# ESOGÜ Electrical-Electronics Engineering Department

**COURSE CODE:** 151225407 – 151245407 **COURSE TITLE:** Busıness Skills for Engineers

| **Semester** | **Weekly Hours** | | **COURSE** | | | |
|---|---|---|---|---|---|---|
| | **Theoretical** | **Practical** | **Credits** | **ECTS** | **Type** | **Language** |
| 5 | 3 | 0 | 3 | 4 | Compulsory ( ) Elective (✔) | Turkish () English (X) |

Write the credit (for non-credit courses weekly hours) below (If necessary distribute the credits.).

| **Math and Basic Science** | **Electrical Engineering** [mark (√) if there is high design content] | **General Education** | **Humanities** |
|---|---|---|---|
| | ( ) | | ✔ |

| **Assessment** | **THEORETICAL-PRACTICAL COURSES** | | | **LABORATORY COURSES** | | |
|---|---|---|---|---|---|---|
| **Midterm** | **Type** | **Number** | **%** | **Activity Type** | **Number** | **%** |
| | Midterm | 1 | 30 | Quiz | | |
| | Quiz | | | Lab performance | | |
| | Homework | 1 | 20 | Report | | |
| | Project | | | Oral exam | | |
| | Other (……) | | | Other (……) | | |
| **Final** | | 1 | 50 | | | |
| **Makeup exam (Oral/Written)** | | | | | | |

| | |
|---|---|
| **Prerequisites** | none |
| **Brief content of the course** | Entrepreneur engineer; Features of engineering; Money management; Time management; Writing skill; Speech and presentation skills; Human relationship; Business and engineering ethics; Team work; Organizing and leadership; Evaluation of technology. |
| **Objectives of the course** | To develop students' business culture skills to be more successful in their professional life |
| **Contribution of the course towards professional education** | To increase the success potential of the engineering students in their careers by developing their business culture skills as entrepreneurs and as paid employees; To strengthen technical knowledge with managerial and visionary information. |
| **Outcomes of the course** | Students develop entrepreneurial knowledge; Engineering learns the dimension of business culture; Students learn about business money management; Students acquire time management skills; Students develop communication and presentation skills; Students learn the basic principles of business and engineering ethics; Understand the importance of teamwork in business; Students learn about organizing and leadership; Students learn to look at technology from an operating point of view. |
| **Textbook of the course** | Goldberg, David E. (2006), "The Entrepreneurial Engineer", Wiley & Sons, USA |
| **Other reference books** | Cather H., Morris R., Wilkinson J. (2001), "Business Skills for Engineers", Newnes, USA<br>Chou, Wushow "Bill" (2013), "Fast-Tracking Your Career: Soft Skills for Engineering and IT Professionals", Wiley & Sons, USA<br>Woods, Clara (2004), "Çalışma Kılavuzu", Optimist Yayım Dağıtım, İstanbul |
| **Required material for the course** | Computer, projection device, presentation software, white board |

| WEEKLY PLAN OF THE COURSE | |
|---|---|
| **Week** | **Topics** |
| 1 | Entrepreneur engineer; features of engineering business |
| 2 | Money management skills |
| 3 | Time management skills |
| 4 | Business writing skills |
| 5 | Speech and presentation skills |
| 6 | Case study |
| 7 | Human relations |
| 8 | Mid-Term Examination |
| 9 | Mid-Term Examination |
| 10 | Business and engineering ethics |
| 11 | Team work |
| 12 | Organizing and leadership |
| 13 | Evaluation of technology |
| 14 | Case study |
| 15,16 | Final Exam |

| NO | OUTCOMES OF THE PROGRAMME | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| 1 | Adequate knowledge of mathematics, science and Electrical and Electronic Engineering; ability to practice theoretical and practical knowledge of these areas into modeling and solving problems of Electrical and Electronic Engineering | | | | x |
| 2 | Ability to identify complex engineering problems in Electrical and Electronic Engineering and related fields, for this purpose having skills to formulate, select and apply appropriate methods. | | | | x |
| 3 | Having skills to apply modern design methods to design a complex system, equipment or product that should work under realistic conditions and constraints and satisfy specific requirements concerning the Electrical and Electronic Engineering. | | | | x |
| 4 | Having skills to develop, select and apply modern techniques and tools needed for Electrical and Electronic Engineering applications, skills to use information technology effectively. | | | | x |
| 5 | Skills to design and conduct tests, collect data, analyze results, and interpret data for the experimental investigation of Electrical and Electronic Engineering problems | | | | x |
| 6 | Ability to function effectively as an individual and as a member of teams within the discipline and in multidiscipline areas. | x | | | |
| 7 | Communicating effectively in oral and written form both in Turkish and English. | x | | | |
| 8 | Awareness of the necessity of lifelong learning, access to information, monitoring developments in science and technology and the ability to self-renewing | x | | | |
| 9 | Understanding of professional and ethical responsibility | x | | | |
| 10 | Information on project management, change management and risk management practices, awareness on entrepreneurship, innovation and sustainable development. | | | | x |
| 11 | Information about universal and societal effects of engineering applications on health, safety and environment; awareness of the legal consequences of engineering solutions. | | | | x |

**Scale for assessing the contribution of the course to the program outcomes:**

**4: Very high** **3: Medium** **2: Low** **1: None**

**Name of Instructor(s):**

Gürcan Banger

**Signature(s)**:

**Date:**