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| Description: logo | **ÇANKAYA UNIVERSITY**  **Graduate School of Natural and Applied Sciences** **Course Definition Form** |

Please fill in the form completely and submit the printed copy containing the approval of the Department Chair to the Director of the Graduate School. Upon the receipt of *both copies*, the printed copy will be forwarded to the Graduate School’s Administrative Committee for approval. Incomplete forms will be returned to the Department. The approved form is finally sent to the President’s office for approval by the Senate.

**Part I. Basic Course Information**

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| **Department Name** | ELECTRONIC AND COMMUNICATION ENGINEERING | | | | **Dept. Numeric Code** | | |  |  | | --- | --- | | 8 | 2 | |
| **Course Code** | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | | **Number of Weekly Lecture Hours** | |  | | --- | | 3 | | **Number of Weekly Lab/Tutorial Hours** | |  | | --- | |  | | **Number of Credit Hours** | |  | | --- | | 3 | |
| **Course Web Site** | http:// ece.cankaya.edu.tr | | | | **ECTS Credit** | | |  |  | | --- | --- | | 7, | 5 | |

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| **Course Name**  *This information will appear in the printed catalogs and on the web online catalog.* | |
| English Name |  |
| Turkish Name |  |

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| **Course Description**  *Provide a brief overview of what is covered during the semester. This information will appear in the printed catalogs and on the web online catalog.*  *Maximum 60 words.* |
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| **Prerequisites**  (if any)  *Give course codes and check all that are applicable.* | 1st   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | | 2nd   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | | | | 3rd   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | | | 4th   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | |
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| Consent of the Instructor | | | Senior Standing | Give others, if any. | | |
| **Co-requisites**  (if any) | 1st   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | | 2nd   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | | | | 3rd   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | | 4th   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | | |
|  |  | | |  |  | |
| **Course Type**  *Check all that are applicable* | Must course for dept.  Must course for other dept.(s)  Elective course for dept.  Elective course for other dept.(s) | | | | | | |

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| **Course Classification**  *Give the appropriate percentages for each category.* | | | | | |
| Category | Mathematics & Natural Sciences | Engineering Sciences | Engineering Design | General Education | Other |
| Percentage |  |  |  |  |  |

**Part II. Detailed Course Information**

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| **Course Objectives**  *Explain the aims of the course. Maximum 100 words.* |
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| **Learning Outcomes**  *Explain the learning outcomes of the course. Maximum 10 items.* |
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| **Textbook**(s)  *List the textbook(s), if any, and other related main course materials.* | | | | |
| Author(s) | Title | Publisher | Publication Year | ISBN |
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| **Reference Book**s  *List the reference books as supplementary materials, if any.* | | | | |
| Author(s) | Title | Publisher | Publication Year | ISBN |
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| **Teaching Policy**  *Explain how you will organize the course (lectures, laboratories, tutorials, studio work, seminars, etc.)* |
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| **Laboratory/Studio Work**  *Give the number of laboratory/studio hours required per week, if any, to do supervised laboratory/studio work, and list the names of the laboratories/studios in which these sessions will be conducted.* |
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| **Computer Usage**  *Briefly describe the computer usage and the hardware/software requirements in the course.* |
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| **Course Outline**  *List the topics covered within each week.* | |
| Week | Topic(s) |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
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| **Grading Policy**  *List the assessment tools and their percentages that may give an idea about their relative importance to the end-of-semester grade.* | | | | | | | | |
| Assessment Tool | Quantity | Percentage | Assessment Tool | Quantity | Percentage | Assessment Tool | Quantity | Percentage |
| Homework |  |  | Case Study |  |  | Attendance |  |  |
| Quiz |  |  | Lab Work |  |  | Field Study |  |  |
| Midterm Exam |  |  | Class Participation |  |  | Project |  |  |
| Term Paper |  |  | Oral Presentation |  |  | Final Exam |  |  |

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| **ECTS Workload**  *List all the activities considered under the ECTS.* | | | |
| Activity | Quantity | Duration  (hours) | Total Workload  (hours) |
| Attending Lectures (*weekly basis*) |  |  | 0 |
| Attending Labs/Recitations (*weekly basis*) |  |  | 0 |
| Preparation beforehand and finalizing of notes (*weekly basis*) |  |  | 0 |
| Collection and selection of relevant material (*once*) |  |  | 0 |
| Self study of relevant material (*weekly basis*) |  |  | 0 |
| Homework assignments |  |  | 0 |
| Preparation for Quizzes |  |  | 0 |
| Preparation for Midterm Exams (*including the duration of the exams*) |  |  | 0 |
| Preparation of Term Paper/Case Study Report (*including oral presentation*) |  |  | 0 |
| Preparation of Term Project/Field Study Report (*including oral presentation*) |  |  | 0 |
| Preparation for Final Exam (*including the duration of the exam*) |  |  | 0 |
| TOTAL WORKLOAD **/** 25 | | | 0,0 |
| **ECTS Credit** | | | **7.5** |

*Total Workloads are calculated automatically by formulas. To update all the formulas in the document first press CTRL+A and then press F9.*

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| **Program Qualifications vs. Learning Outcomes**  *Consider the below program qualifications determined in terms of learning outcomes of all the courses in the curriculum and capabilities. Look at the learning outcomes of this course given above. Relate these two using the Likert Scale by marking with X in one of the five choices at the right..* | | | | | | |
| **No** | **Program Qualifications** | **Contribution** | | | | |
| **0** | **1** | **2** | **3** | **4** |
| 1 | Ability to conduct scientific research in the electronic and communication engineering area: extend and deepen knowledge; comment and apply the assessed information. |  |  |  |  |  |
| 2 | Knowledge about techniques and methods applied in Electronic and communication engineering |  |  |  |  |  |
| 3 | Ability to complete and apply information using limited or missing data; ability to integrate multidisciplinary information in one part. |  |  |  |  |  |
| 4 | Awareness of new and developing applications; ability to investigate and learn them if necessary. |  |  |  |  |  |
| 5 | Ability to devise and develop techniques to solve engineering problems; ability to realize new innovative techniques when dealing with engineering solutions. |  |  |  |  |  |
| 6 | Ability to develop original ideas and methods and ability to develop innovative solutions when designing systems, components and processes. |  |  |  |  |  |
| 7 | Apply and develop analytical modeling and profound experimental research. In the light of these, solve and report about complex problems. |  |  |  |  |  |
| 8 | Take leadership in multidisciplinary teams; ability to devise different approaches to solve complex problems and take responsibility. |  |  |  |  |  |
| 9 | Ability to communicate both orally and in writing at the level of the European language portfolio B2 (English in particular). |  |  |  |  |  |
| 10 | Ability to explain the work progress and results clearly and in a systematic manner both verbally and in writing in national and international media. |  |  |  |  |  |
| 11 | Ability to describe environmental and social aspects of engineering applications. |  |  |  |  |  |
| 12 | Awareness of societal, scientific and ethical values at all stages of collecting, analyzing and publishing data |  |  |  |  |  |

Contribution Scale to a Qualification: **0**-None, **1**-Little, **2**-Medium, **3**-Considerable, **4**-Largest

**Part III New Course Proposal Information**

*State only if it is a new course*

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| Is the new course **replacing** a former course in the curriculum**?** | | | | Yes | No | Former Course’s Code   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | | | | | Former Course’s Name | |
|  | | | |  | |
| Is there any similar course which has content **overlap** with other courses offered by the university**?** | | | | Yes | No | Most Similar Course’s Code   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | | | | | Most Similar Course’s Name | |
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| **Frequency** of Offerings  *Check all semesters that the course is planned to be offered.* | | | | Fall  Spring  Summer | | | | | | | |
| **First** Offering | Academic Year | | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 2 | 0 |  |  | / | 2 | 0 |  |  | | | | | Semester | | Fall  Spring | | |
| Maximum **Class Size** Proposed | | |  | | --- | |  | | Student **Quota** for Other Departments | | | | |  | | --- | |  | | Approximate **Number of Students** Expected to Take the Course | | | |  | | --- | |  | |
| **Justification for the proposal**  *Maximum 80 words* | | | | | | | | | | | |
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**Part IV Approval**

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| **Proposed by** | Faculty Member  *Give the Academic Title first.* | Signature | Date |
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| Departmental Board Meeting Date |  | Meeting Number |  | Decision Number |  |
| Department Chair |  | Signature |  | Date |  |

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| [Graduate School of Natural and Applied Sciences](http://fbe.cankaya.edu.tr/) [Administrative Committee](http://fbe.metu.edu.tr/administrative-committee) Meeting Date |  | Meeting Number |  | Decision Number |  |
| Director | Prof. Dr. Taner ALTINOK | Signature |  | Date |  |

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| Senate  Meeting Date |  | Meeting Number |  | Decision Number |  |