

**University of Baghdad**  
**College of Engineering/ Department of Environmental Engineer**

**EnE208 Computer programming**  
**Tentative Course Outline 2023-2024**

**Instructor:** Dr. Zainab Kadhim Abdulsada

**Email:** [Zainab.alsada@coeng.uobaghdad.edu.iq](mailto:Zainab.alsada@coeng.uobaghdad.edu.iq)

**Lecture schedule:** Thursdays 8:30 to 9:30 am/ 9:30 to 10:30 am

**Lab schedule:** Tuesdays 10:30 am to 12:30 pm/ Wednesdays 8:30 to 10:30 am

### **Course Description**

To develop an understanding of MATLAB programming language.

This is an introduction to MATLAB and its popular toolboxes. Lectures are interactive, with students conducting sample MATLAB problems in real time. This course includes problem-based MATLAB assignments. Students may bring their own laptop and software. This course represents a great preparation for classes/projects that use MATLAB.

The goal of this course is that the students will be able to use MATLAB at introductory level and hence gain useful computational skills that are applicable to their field of study.

### **Grading:**

- Class attendance, discussion and participation, and assignment (6%)
- 1<sup>st</sup> midterm exam (12%)
- 2<sup>nd</sup> midterm exam (12%)
- Lab (10%)
- Final Exam (60%)

### **Textbooks:**

- Dr. Zainab Kadhim Abdulsada, Lecture Notes for EnE208 computer programming 2023-2024. Available on Google Classroom prior to lecture.

**Tentative course schedule:**

| Week | Date   | Lecture                            | Week | Date          | Lecture                         |
|------|--------|------------------------------------|------|---------------|---------------------------------|
| 1    | Oct.12 | Introduction                       | 16   | Jan.25        | Mid-term break                  |
| 2    | Oct.19 | Arrays                             | 17   | Feb.1         | Input/output                    |
| 3    | Oct.26 | Symbolic math                      | 18   | Feb.8         | Selection                       |
| 4    | Nov.2  | Plotting                           | 19   | Feb.15        | Relational and logical operator |
| 5    | Nov. 9 | Matrix                             | 20   | Feb.22        | Logical vector                  |
| 6    | Nov.16 | Linear algebraic equations         | 21   | Feb.29        | Practicing                      |
| 7    | Nov.23 | m-files/global and local variables | 22   | Mar.7         | Holiday (expected)              |
| 8    | Nov.30 | dsolve                             | 23   | Mar.14        |                                 |
| 9    | Dec.7  | If-else                            | 24   | Mar.21        | Norouz Holiday                  |
| 10   | Dec.14 | Loop                               | 25   | Mar.28        |                                 |
| 11   | Dec.21 |                                    | 26   | Apr.4         | Review                          |
| 12   | Dec.28 | Holiday (expected)                 | 27   | Apr.11        | Eid Al-Fater (expected)         |
| 13   | Jan.4  | Review                             | 28   | Apr.18        | 2 <sup>nd</sup> term exam       |
| 14   | Jan.11 | 1 <sup>st</sup> term exam          | 29   | Apr. 25       | -----                           |
| 15   | Jan.18 | Mid-term break                     | 30   | Apr.30/ May 2 | -----                           |

**Note:**

Course content is subject to change based on time limitations and class progress.