

**IE 241 Cost Analysis in Engineering (3 0 3) (ECTS: 5)**  
**2026-2027 Fall**

**Instructors:**

|                      |                                                                          |                            |                           |
|----------------------|--------------------------------------------------------------------------|----------------------------|---------------------------|
| <b>Instructor:</b>   | Dr. Ahmet KABARCIK                                                       |                            |                           |
| <b>Office:</b>       | L-323                                                                    |                            |                           |
| <b>Phone:</b>        | 1373                                                                     |                            |                           |
| <b>Email:</b>        | <a href="mailto:a.kabarcik@cankaya.edu.tr">a.kabarcik@cankaya.edu.tr</a> |                            |                           |
| <b>Office Hours:</b> | TBA                                                                      |                            |                           |
| <b>Class Hours:</b>  |                                                                          | Section 01                 | Section 02                |
|                      | <b>Class:</b>                                                            | LB05                       | LB05                      |
|                      | <b>Time:</b>                                                             | Wednesday<br>14:20 – 17:10 | Thursday<br>14:20 – 17:10 |

**Catalog Description:**

Introduction to accounting systems; basics of financial accounting; preparation and analysis of financial statements; inventory valuation and depreciation methods; cost terms and classifications; cost-volume-profit analysis; budgeting; variance analysis; allocation of common costs and joint costs; costing systems and their practices in manufacturing and service industry; pricing decisions and cost management.

**Text Book:**

1. Charles T. Horngren, Srikant M. Datar, Madhav V. Rajan, Cost Accounting - A Managerial Emphasis, 14<sup>th</sup> Edition, Pearson, 2012
2. Jae K. Shim, Joel G. Siegel, Financial Accounting, McGraw-Hill, 1999

**Reference Books:**

Leslie G. Eldenburg, Susan K. Wolcott, Cost Management, John Wiley & Sons, 2011.

**Course Outline:**

|    |                                                                    |
|----|--------------------------------------------------------------------|
| 1  | Introduction to Accounting Systems, Basics of Financial Accounting |
| 2  | Financial Transaction Recording, Preparing Financial Statements    |
| 3  | Inventory Valuation, Depreciation Methods                          |
| 4  | Introduction to Cost Terms and Classification of Costs             |
| 5  | Cost Behavior and Cost Functions                                   |
| 6  | Cost-Volume-Profit Analysis                                        |
| 7  | Master Budget                                                      |
| 8  | Flexible Budget and Variance Analysis                              |
| 9  | Allocation of Support Department Costs, Common Costs, and Revenues |
| 10 | Allocation of Joint Costs                                          |
| 11 | Job Costing                                                        |
| 12 | Activity-Based Costing                                             |
| 13 | Process Costing                                                    |
| 14 | Pricing Decisions and Cost Management                              |

**Tentative Grading:**

- % 30 Homework / Quiz (3 activities, each is 10%)
- % 33 Midterm Exam
- % 37 Final Exam

***Letter grades will be based mainly on the catalog grading system described in Çankaya University's regulations.***

***Note that the instructor reserves the right to modify these percentages if he deems it necessary.***

**Academic Integrity:** All students admitted to Çankaya University are expected to act honestly and ethically. Therefore, any form of dishonesty will not be tolerated. Every student should declare their understanding of and belief in the department's Honor Code for examinations and assignments.

**Make-up Exams:** If a student misses the midterm exam or final exam and has a valid excuse for his/her absence, a make-up exam will be given. ***A make-up exam may have a different format and may contain different types of questions than the regular exam.***

**Conditions that may lead to the letter grade “NA”:**

- Not attending the *Midterm Exam* (or its makeup) or the *Final Exam* (or its makeup);
  - If you fail to take the midterm exam (or its makeup), you will NOT be able to take the final exam, and you will receive the letter grade NA.
  - If you are eligible to take the final exam but fail to take it (or its makeup) you will receive the letter grade NA.

**Course Website:**

- Communication will be made through the course page at <http://webonline.cankaya.edu.tr>
- Announcements, lecture notes, grades, and other information will be uploaded to the course page.
- Every student should check the course page regularly. Students are also responsible for printing the course materials (lecture notes, exercises, etc.) from the course webpage.

**Exams and Homework:**

- There will be one midterm exam, a final exam, and three homework or quiz assignments in this course.
- In *homework assignments*, students should work in teams of *a maximum of three students*.
  - It is the student's responsibility to find his/her team members.
  - Each team should submit a single written document including their work for each homework assignment.
- Further details about the midterm exam, homework assignments, and final exam will be given later.

**Students who do not meet the 60% attendance requirement set by university regulations will not be admitted to the final exam.**

**NOTE THAT EVERYTHING IN THIS SYLLABUS IS SUBJECT TO CHANGE. STUDENTS WILL BE NOTED ABOUT ANY CHANGE.**