| | FUNDAMENTALS OF | ELEC | CTRICITY AND ELECTRONICS | | | | | | |
|----|---|---|---|--|--|--|--|--|--|
| 1 | Course Title: | FUNDAN | MENTALS OF ELECTRICITY AND ELECTRONICS | | | | | | |
| 2 | Course Code: | BSM2806 | | | | | | | |
| 3 | Type of Course: | Compulsory | | | | | | | |
| 4 | Level of Course: | First Cycle | | | | | | | |
| 5 | Year of Study: | 2 | | | | | | | |
| 6 | Semester: | 4 | | | | | | | |
| 7 | ECTS Credits Allocated: | 4.00 | | | | | | | |
| 8 | Theoretical (hour/week): | 2.00 | | | | | | | |
| 9 | Practice (hour/week): | 1.00 | | | | | | | |
| 10 | Laboratory (hour/week): | 0 | | | | | | | |
| 11 | Prerequisites: | None | | | | | | | |
| 12 | Language: | Turkish | | | | | | | |
| 13 | Mode of Delivery: | Face to face | | | | | | | |
| 14 | Course Coordinator: | Prof. Dr. ALİ VARDAR | | | | | | | |
| 15 | Course Lecturers: | | | | | | | | |
| 16 | Contact information of the Course Coordinator: | Prof. Dr. Ali VARDAR e-posta: dravardar@uludag.edu.tr Telefon: 0 224 2941605 Adres: Bursa Uludağ Üniversitesi, Ziraat Fakültesi, Biyosistem Mühendisliği Bölümü, Görükle Kampüsü, 16059, Nilüfer/BURSA | | | | | | | |
| 17 | Website: | | | | | | | | |
| 18 | Objective of the Course: | Used today in the field of agriculture and animal husbandry technologies in electricity, electronics and automation applications are given frequently. The aim of the course in this context, the basic information about electricity and electronics to teach basic skills to teach, and in this regard. | | | | | | | |
| 19 | Contribution of the Course to Professional Development: | The course contributes to the student's understanding of the infrastructure of agricultural electricity, electronics and automation. | | | | | | | |
| 20 | Learning Outcomes: | | | | | | | | |
| | | 1 | Understand the concepts and importance of electricity and electronics | | | | | | |
| | | 2 | Recognize basic electrical and electronic circuit elements and their features | | | | | | |
| | | 3 | Establish basic electrical and electronic circuits | | | | | | |
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| 21 | Course Content: | | | | | | | | |
| | | Со | ourse Content: | | | | | | |
| | Theoretical | | Practice | | | | | | |
| 1 | Introduction | | Lectures on the analysis of expectations | | | | | | |
| 2 | Electrical Principles | | Homework topics and information given | | | | | | |

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|--|---|------------|--|--|--|--|--|--|--|
| 3 | Electrical Measurement units | | Problem solutions | | | | | | |
| 4 | Ohm's Law | | Problem solutions | | | | | | |
| 5 | Electrical measuring instruments | | Measurement applications | | | | | | |
| 6 | Electrical Circuits | | Electrical circuit applications | | | | | | |
| 7 | Electrical Circuits | | Electrical circuit applications | | | | | | |
| 8 | And Principles of Magnetism | | Electrical circuit applications | | | | | | |
| 9 | Repeating courses and midterm exar | n | Electrical circuit applications | | | | | | |
| 10 | Electronic circuit elements | | Examination of the electronic circuit components | | | | | | |
| 11 | Electronic circuit elements | | Examination of the electronic circuit components | | | | | | |
| 12 | Various electronic circuitry | | Circuit applications | | | | | | |
| 13 | Various electronic circuitry | | Circuit applications | | | | | | |
| 14 | General Review | | Circuit applications | | | | | | |
| 22 | Textbooks, References and/or Other Materials: | | 1. Vardar A., 2018. Elektrik ve Elektroniğin Temelleri, BUÜ Ders Notları No: 114, Bursa. 2. Çelebi H.H., 1999. Elektrik Bilgisi, Yüce yayınları, İstanbul. 3. Özkan T., 1995. Temel Elektronik, Kayhan Matbaası, İstanbul. 4. Ufuktepe Y. Ve Bozdemir S., 1997. Elektromanyetik Teori, Baki Kitabevi, Adana. 5. Boylestad R. Ve Nashelsky L., 1994. Elektronik Elemanlar ve Devre Teorisi, Evren Ofset, Ankara. 6. Bal G., 2001. Doğru Akım Makinaları ve Sürücüleri, Seçkin Yayıncılık, Ankara. | | | | | | |
| 23 | Assesment | | | | | | | | |
| TERM L | EARNING ACTIVITIES | NUMBE R | WEIGHT | | | | | | |
| Midtern | n Exam | 1 | 10.00 | | | | | | |
| Quiz | | 0 | 0.00 | | | | | | |
| Home v | vork-project | 1 | 30.00 | | | | | | |
| Final Ex | xam | 1 | 60.00 | | | | | | |
| Total | | 3 | 100.00 | | | | | | |
| | ution of Term (Year) Learning Activities s Grade | es to | 40.00 | | | | | | |
| Contrib | ution of Final Exam to Success Grade |) | 60.00 | | | | | | |
| Total | | | 100.00 | | | | | | |
| Measurement and Evaluation Techniques Used in the Course | | | Midterm Exam, Practice Exam and Final Exam | | | | | | |
| 24 | ECTS / WORK LOAD TABLE | | | | | | | | |

| Theoretical | | | | | | | , | 14 | | | 2.00 | 2.00 | | | 28.00 | | |
|--|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|----------|-------|-------|----------|------|-------|--------|--|
| Practicals/Labs | | | | | | | • | 14 | | | 1.00 | 1.00 | | | 14.00 | | |
| Self study and preperation | | | | | | | ŕ | 14 | | | 2.00 | 2.00 | | | 28.00 | | |
| Homeworks | | | | | | | • | 1 | | | 30.00 | 30.00 | | | 30.00 | | |
| Projects | | | | | | | | (| 0 | | | 0.00 | 0.00 | | | 0.00 | |
| Field Studies | | | | | | | (| 0 | | | 0.00 | 0.00 | | | 0.00 | | |
| Midterm exams | | | | | | | • | 1 | | | 1.00 | 1.00 | | | 1.00 | | |
| Others | | | | | | | | (| 0 | | | 0.00 | 0.00 | | | 0.00 | |
| Final Exams | | | | | | | | • | 1 | | | 20.00 | 20.00 | | | 20.00 | |
| Total Work Load | | | | | | | | | | | | | | | | 121.00 | |
| Total work load/ 30 hr | | | | | | | | | | | | | | | | 4.03 | |
| ECTS Cred | ECTS Credit of the Course | | | | | | | | | | | | | | | 4.00 | |
| 25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS | | | | | | | | | | | | | | | | | |
| | PQ1 | PQ2 | PQ3 | PQ4 | PQ5 | PQ6 | PQ7 | PQ8 | PQ9 | PQ1 0 | PQ11 | PQ12 | PQ1 3 | PQ14 | PQ15 | PQ16 | |
| ÖK1 | 4 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ÖK2 | 3 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Number

Activites

ÖK3

Contrib

ution Level: 0

4

1 very low

4

3

5

2 low

0

0

0

LO: Learning Objectives PQ: Program Qualifications

3 Medium

0

0

0

4 High

0

0

0

Duration (hour) Total Work Load (hour)

0

5 Very High

0