

AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

| Course Title Basic Electrics - Electronics II | | | | | | | |
|---|---|-----------------------------------|--------------|----------------------------------|---------------|--------------------|----------|
| Course Code | AEK110 | Couse Level | | Short Cycle (Associate's Degree) | | | |
| ECTS Credit 3 | Workload 76 (Hours) | Theory | 1 | Practice | 2 | Laboratory | 0 |
| Objectives of the Course | Objectives of the Course In this course, it is aimed to develop students' knowledge and skills about basic electric control circuits. | | | | circuits. | | |
| Course Content | In this course, it is aimed to in DC and AC current circu the circuits, utilization area temperature control eleme | its and practi s, varieties of | cing, variet | ies of electric r | notors, their | structures, connec | ction to |
| Work Placement N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods Explanation (Presentation), Experiment, Demonstration, Problem Solving | | | | | | | |
| Name of Lecturer(s) Ins. Emine ERTÜRK ŞAHİN | | | | | | | |

| Assessment Methods and Criteria | | | | |
|---------------------------------|----------|----------------|--|--|
| Method | Quantity | Percentage (%) | | |
| Midterm Examination | 1 | 40 | | |
| Final Examination | 1 | 70 | | |

Recommended or Required Reading

1 Elektrik-Elektronik Mühendisliğin Temelleri Cilt 1 Yazar: Uğur Arifoğlu

| Week | Weekly Detailed Course Contents | | | | | |
|------|---------------------------------|---|--|--|--|--|
| 1 | Theoretical | Basic Electrical and Electronics knowledge introduction | | | | |
| 2 | Theoretical | Unit systems introduction | | | | |
| 3 | Theoretical | Circuit elements introduction and working principles in the circuit | | | | |
| 4 | Theoretical | Circuit elements introduction and working principles in the circuit | | | | |
| 5 | Theoretical | Circuit Analysis methods and solutions to questions about the subject | | | | |
| 6 | Theoretical | Circuit Analysis methods and solutions to questions about the subject | | | | |
| 7 | Theoretical | Circuit Analysis methods and solutions to questions about the subject | | | | |
| 8 | Theoretical | Kirchhoff current law and related questions | | | | |
| 9 | Theoretical | Kirchhoff current law and related questions | | | | |
| 10 | Theoretical | Kirchhoff's voltage law and related questions | | | | |
| 11 | Theoretical | Kirchhoff's voltage law and related questions | | | | |
| 12 | Theoretical | Thavenin's theorem and solutions to questions about the subject | | | | |
| 13 | Theoretical | Thavenin's theorem and solutions to questions about the subject | | | | |
| 14 | Theoretical | Norton's theorem and related question solutions | | | | |
| 15 | Theoretical | Norton's theorem and related question solutions | | | | |
| 16 | Final Exam | Final exam | | | | |

| Workload Calculation | | | | |
|--|----------|----------------------|---|----------------|
| Activity | Quantity | Preparation Duration | | Total Workload |
| Lecture - Theory | 13 | 0 2 | | 26 |
| Lecture - Practice | 13 | 1 | 1 | 26 |
| Assignment | 5 | 0 | 2 | 10 |
| Midterm Examination | 1 | 5 | 2 | 7 |
| Final Examination | 1 | 5 | 2 | 7 |
| Total Workload (Hours) | | | | |
| [Total Workload (Hours) / 25*] = ECTS | | | | |
| *25 hour workload is accepted as 1 ECTS | | | | |



| Learn | Learning Outcomes | | | | | |
|-------|-------------------|--|--|--|--|--|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |

| Progr | Programme Outcomes (Alternative Energy Sources Technology) | | | | | | |
|-------|--|--|--|--|--|--|--|
| 1 | To have knowledge about basic science and technology. | | | | | | |
| 2 | To have knowledge about basic energy and alternative energy sources. | | | | | | |
| 3 | To have knowledge about basic electrical and electronic laws. | | | | | | |
| 4 | To have knowledge about the installation and operation of energy facilities. | | | | | | |
| 5 | Learning the methods of recycling of waste and use of energy. | | | | | | |
| 6 | To have experience in energy generation and project design. | | | | | | |

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

| | L1 | L2 | L3 | L4 | L5 |
|----|----|----|----|----|----|
| P1 | 5 | 5 | 5 | 5 | 5 |
| P3 | 4 | 4 | 4 | 4 | 4 |
| P5 | 3 | 3 | 3 | 3 | 3 |
| P6 | 3 | 3 | 3 | 3 | 3 |

