



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

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|--|---|--|------------|--|---|----------------------------------|---|------------|---|
| Course Title | | Basic Machine Knowledge | | | | | | | |
| Course Code | | MKE180 | | Course Level | | Short Cycle (Associate's Degree) | | | |
| ECTS Credit | 2 | Workload | 50 (Hours) | Theory | 2 | Practice | 0 | Laboratory | 0 |
| Objectives of the Course | | Introduction of Basic Machines Giving the solution approach of the problems related to machine design Teaching basic machine subjects Developing the ability to work in teams | | | | | | | |
| Course Content | | Historical development of machines, Professional ethics, Introduction to the work done by machine makers in general, Basic concepts in machine, Classification of machine elements in general, Simple Strength Calculations, Machine tools and their work. | | | | | | | |
| Work Placement | | N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods | | | | Explanation (Presentation), Demonstration, Discussion, Case Study, Individual Study, Problem Solving | | | | | |
| Name of Lecturer(s) | | Assoc. Prof. Ali Kemal ÇAKIR | | | | | | | |

Assessment Methods and Criteria

| Method | Quantity | Percentage (%) |
|---------------------|----------|----------------|
| Midterm Examination | 1 | 40 |
| Final Examination | 1 | 70 |

Recommended or Required Reading

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| 1 | Basic Machine Knowledge Course Notes |
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| Week | Weekly Detailed Course Contents | |
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| 1 | Theoretical | Machining as a Profession. |
| 2 | Theoretical | Energy and Machinery. Dimensions, Units and Error |
| 3 | Theoretical | Unit analysis, unit transformations and related applications |
| 4 | Theoretical | Description of measurement and control issues, introduction of used measuring instruments |
| 5 | Theoretical | Caliper as dimension measuring instruments, micrometer and dial gauge Infinitives as instruments. Measure reading applications with caliper and micrometer |
| 6 | Theoretical | Connecting elements, welding connections, Solder connections, Bonding connections, Bolt connections |
| 7 | Theoretical | Professional and ethical responsibility explaining to have |
| 8 | Theoretical | National and international standards and quality organizations. Standard and Definition of quality. |
| 9 | Intermediate Exam | midterm |
| 10 | Theoretical | Entrepreneur and self-confidence of students explaining |
| 11 | Theoretical | Engineering service national and global have knowledge about the dimensions |
| 12 | Theoretical | Industrial rights, intellectual property rights, patent licensing |
| 13 | Theoretical | Science and technology policy |
| 14 | Theoretical | Machine Design |
| 15 | Theoretical | Visiting an industrial organization, Manufacturing |



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| 16 | Final Exam | Final Exam |
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Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|--|----------|-------------|----------|----------------|
| Lecture - Theory | 14 | 1 | 1 | 28 |
| Assignment | 5 | 0 | 3 | 15 |
| Midterm Examination | 1 | 3 | 1 | 4 |
| Final Examination | 1 | 2 | 1 | 3 |
| Total Workload (Hours) | | | | 50 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 2 |

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

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| 1 | Mathematics, science and engineering related fields sufficient knowledge of the issues; theoretical and apply practical knowledge to modeling engineering problems and ability to apply for solving. |
| 2 | Realistic complex system, process, device or product under certain conditions and conditions, ability to design in a way; modern design for this purpose the ability to apply methods. |
| 3 | Designing experiments to investigate engineering problems, conducting experiments, collecting data, analyzing results and interpretation skill |
| 4 | Awareness of the necessity of lifelong learning; information accessing, monitoring developments in science and technology; and self-renewal ability. |
| 5 | Awareness of professional and ethical responsibility |
| 6 | To introduce the basic level of material knowledge, measurement methods, machine parts and machine tools used in part production. |

Programme Outcomes (Private Security and Protection)

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| 1 | Know the powers of private security |
| 2 | Know defense and attack techniques |
| 3 | To understand the security measures |
| 4 | Establishing Organizational Communication |
| 5 | To apply the basic principles of first aid |
| 6 | To be able to make threat assessment and risk management |
| 7 | Learn what the body language is and what needs to be considered to ensure effective communication. |
| 8 | Weapon information |
| 9 | Knows Environmental Health Management in Disasters |
| 10 | Knows the elements of crime |
| 11 | Prepare a security plan |
| 12 | To have necessary knowledge in the field of criminology |
| 13 | To be able to determine employee and employer relations |
| 14 | To have information about the types of terrorist attacks and the signs of the attacks |
| 15 | Evaluate new approaches in security studies |
| 16 | Show effective interventions in social activities |
| 17 | Search and rescue in case of emergency, conducting emergency studies, can manage the organization |
| 18 | Explain the basic elements of health and the factors affecting it. |
| 19 | Know the basic principles of survival |

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

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| | L4 |
| P1 | 2 |
| P2 | 2 |
| P3 | 2 |
| P4 | 2 |
| P5 | 2 |
| P6 | 2 |
| P7 | 2 |
| P8 | 2 |



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| P9 | 2 |
| P10 | 2 |
| P11 | 2 |
| P12 | 2 |
| P13 | 2 |
| P14 | 2 |
| P15 | 2 |
| P16 | 2 |
| P17 | 2 |
| P18 | 2 |
| P19 | 2 |

