



Benha University

# Microprocessor ECE311C & ECE413

Computer Systems Engineering  
Electrical Engineering Department



Faculty of Engineering  
(at Shoubra)

**Course Title:** Microprocessor  
**Course Code:** ECE311C & ECE413  
**Course Page:** <http://bu.edu.eg/staff/ahmedbayoumi-courses/13475>  
**Instructor:** Dr. Ahmed Bayoumi (<http://www.bu.edu.eg/staff/Ahmed Bayoumi>)  
**Main Textbook:** The intel microprocessors (8th Edition) Architecture, Programming, and Interfacing. by BARRY B. BREY. ISBN-13: 978-0-13-502645-8, ISBN-10: 0-13-502645-8

**Other Resources:**

- Course Contents:**
1. Introduction to the microprocessor and computer
  2. The microprocessor and its architecture
  3. Addressing modes
  4. Data movement instructions
  5. Arithmetic and logic instructions
  6. Program control instructions
  7. Using assembly language with c/c++
  8. Programming the microprocessor
  9. 8086/8088 hardware specifications
  10. Memory interface

- Recommended Background:**
1. Understanding of:
    - a) Probability (such as the likelihood of an event)
    - b) Computer system organization (such as binary representations and arithmetic).
  2. You should be comfortable with simple calculations and manipulations using scientific notation.

- Attendance Policy:**
1. Attendance is expected.
  2. Whether you attend or not, you are responsible for keeping track of whatever happens during the lectures and the tutorials.
  3. Side talking, cellphones, laptops, food/drinks, and walking<sup>1</sup> are not allowed.



**Total Marks:** 150.

**Grading System:**

<b>Attendance<sup>2</sup>:</b>	05%
<b>Assignments:</b>	05%
<b>Quizzes:</b>	05%
<b>Midterm Exam:</b>	15%
<b>Project(s):</b>	10%
<b>Final Exam:</b>	60%
<b>Total</b>	100%

<sup>1</sup>If you are late for the lecture, then you are allowed to walk into the lecture hall but quietly (1 min only).

<sup>2</sup>Attendance will be taken anyway.