

King Fahd University of Petroleum and Minerals
Department of Mathematics & Statistics
MATH 619 Syllabus, Term 251

Program: MSC-Data Science & Analytics

Code: MATH 619

Title: Project

Prerequisite: Graduate Standing

Instructor: Dr. Boubaker Smii

E-mail: boubaker@kfupm.edu.sa

Description: A graduate student will arrange with a faculty member to conduct an industrial research project related to the program field. Subsequently the students shall acquire skills and gain experiences in developing and running actual industry-based project. This project culminates in the writing of a technical report, and an oral technical presentation in front of a board of professors and industry experts.

Prerequisite: Graduate Standing

Objective: The main objective of the project is to

- Discuss industry-oriented applications
- Integrate the knowledge, skills, and competencies of the program into a practical project
- Provide students the opportunity to team up with industry professionals to develop their professional skills and knowledge

Learning Outcomes: Upon completion of the project, students should be able to:

- Discuss the steps needed to design computational-based solutions to a practical problem
- Apply the required computational skills to solve the problems
- Develop the ability and confidence necessary for solving mathematical problems.
- Assess and evaluate the proposed solution/design.

Supplementary Material:

1. IBM SPSS

Attendance: Attendance is a University Requirement. A student must attend all scheduled meetings. A **warning** will be assigned to a student who misses 2 presentations with no official, KFUPM excuse.

Academic Integrity: All KFUPM policies regarding ethics apply to this course.

Rules, regulations and implementation plan of the project

- 1- Each student should come up with a project title and project idea.
- 2- The project should be of a practical nature and directly related to industry.
- 3- Students are required to indicate the names of a potential academic advisor and industrial advisor (if any with CV). Having an industry expert as co-supervisor is recommended.
- 4- As part of the assessment method, a short report (5-6 pages) describing the progress and the encountered difficulties by the student should be submitted to the advisor bi-weekly along with a Power-Point presentation.
- 5- Poster session at Math Department should be delivered during last week of the second semester and each student should be present from **1 pm** to **4 pm** to answer the questions of a scientific committee.
- 6- Final report is required, and is part of the assessment.
- 7- Presentation is required in front of the advisor and at least two others (faculty members or external industry experts, to be selected by the advisor).
- 8- Student is given letter grade. The letter grade will be based on the short reports, the presentations, the final report and the oral examination during the presentation.
- 9- Grade is assigned by the advisor, not by the committee.

Very important (effective: semester 251)

1-The Project course **Math 619** **must** be conducted **individually**, meaning **only one student** will work with **one** project.

2- Each student (after consultation of his advisor) should submit a proposal to CGIS through:

gs-academics@kfupm.edu.sa.

3- Each proposal should include:
student's name, advisor's name, brief description of their research project, title, objectives, table of contents, introductions, literature review and method.

3- The **deadline** for submission of the full proposal will be on **July 19th , 2025**.