramount. This includes avoiding plagiarism, properly citing sources, and adhering to protocols in experimental procedures.

7- **Professional Development**: Students should take the initiative to attend workshops, conferences, and seminars that can enhance their knowledge and skills, and actively seek opportunities for professional growth.

8- **Adherence to Program Requirements**: Students should understand and adhering to the specific requirements of the master's program, including course requirements, proposal and thesis submission deadlines, program-follow-up procedure, and examination protocols.

9- **Utilization of Resources:** Students should make use of the resources provided by the University and the program, such as libraries and labs to support their learning and research.

10-　　**Time Management and Self-Discipline**: Effective time management and self-discipline are critical, especially given the rigorous demands of a graduate program. Students are responsible for managing their study schedule, meeting deadlines, and balancing academic commitments with other aspects of life.

11-　　**Feedback and Evaluation Participation:** Students are required to engage and participating in program evaluations to provide feedback about courses, teaching, and other aspects of the program.

2.4 Lack of Academic Commitment and its Consequences

If the student's academic GPA is less than 3.75 , she/he will receive a warning from the Deanship of graduate studeies. By next semester, if the student GPA did not raise the GPA to, she/he will receive another warning. Finally, if the student didn't raise the GPA, he/she will be terminated. Then, the student can apply for reregistering request to the Deanship of postgraduates. The request will be sent to the program for consideration and approval by the department council. Upon approval, the student can reregister to the program.

If the student receives "Fn" in its end of semester report for two consecutive semesters, the student's registration will be terminated by the Deanship of graduate studies from the program.

3.Thesis Proposal

3.1 Proposal Development

After the student passes at least fifty percent of the courses with a cumulative GPS of 'Very Good' or better, she/he is allowed to submit her/his thesis proposal to the program by following these guidelines:

1. **Topic Selection** : Students often need to choose a topic that aligns with their interests. Then, the department suggests a qualified faculty member to serve as the thesis supervisor.
2. **Initial Meeting** a meeting between the student and the faculty member is conducted to discuss the research plan, objectives, methodology, and expected outcomes.
3. **Supervisor Confirmation** :after meeting with the potential supervisor, students must identify and confirm a faculty member who specializes in the relevant area and is willing to provide guidance.
4. **Proposal Preparation:** upon agreement, the faculty member prepares a comprehensive proposal according to a proposal form template (see Appendix A) that includes the research question, literature review, methodology, and expected outcomes.

3.2 Proposal Approval

1- Postgraduate Committee Review: The proposal is then submitted to the postgraduate committee to review it. Upon approval, the postgraduate committee will distribute the proposal with a survey to collect the staff member's opinions and comments about the proposal (see Appendix A).

2- Feedback and Revision: The comments are sent back to the faculty member for consideration.

3- Department Council Approval: the proposal will be discussed and approved by the department council.

4- Upon approval, the head of the department/female supervisor begins an electronic transaction "appointment of a supervisor" "تعيين مشرف '' as shown in the following figure:

Required Documents
- The research proposal.
- acknowledgment of scientific publication signed by the supervisor and student (see Appendix A).
- Department meeting minutes.
- The C.V of the main or the co-supervisor if he/she is an assistant professor.
- If the co-supervisor from other department within the collage of science, an approval from the head of the department where the co-supervisor belongs must be attached.
- If the co-supervisor from outside the collage, an approval from the Vice Dean of the College for Postgraduate Studies and Scientific Research must be attached.

Head of the department /female supervisor

Vice Dean of the College for Postgraduate Studies and Scientific Research

Deanship of Postgraduate studies

Figure 1:The appointment of a supervisor procedures.

3.3 Supervisor Replacement Procedures

In case the main supervisor is unable to continue supervising the student's thesis, such as leaving the university or any other valid reason, then the Department proposes a substitute supervisor to continue supervising the student's thesis. The appointment of the proposed supervisor should be discussed and approved by the department council. Then the head of department/ female supervisor will follow the procedures shown in *Figure1*.

3.4 Changing/modifying the thesis Title Procedures

In case that the supervisor and the student decided to change or modify the approved Title of the thesis , the supervisor should fill the form "changing/modifying Thesis's Title" (see Appendix A) and send it to the postgraduate committee and then follow the procedures

Supervisor creates an electronic transaction "

Changing/modifying Thesis Title"

"تغيير/تعديل عنوان الرسالة"

Required documents:
- The proposal with the new title.
- Department council minute.

Head of Department/Female supervisor

Vice Dean of the College for Postgraduate Studies and Scientific Research

Collage Dean

Figure 2: Changing/modifying Thesis's Title procedures.

4. Progress Tracking

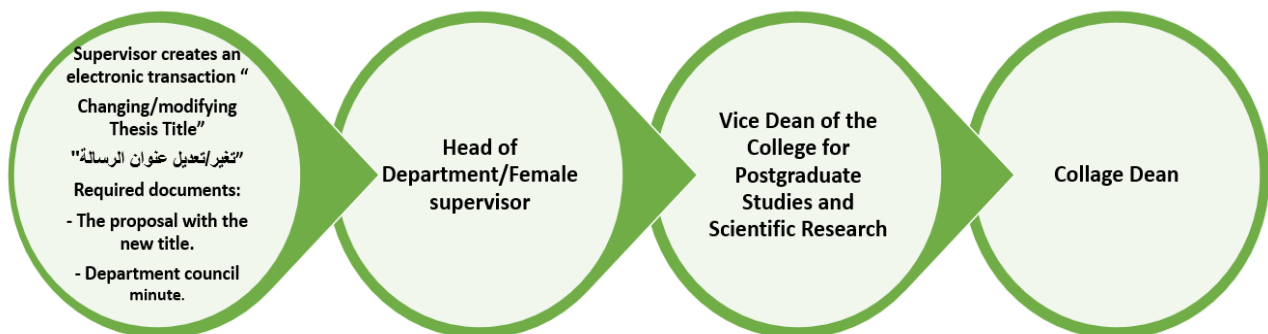The program adopts the following procedure to follow-up on scientific thesis supervision that can be summarized in the figure below:
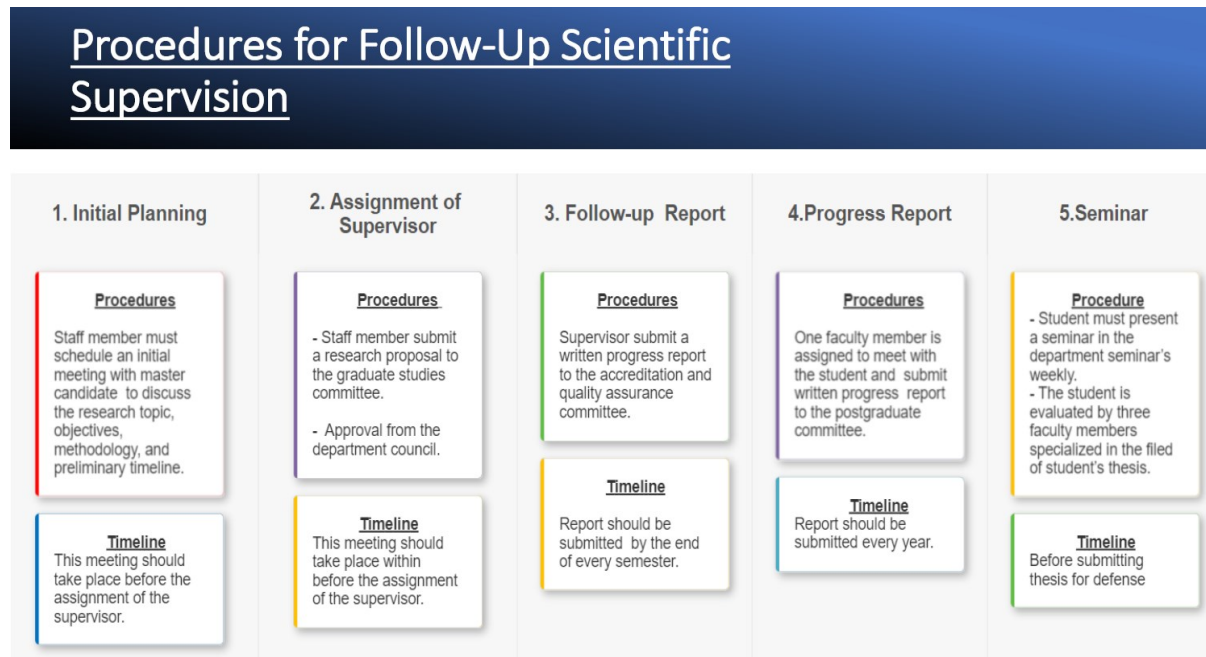
Figure 3:Follow-Up on scientific supervision procedures.

1-   By the end of each semester, the supervisor submits to the program a follow-up report including the summary of progress against the proposed timeline, challenges, and recommendation, signed by both the supervisor and the student (see Appendix A).

2-   By the end of each year. The program assigns a mentor to each student, the mentor meets with the student and writes a report and submits it to the program (see Appendix A)

3-   By the end of each year, the program coordinator writes a report of follow-up procedures to be discussed and approved by the department council.

4- students must present their results during the department weekly seminar and will be evaluated by two faculty members in the same speciality according to the Rubric in (see Appendix A).

4.1 Extension

If the student did not complete the degree requirements after three years due to unforeseen circumstances, such as personal issues, health problems, or academic challenges, he/she should request for extension maximum for one year using the following steps:

1- The supervisor should fill in the form for requesting extension (see Appendix A) and submit it to the postgraduate committee within the department .
2- Upon approval by the postgraduate committee, the request will be discussed in the department council meeting for approval.
3- Then, the supervisor should create an electronic transaction "requesting extension " with the following path:

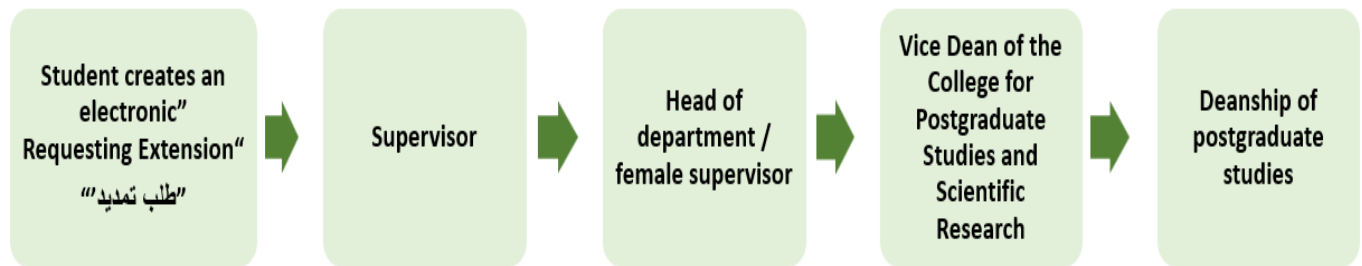| Student creates an electronic" Requesting Extension" "طلب تمديد" | → | Supervisor | → | Head of department / female supervisor | → | Vice Dean of the College for Postgraduate Studies and Scientific Research | → | Deanship of postgraduate studies |

Figure 4: Requesting extension procedures.

5. Thesis Writing

5.1 Structure and Content

thesis must be composed in English, adhering to Standard format and structure of the thesis the sanctioned by the Deanship of Graduate Studies (see Writing thesis guidelines in Appendix A).

5.2 Ethical Conduct

Adhering to ethical guidelines in research and academic integrity is paramount. This includes avoiding plagiarism and properly citing sources.

5.2 Thesis Submission

To be eligible to submit thesis for approval, the students must:

1- Share their research results either in an international/or national conference or publish it in a peer reviewed journal.
2- Participate in the department weekly seminar to present their research results.

Before the formation of the Viva committee, the student should submit his/her thesis to the Deanship of Graduate Studies for approval. There are two stages for the approval process as shown in the following figure

Stage 1

The student creates an electronic transaction "Ending the study plan and recording the student's achievements" "انهاء الخطة الدراسية وتسجيل انجازات الطالب" with the following documents :

a) A copy of any publication.

b) Certificate of attendance a national or international conference.

c) Any scientific participation from the scientific thesis

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Head of department/Female supervisor

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Vice Dean of the College for Postgraduate Studies and Scientific Research

↓

Deanship of postgraduate studies

Stage 2

The student creates a "Delivering the thesis to the scientific department and authorizing it for discussion" "تسليم الرسالة للقسم العلمي واجازتها للمناقشة" with the following attachments:

a) A copy of the approved transaction mentioned in stage 1

b) A copy of the thesis in pdf format.

c) Plagiarism report.

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Supervisor

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Head of department/Female supervisor

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Vice Dean of the College for Postgraduate Studies and Scientific Research

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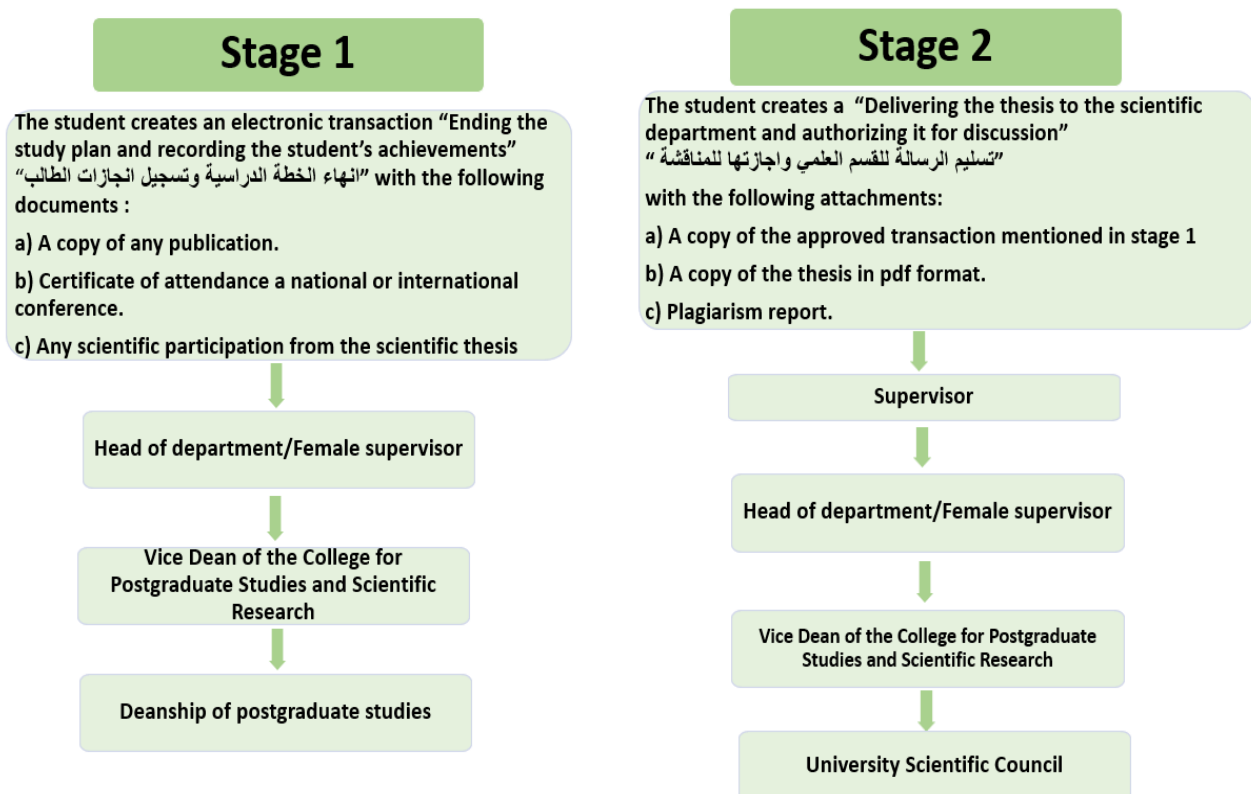**University Scientific Council**

Figure 5:Thesis approval procedures.

6. Thesis Viva

6.1 Viva committee Regulations

According to the Postgraduate bylaw, the Formation of the Viva committee should fulfil the following requirements:

1. The minimum number of examiners is three provided that the supervisor and the co-supervisor, if any, do not constitute a majority.
2. The supervisor is the Chairperson of the committee.
3. Two additional members: one from the department (internal examiner) and the other outside the department (external examiner).
4. A professor, or at least an associate professor, should be on the examination board.
5. Each examiner will be paid 1000 Saudi Riyals by the university.

6.2 Viva Committee Formation

1- Upon approval of the thesis by the Deanship of Postgraduate studies, the supervisor should fill a form "Viva committee formation"(see Appendix A) to the postgraduate committee withing the department with the required documents.

2- The postgraduate committee will review the form and once approved , the request will be discussed in the department council meeting for approval.

3- When the department council minutes is approved by the Dean, the supervisor should create an electronic transaction with the following path

Supervisor creates an electronic transaction " formation of Viva " "تشكيل لجنة مناقشة" → Head of department or female supervisor → Vice Dean of the College for Postgraduate Studies and Scientific Research → Collage Dean

-Required Documents:
-A copy of the department minute.
- C.V of external and internal examiners.
- Publication or certificate of conference attendance.
- A letter from the supervisor acknowledging that any publication is from student's thesis results.
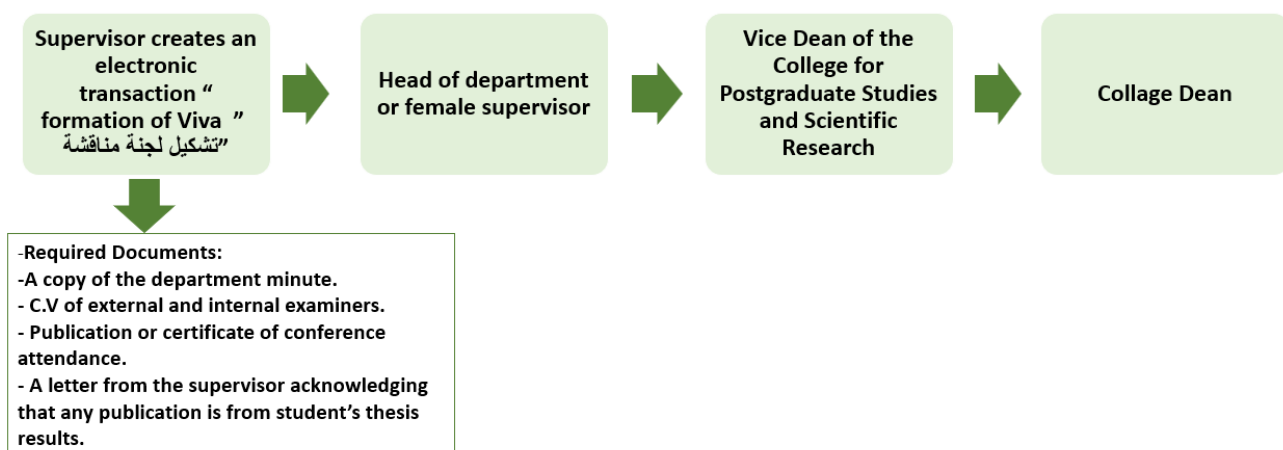
Figure 6: Viva committee formation procedures.

4-Upon approval by the dean of Deanship of postgraduate studies, the date and time of the Viva will be announced to the whole department.

6.3 Criteria for Thesis Evaluation

The evaluation of a thesis is based on various criteria that assess the quality, originality, and academic rigor of the student's work. Ther key areas that are generally considered:

Originality and Significance of Research: The thesis should contribute new knowledge or insights to the field of study. It should be clear how the research addresses a gap in existing literature or tackles a novel problem.

Quality of Research Design and Methodology: The research methodology should be appropriate and well-executed. This includes the design of experiments or studies, the selection of tools and techniques, and the application of theoretical frameworks.

Depth of Literature Review: The thesis should demonstrate a comprehensive understanding of the existing literature and how the current research fits within the broader academic context.

Analysis and Interpretation of Data: The thesis should present a thorough analysis of the data collected during the research process. The interpretation of this data should be logical, coherent, and support the thesis' conclusions.

Clarity and Coherence of Argument: The thesis should present a clear, logical, and coherent argument throughout. Each section should contribute towards the overall thesis statement or research question.

Quality of Writing and Presentation: The thesis should be well-written, with clear and concise language, proper grammar, and a logical structure. The formatting should adhere to the program's guidelines, and figures and tables should be well-presented and clearly contribute to the text.

Conclusions and Implications: The conclusions should be well-founded based on the research findings. The thesis should also discuss the implications of these findings, including their relevance and potential impact on the field.

Reference and Citation Quality: Proper and consistent citation of sources is critical. The thesis should accurately reference all sources of information and ideas that are not the student's own.

Compliance with Ethical Standards: If relevant, the thesis should demonstrate adherence to ethical standards in research, especially for studies involving human or animal subjects.

6.4 Criteria for Students' Evaluation During the Viva

The viva provides the student with an opportunity to defend his/her thesis and helps the examiners determine if the student fulfilled the criteria for the master degree. One method to achieve this is to read the thesis, however the oral examination gives the examiners the opportunity to examine the general field within which the thesis lies; discuss the thesis in detail; explain any unclear areas; and confirm that the thesis is entirely of the student's own work.

In a Master's viva, the evaluation criteria focus on assessing the student's depth of knowledge, understanding of the research subject, and the quality of their thesis. The key areas include:

Understanding of Subject Matter: The student should demonstrate a thorough understanding of their research topic and its place within the broader context of the field. They should be able to articulate the key concepts and theories relevant to their research.

Defence of Research Methodology: Evaluators often assess the student's ability to justify the choice of research methods and explain how these methods were implemented effectively.

Interpretation of Results: The student should clearly articulate their research findings and be able to discuss how these results contribute to the field. This includes understanding the implications and limitations of their work.

Response to Questions: An essential part of the viva is how the student responds to questions and critiques. They should be able to engage thoughtfully and critically with the questions, demonstrating a deep understanding of their research and its broader implications.

Communication Skills: The ability to effectively communicate research findings and ideas, both orally and through their thesis, is crucial. This includes clear, concise, and coherent presentation skills.

Professionalism and Poise: The student's demeanour during the defence is also considered. Professionalism, confidence, and the ability to remain poised under pressure are important.

6.5 Viva Procedures

On the day of the viva, the head of the department, or a member of the postgraduate committee delegated by the head of the department, must attend the Viva as a representative of the postgraduate studies deanship for monitoring and write a report to the Dean of Graduate studies (see Appendix A). Moreover, the committee should fill in and sign the " Viva Committee Report and

decision" "تقرير لجنة المناقشة والحكم على الرسالة") see Appendix A) with one of the following recommendations:

a) Accepting the dissertation and recommending the degree award.

b) Accepting the thesis and suggesting some changes without being re-examined. One of the Viva committee's members will be delegated to approve the thesis after the recommended corrections, providing that the corrections are made within a maximum period of three months from the examination date; the University Council is entitled to make exceptions.

c) Re-examining the dissertation after the corrections are made within a period specified by the Council of the Deanship of Graduate Studies based on the Department Council recommendation. The maximum period is one year from the examination date.

d) Thesis not accepted for the degree.

6.6 After the Viva

After the Viva, the supervisor should create an electronic transaction "requesting payment for Viva committee's members payment with the following procedures
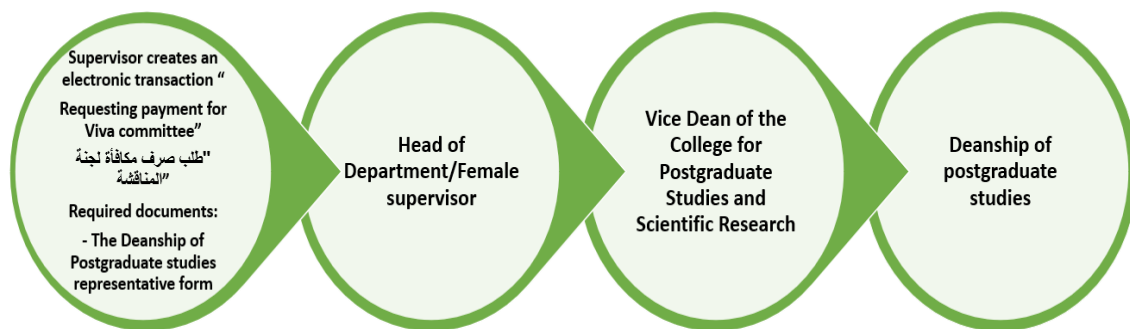

Figure 7:Requesting payment for Viva Committee procedures.

7. Completion and Graduation

7.1 Final Submission

1- In the case that recommendation of the Viva committee to accept the thesis and recommending the degree award, the student should then follow the procedures in section 7.2

2- In case the recommendation of the Viva committee to accepting the thesis and suggesting some changes without being re-examined, then the student should:

 a) The student should make the suggested recommendations in the thesis and send it to the delegated Viva committee's member to follow up on corrections.

b) After reviewing the thesis, the delegated Viva committee's member has to fill in the Confirmation of completion of correction form " إقرار اكمال التعديلات '' and send it to the supervisor (Appendix A) .

3- In the case that recommendation of the Viva committee to Re-examining the dissertation after the corrections are made within a period specified by the Council of the Deanship of Graduate Studies based on the Department Council recommendation. The maximum period is one year from the examination date.

7.2 Procedures for Getting the degree certificate

1- The student should submit a copy of his/her thesis to the library through the King Abdulaziz scientific platform (see Appendix A).

2- Then, the student should create an electronic transaction as follows
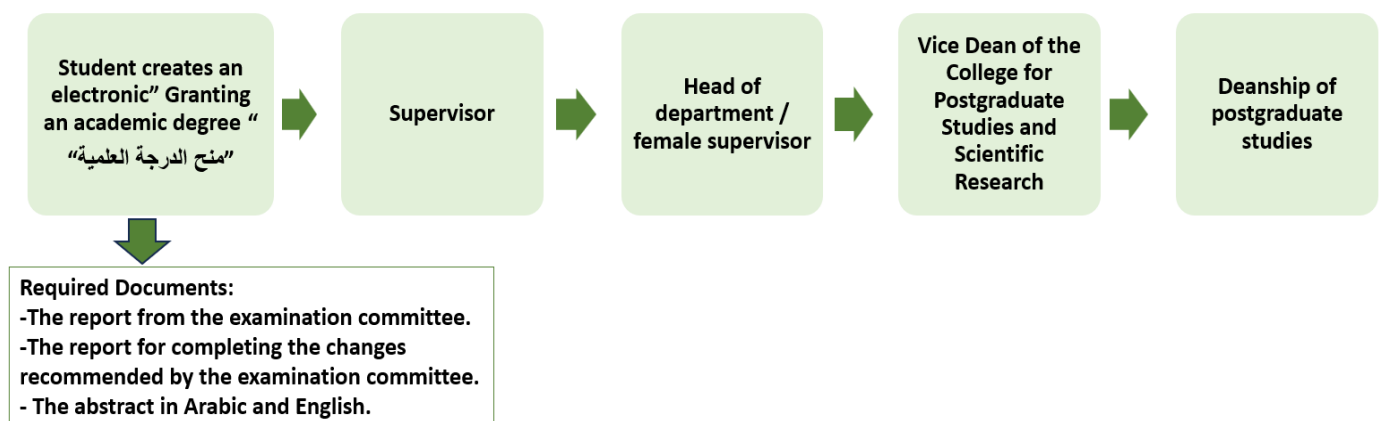
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│ Student creates │   │             │   │   Head of       │   │ Vice Dean of    │   │  Deanship   │
│ an electronic"  │ → │  Supervisor │ → │ department /    │ → │ the College for │ → │     of      │
│ Granting an     │   │             │   │ female          │   │ Postgraduate    │   │ postgraduate│
│ academic degree"│   │             │   │ supervisor      │   │ Studies and     │   │  studies    │
│ "منح الدرجة      │   │             │   │                 │   │ Scientific      │   │             │
│ العلمية"         │   │             │   │                 │   │ Research        │   │             │
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┌───────────────────────────────────────┐
│ Required Documents:                    │
│ -The report from the examination       │
│  committee.                            │
│ -The report for completing the changes │
│  recommended by the examination        │
│  committee.                            │
│ - The abstract in Arabic and English.  │
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Figure 8: Getting the academic degree procedures.

8. Support

- Program Contact information for support

  ➢ Head of Department : Dr. Ahmed Alzahrani

      Email: aualzahrani@kau.edu.sa

  ➢ Female Supervisor: Dr,. Norah Alsenani

      Email: nsenany@kau.edu.sa

  ➢ Program Coordinator: Prof. Shreef Nafee

      Email: snafee@kau.edu.sa

- Dean of Postgraduate studies Contact information for support

[دليل منسوبين عمادة الدراسات العليا ـ عمادة الدراسات العليا (kau.edu.sa)](https://kau.edu.sa)

Appendix A: Links to Documents

- *Forms*

1- Research proposal form	نموذج مقترح بحثي
2- Survey on research proposal Form	استبيان المقترح البحثي
3- Acknowledgment of scientific publication Form	إقرار النشر العلمي
4- Modifying/changing Thesis's Title form or changing supervisor	نموذج تعديل/تغير عنوان الرسالة-تغيير لجنة اشراف
5- Thesis follow-up report form	نموذج تقرير المتابعة للرسالة
6- Mentor Report form	نموذج تقرير المرشد
7- Seminar presentation Rubric	معايير تقييم عرض السمنار
8- Poster guidelines	ضوابط الملصق العلمي
9- Viva committee formation form	نموذج طلب تشكيل لجنة مناقشة
10-Postgraduates representative report	نموذج تقرير ممثل عمادة الدراسات العليا
11-Viva Committee report form	نموذج تقرير لجنة المناقشة والحكم على الرسالة
12-Confirmation of completion of correction form	نموذج إقرار اكمال التعديلات
13-King Abdulaziz scientific platform	منصة جامعة الملك عبدالعزيز العلمية

- *Manuals*

1- KAU Postgraduate manual	دليل الدراسات العليا بجامعة الملك عبدالعزيز.
2- Kau Thesis Writing guidelines	دليل كتابة الرسائل العلمية بجامعة الملك عبدالعزيز.

- *Regulations*

Regulations of postgraduate studies at KSA universities and executive rules at King Abdulaziz University	اللائحة المنظمة للدراسات العليا بالجامعات و القواعد التنفيذية بجامعة الملك عبدالعزيز

Approval Data

Committee/Council No.	16th
Reference NO.	8
Date	14-2-2024