

Summer Practice

Course Code:

ME 400

Course Period:

Autumn

Course Type:

Core

Credits:

0

ECTS:

1

Prerequisite Courses:

Restricted Elective II (Academic English Courses) [1]

Course Language:

English

Course Objectives:

The aim of summer practice is to let students observe and experience the engineering world outside the university, get a glimpse of the practical aspects of engineering, observe how the knowledge at school and the engineering practice outside are related and decide what they would like to do after they graduate and, perhaps, decide about their elective courses according to that. Students register to this course after they have completed their practice and write their report within this course.

Course Content:

Compulsory summer internship for a minimum of 20 business days. Internships cannot coincide with academic semesters. Students are required to undertake an internship prior to or in the middle of their fourth year of education, if time permits, and to register to this course in the semester following the completion of their internship. Their written report is evaluated and graded within this course.

Course Methodology:

8: Summer practice.

Course Evaluation Methods:

D: Report.

| Course Learning Outcomes | Program Learning Outcomes | Teaching Methods | Assessment Methods |
|---|---------------------------|-----------------------|--------------------|
| 1) Ability to convey in writing what they observed, did and experienced during their summer practice. | 8, 9 | From previous courses | D |
| 2) A practical experience with a chance to observe what mechanical engineering involves in a practical environment. | 7, 11, 12 | 8 | D |

| COURSE CONTENT | | |
|----------------|----------------|-----------------|
| Week | Topics | Study Materials |
| 1 | Report writing | |
| 2 | Report writing | |
| 3 | Report writing | |
| 4 | . | |
| | . | |
| | . | |
| 14 | Report writing | |

| ASSESSMENT | | |
|--|--------|------------|
| IN-TERM STUDIES | NUMBER | PERCENTAGE |
| Report | 1 | 100 |
| Total | | 100 |
| CONTRIBUTION OF FINAL EXAM TO OVERALL GRADE | | --- |
| CONTRIBUTION OF IN-TERM STUDIES TO OVERALL GRADE | | 100 |
| Total | | 100 |

| COURSE'S CONTRIBUTION TO PROGRAM | | | | | | | | |
|----------------------------------|--|---|--------------|---|---|---|---|---|
| No | Program Learning Outcomes | | Contribution | | | | | |
| | | | NA | 1 | 2 | 3 | 4 | 5 |
| 1 | Adequate knowledge in mathematics, science and engineering subjects pertaining to the relevant discipline; ability to use theoretical and applied knowledge in these areas in complex engineering problems. | X | | | | | | |
| 2 | Ability to identify, formulate, and solve complex engineering problems; ability to select and apply proper analysis and modeling methods for this purpose. | X | | | | | | |
| 3 | Ability to design a complex system, process, device or product under realistic constraints and conditions, in such a way as to meet the desired result; ability to apply modern design methods for this purpose. | X | | | | | | |
| 4 | Ability to devise, select, and use modern techniques and tools needed for analyzing and solving complex problems encountered in engineering practice; ability to employ information technologies effectively. | X | | | | | | |
| 5 | Ability to design and conduct experiments, gather data, analyze and interpret results for investigating complex engineering problems or discipline specific research questions. | X | | | | | | |
| 6 | Ability to work efficiently in intra-disciplinary and multi-disciplinary teams; ability to work individually. | X | | | | | | |
| 7 | Ability to communicate effectively in Turkish, both orally and in writing; knowledge of a minimum of one foreign language; ability to write effective reports and comprehend written reports, prepare design and production reports, make effective presentations, and give and receive clear and intelligible instructions. | X | | | | | | |
| 8 | Recognition of the need for lifelong learning; ability to access information, to follow developments in science and technology, and to continue to educate him/herself. | X | | | | | | |
| 9 | Consciousness to behave according to ethical principles and professional and ethical responsibility; knowledge on standards used in engineering practice. | X | | | | | | |

| | | | | | | | | |
|----|--|---|--|--|--|--|--|--|
| 10 | Knowledge about business life practices such as project management, risk management, and change management; awareness in entrepreneurship, innovation; knowledge about sustainable development. | X | | | | | | |
| 11 | Knowledge about the global and social effects of engineering practices on health, environment, and safety, and contemporary issues of the century reflected into the field of engineering; awareness of the legal consequences of engineering solutions. | X | | | | | | |
| 12 | Ability to work professionally in both thermal and mechanical systems areas, including design and realization. | X | | | | | | |
| 13 | Ability to verify and validate numerical solutions to engineering problems. | X | | | | | | |

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION

| Activities | Quantity | Duration (Hour) | Total Workload (Hour) |
|----------------------------------|----------|-----------------|-----------------------|
| Course Duration (14 weeks) | 14 | 2 | 28 |
| Total Work Load | | | 28 |
| Total Work Load / 25 (h) | | | 1.1 |
| ECTS Credit of the Course | | | 1 |