GUIDELINES FOR THE MIS GRADUATION PROJECT

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MANAGEMENT INFORMATION SYSTEMS
BUSINESS SCHOOL
THE UNIVERSITY OF JORDAN

Introduction to the MIS Graduation Project

The graduation project is one of the most important academic requirements for Management Information Systems (MIS) students. It aims to enhance their practical and applied skills in analyzing, designing, and developing information systems that meet business needs. This project provides students with the opportunity to apply the knowledge and skills they have acquired during their studies to solve real-world problems and propose innovative technological solutions that improve business processes and decision-making.

Students are required to work in groups, where each team selects a project idea related to developing an information system for a specific sector, such as commercial, financial, healthcare, education, or others. The idea must be approved by the academic supervisor before students proceed with implementation. The project follows a structured process, including data collection and analysis, prototyping, programming, system testing, and final presentation.

The project is evaluated based on several criteria, including understanding the problem, quality of design and development, accuracy in implementing required functionalities, level of creativity and innovation, as well as the quality of documentation and presentation. Throughout the semester, students go through multiple assessment stages, including periodic report submissions, follow-up meetings with the supervisor, presentations, and final discussions with the evaluation committee.

This project is designed to prepare students for the challenges of the job market by enhancing their research, analytical, and critical thinking skills, fostering teamwork, and refining their technical expertise in information system development.

Project Scope and Execution

Students are required to work in teams to foster collaboration and teamwork skills. Each group must propose five potential project ideas and discuss them with their supervisor. The approved project idea should be relevant to a specific industry, such as finance, healthcare, education, e-commerce, or logistics, ensuring that students develop systems with practical business value.

Evaluation Criteria & Assessments

The graduation project is assessed through multiple evaluation stages to ensure high-quality output. Key assessment components include:

1. **Report 1:** Initial research, project scope, feasibility study, and project plan (10% of project Grades).
2. **Report 2:** System modeling, database design, and interface mock-ups (10% of project Grades).
3. **Demo Session:** System demonstration to ensure development progress.
4. **MOC Viva:** A structured evaluation focusing on the **system's functionality and business logic** (20% of the system's grade).
5. **Final Documentation:** A detailed project report assessing the **technical documentation quality** (20% of the documentation grade).
6. **Final Presentation & Viva:** A formal **oral defense** where students present their project before a panel of faculty members (40% of the final grade).

The groups are required to submit Periodic reports to the Supervisor as follows:

	Due Date	Marks
Report 1 - Draft Submission	16/3/2025	-
Report 1 - Final Submission	23/3/2025	10
Report 2 - Draft Submission	13/4/2025	-
Report 2 - Final Submission	20/4/2025	10
Demo	11-12/5/2025	-
MOC viva	21-22/5/2025	20
Final documentation	27/5/2025	20
Total		60%

The groups are required to present their projects in front of the examiners, and they will be evaluated for 40% of the final grade.

	Due Date	Marks
Final Documentation Submission to the Department	3/6/2025	-
Your Project Viva	4-5/6/2025	40
Total		60%

Submission Phases for System Development & Coding to Your Supervisor Are as Follows:

Task	Description	Due Date
Initial System Setup	✓ Setting up the development environment (frameworks, database, and tools). ✓ Implementing User authentication & authorization. ✓ Database connection and basic CRUD (Create, Read, Update, Delete) operations.	23/3/2025
Core Functionalities Development	✓ Implementing the main system features based on project requirements. ✓ Integration of business logic and database operations. ✓ Submitting the core system module for review and debugging feedback.	6/4/2025
System Integration & Feature Expansion	✓ Enhancing and optimizing system performance. ✓ Implementing advanced features, such as notifications, file uploads, or analytics. ✓ Submitting a semi-functional system for usability testing.	27/4/2025

Testing & Bug Fixing	✓ **Conducting unit testing, integration testing, and performance testing.** ✓ **Fixing bugs and improving error handling mechanisms.** ✓ **Submitting a fully functional system for final review before deployment.**	**11/5/2024**
Final System Submission & Deployment	✓ **Deploying the system to a live environment or local server.** ✓ **Submitting source code, executable files, and a user guide for evaluation.**	**18/5/2025**
Final Presentation & Demonstration	✓ **Live demonstration of the fully developed system to the supervisor.** ✓ **Showcasing system functionalities, performance, and security measures.**	**25/5/2025**

Project Deliverables & Success Factors

To ensure the successful completion of the project, students must demonstrate:

- **Deep understanding of the business problem** and how the system addresses it.
- **Strong business logic implementation** to align the system with industry needs.
- **Effective system functionality**, including data validation, seamless database integration, and error handling.
- **User-friendly interface and accessibility** to enhance user experience.
- **Well-structured reports and presentations** showcasing **professional communication skills**.
- **Ability to engage in discussions** and defend their work confidently during viva sessions.

General Guidelines

- After the graduation projects groups are formed, each group's members are encouraged to prepare 5 ideas for their project and meet with their supervisor in order to make a decision.
- One the supervisor agrees on the project idea, each group shall immediately starts working on the project and the documentation.
- During the semester, the whole group should regularly meet with their supervisor to discuss their progress and the upcoming tasks.
- The text in all reports should follow the following style criteria:
  - Normal text written in "Times New Romans" of font 12 point. And font size 10 should be used for footnotes, captions, figures, tables.
  - The line spacing for the text should be set to 1.5.
  - Text should follow the Left to right justified alignment.

- **Graduation project presentations will be held on *26-27/05/2024*.**
  Each project is required to be presented in 15 minutes (5 minutes for each student in the group) in front of the examiners.
- Graduation project presentations are expected to include:
  - A PowerPoint slides that generally describe the system
  - A live demo for the system itself.
- The supervisor and the examiners have 60 and 40 marks respectively in order to evaluate each student.
- General evaluation criteria are as follows:
  - Understanding the system.

- Business logic.
- The proper functionality of the system: validation measures, connecting database with the system, correct functioning of the system.
- Developing reports.
- Presentation.
- Ability to discuss and answer questions.

Report One

- **The main structure for report 1**

1. Title (Cover) Page:

a. Name of the project.

b. Name of the system team members.

c. The date the proposal is submitted.

2. Introduction:

The introduction should offer a preview of the proposal's main points. It should enable the reader to understand what the project is about, including specifying existing problem, proposed solution (system), the value of the system, and customer target.

The introduction can answer the questions such as the who (people involved in the business process), what (the business activities), when (the timing or sequence of activities), where (the environment in which the work takes place), why (the business user should use the system), and how (how the current procedures are performed) of the proposal.

3. Problem Definition:

a. Problem Statement: highlights that aims and objectives of the proposed system. The objective of the system will come as a natural result once the problem is found and clearly understood and specified. Think of "Why this problem is important to address?"

b. Project Scope: highlights the functionalities and capabilities of the system, what it covers and which market segment (audience) it targets.

c. Uniqueness: reflects the innovativeness of the proposed idea. It answers questions like: How is our system different from those available in the market? What new features does the new system offer?
d. Business model.

To help you identify the problem, you can follow the below guidelines:

a. Work Procedures:
    i. Look closely at what is occurring in any business & pinpoint problems.
    ii. Seize the opportunity you believe can be improved through the use of computerized information system.
    iii. Discover what the business is trying to do.
    iv. Address specific problems or objectives to see if some aspect of information systems can help the business to reach its objectives.
b. Activities:
    i. Interviewing user managers.
    ii. Summarizing the knowledge obtained.
    iii. Estimating the scope of the project.

4. Feasibility Study:

Identify the technical, economic, and operational feasibilities of the proposed project.

5. Project Plan:

Develop a project plan the shows the activities required for developing the project alongside the estimated completion date of each activity. (Use MS-Project).

Report Two

- **The main structure for report 2**

1. Draw data flow diagrams (context diagram, level 0, and child diagrams if applicable). Kendall, chapter 7.
2. Develop the ER diagrams and data dictionary.
3. Draw flow charts.
4. Develop entity event matrix.
5. Draw use case models. Kendall, chapter 2.
6. Mock screen (using Visio)

Final Documentation

- **The main structure for the final documentation**

- **Preliminary Pages:**

- Title (cover) page: In the first page (not to be numbered) you should have: The University logo, Faculty (School of Business), Department, Project title, Student Names, and Date of submission.
- Abstract
- Acknowledgment
- Table of contents: In this table, the contents (chapters and sections) with respective page numbers have to be listed.
- List of figures and tables: In this section, all figures and tables are to be listed together with respective page numbers.

- **Main Text (Chapters):**

1. Chapter 1: Introduction

   This chapter includes background (current system if exist), statement of the problem, objectives, scope of the study, and value of the system.
2. Chapter 2: Feasibility and Information Requirements

This chapter includes feasibility study (Technical, Economic, and Operational), data collection methods (how did you collect the data, from whom), information requirements, and project plan.

3. Chapter 3: System Analysis

   This chapter includes an overview of the system (About XXX system), the users, flow charts, use cases organized by users, data flow diagrams.

4. Chapter 4: System Design

   This chapter includes E-R diagrams, data dictionary, and entity event matrix.

5. Chapter 5: [The New System] this chapter should be entitled according to the project title

   This chapter will offer details of the new system (the one students' developed), it will include the functionalities the system is offering along with screen shots illustrating each functionality.

6. Chapter 6: Conclusion

   This chapter will offer a summary of the new system, its value and the problem it is addressing. You can start by summarizing the problem you set out to solve, describe what you have done, and opportunities for future work.