

ALANYA ALAADDIN KEYKUBAT UNIVERSITY INDUSTRIAL ENGINEERING UNDERGRADUATE PROGRAM DESIGN AND PROJECT PRINCIPLES

1. PROJECT COORDINATOR

An instructor and a faculty member who can assist are appointed as project coordinator to be responsible for tasks such as assignment of projects, coordination of presentations and reports.

2. PROJECT APPOINTMENT

- Project groups are created by students. Groups will consist of maximum 3 and minimum 2 students, and the groups are announced to the students at the beginning of the semester.
- Groups are randomly assigned to advisors.

3. PROJECT STUDIES

- The main study titles for the END 403 and END 492 courses covering the graduation thesis are given below. These titles may vary on the basis of the problem.
- Presentations and reports will be evaluated over these headings, and it will be advantageous for the project groups to complete these headings in order, both in terms of presentation and report evaluation. Since the report and presentation at the end of the term will be based on the subject headings, a title that is not made will reflect negatively on the grades of the groups.

4. GRADING

Evaluation will consist of 3 main elements: Presentation evaluation, Report evaluation and Advisor's opinion. Student grade distribution will be calculated using the table below.

| | |
|------------------------|------|
| Individual assessment | (40) |
| a. Advisor opinion | 40 |
| Jury evaluation | (60) |
| b. Presentation (jury) | 30 |
| c. Report | 30 |

a. Advisor opinion

It belongs entirely to the advisor and will be graded on a student basis . The Advisor will consider and evaluate the work done by the students during the relevant course periods.

b. Presentation

- The presentation will be made on the same day for all groups. The presentation schedule will be announced to the students before the presentation.
- All groups are required to submit the presentation file before the presentations begin.
- The presentations will be evaluated with an evaluation form that will be announced to the students.
- Project presentations will be evaluated by the designated instructors' juries.
- Presentation grades will be given according to the evaluation averages of the jury.

c. Report

- Reports will be delivered on the date and in the manner announced. Reports submitted after the deadline will not be considered.
- The reports will be evaluated with an evaluation form that will be announced to the students.
- The reports will be evaluated independently by the jury to be formed. The general report evaluation will be made according to the evaluation average of the jury.
- Reports will be tested for plagiarism, and reports with a plagiarism rate above 25 percent will not be evaluated. Plagiarism of student reports will be considered for evaluation.

- With the report, students will submit electronic copies of all their work (presentation, report, data, Decision Support Systems, etc.) to the course coordinator.
- Students will evaluate each other with the report. Students will distribute 100 points to their other friends. This assessment will not be directly reflected in the grade, but may affect the advisor's opinion.
- Minimum number of sources in reports:
 - At least 25 articles
 - At least 5 Theses
 - At least 40 resources in total
 Must be.
- The reports will be written according to the ALKU postgraduate thesis writing guide. (<https://enstitu.alanya.edu.tr/ogrenci/lisansustu-tez-ve-donem-projesi-yazim-kilavuzu/>)

5. CONTENTS

As is known, the graduation project consists of two main parts. These are END 403 in the first semester system analysis and problem formulation and END 492 in the second semester system design and analysis synthesis.

END 403 course It consists of six main parts:

1. Company and Subject Selection

It is necessary to choose a business where the graduation project will be made and to arrange the company by making the necessary negotiations. An Industrial Engineering problem is expected to be determined for the firm. If a firm cannot be found, work will continue on a theoretical problem given by the advisor.

2. Subject and Scope (analysis of the system)

- Macro analysis** : General information about the business and the sector in which the business operates, the evaluation of business activities within the framework of the chosen topic should be expressed in detail.
- Micro analysis**: Subject/framework of the problem; description of the subsystem and its environment; g aspirations, data collection; findings (symptoms) compiled in the light of data, etc.

3. Problem Definition and Purpose

Detailed description of the problem, objectives of the problem, critical success indicators; reviewing undergraduate courses within the scope of the problem , examining the literature at the level of books; This is an overview of classic solution tools.

4. Conceptual Model

To identify the controllable/uncontrollable factors in the problem; to examine variables and parameters, to examine possible models; search for solutions. Even if the model is not fully determined, it needs to be worked on and expressed verbally.

5. Literature Study and Authentic Value

To start by examining the books and topics related to the subject at the basic level , and then to

conduct a literature study by making an in-depth article and thesis review on the subject . The differences of the project according to the literature should be revealed.

6. Project Planning

Preparation of project work plans, timeline; Listing the uncertainties that may threaten the success of the project in END 492, anticipating and analyzing the risks that may arise and determining the approaches necessary to eliminate these risks.

END 492 course It consists of three main parts:

7. Method (Modelling and Solution Methodology)

Determination and creation of the appropriate model for the problem; determination of the solution method for the described problem; concluding the solution method based on the feedback obtained through the application of the solution method with sample data; verification of the solution method with different and minor scenarios (“*verification*”).

8. Analysis

Data collection and analysis; loading the model, solving the problem and validating its feasibility (“*validation*”); adaptability and parameter analysis.

9. Conclusion, Widespread Impact and Implementation Plan

Presenting the results, Preparing the implementation plan (time, resource and cost) in real scale based on the prototype work; explanation of the pervasive impact; if possible, discussing with business officials and improving the implementation process; researching and evaluating application opportunities within the scope of University-Industry cooperation projects (SANTEZ, TUBITAK, KOSGEB, TEYDEP etc.).

Important dates for END 403 and END 492 will be announced during the term.

END 492 Graduation Project Report Content

- Title
- Summary
- Entrance
- Subject and Scope
- Problem Definition and Purpose
- Conceptual Model
- Literature Search Authentic Value
- Project Planning
- Method
- Analysis
- Conclusion and Widespread Impact
- Bibliography