

COURSE DESCRIPTION:

This course is designed to help Preparatory Year Program students learn the basics of programming, focusing on MATLAB. The goal is to encourage students to learn MATLAB by applying it to solve mathematical

MATLAB combines the capability to perform complex operations on mathematical matrices, create data and function plots, implement algorithms, and interface with programs written in languages like C, C++, and Java.

COURSE OBJECTIVES:

The program aims to:

1. Introduce students to the MATLAB environment.
2. Explain and guide students to do simple calculations using MATLAB.
3. Help students to carry out simple numerical computations and analyses using MATLAB.

The program is designed to introduce students to MATLAB, covering its usage, basic data types, and how to utilize MATLAB for solving elementary algebra math problems and creating graphs.

COURSE LEARNING OUTCOMES:

Upon completion of the MATLAB modular course, students should be able to:

1. Recognize the main features of the MATLAB development environment
2. Use the MATLAB as a calculator effectively
3. Design simple algorithms to solve basic problems

SOFTWARE & HARDWARE:

Labs: The session will be carried out in the computer LAB.

METHODOLOGY

1. All newly admitted students will sit for the short course Introduction to MATLAB
2. The course is 8 contact hours (8 lectures - one contact hour per week)
3. The course has 5 assignments (one assignment per week and one final project (all students should present as groups in the last two classes))

RULES & REGULATIONS

Attendance

- Every 3 registered late will convert into 1 absent.
- A student is registered absent in a class if he joins after 10 minutes or he did not attend.
- A student is registered as late in a class if he joins within 10 minutes from the start of the class time.
- A student will receive 1st warning if he has 1 unexcused absence.
- A student will be awarded a 'DN' grade if he reaches 2 unexcused absences.
- A student will be awarded a 'DN' grade if he reaches 3 total absences.
- 1 point will be deducted for being late for one class.
- 3 points will be deducted from the student's attendance grade for each unexcused absence.
- It's the responsibility of the student to keep a record of his absences. Students will have only one week to submit their official excuses to the office of the Chairman, Prep Year Program.

Change of Section

Change of section is not allowed.

Lectures

The course is 8 contact hours (8 lectures - one contact hour per week)

GRADING POLICY

No.	ASSESSMENT AND GRADES POLICY	TOTAL WEIGHT
1	Attendance	5%
2	Quizzes and tests	20%
3	Class participation	25%
4	Project/assignments	50%

TEXTBOOK

Introduction to MATLAB for engineering students by David Houcque