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|  | **HASAN KALYONCU UNIVERSITY**  **Faculty of Engineering**  **Course Description Form** |

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| **COURSE:**  Technical Drawing | | | | |
| **CODE:**  CE112 | **SEMESTER:** SPRING | | | |
| **LANGUAGE:**  ENGLISH | **TYPE:** COMPULSORY | | | |
| **PRE-REQUISITES: -**  **CO-REQUISITES: -** | **THEORY** | **PRACTICAL** | **CREDIT** | **ECTS** |
| **WEEKLY HOURS: 4** | 2 | 2 | 3 | 3 |

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| **CONTENT OF THE COURSE:**  Scale, line types, geometric drawings, projections and perspective, freehand sketch drawing, drawing of various reinforced concrete building elements, steel construction, walls, roads and earth works, culverts and bridges. Introduction to Autocad software, Autocad commands. Single dimension drawings, drawings with coordinates, page and setting commands, drawing commands, two dimensional drawings, practice. |

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| **OBJECTIVE OF THE COURSE:**  To introduce the different types of Civil construction elements including: Reinforced Concrete structures, Steel structures, Sanitary engineering construction and their representation in engineer’s language i.e drawing. |

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| **WEEKLY SCHEDULE** | |
| **Week** | **Topics** |
| 1 | Introduction to AutoCAD software |
| 2 | Draw Commands |
| 3 | Erase and Selection Sets |
| 4 | Display Commands |
| 5 | Drawing Aids |
| 6 | Preparing the structural drawings using Autocad software |
| 7 | Preparing the structural drawings using Autocad software |
| 8 | Delivery of the project |
| 9 | Drawing the front view, left side view, right side view, back view, top view and bottom view |
| 10 | Drawing the front view, left side view, right side view, back view, top view and bottom view |
| 11 | Drawing the front view, left side view, right side view, back view, top view and bottom view |
| 12 | Drawing the front view, left side view, right side view, back view, top view and bottom view |
| 13 | Drawing the front view, left side view, right side view, back view, top view and bottom view |
| 14 | Delivery of the project |

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| **TEXTBOOK:** Textbook of Engineering Drawing, Second edition, Copyright © 2008, ISBN: 81-7800-149-7. |

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| **EVALUATION SYSTEM:** | | |
| **IN-TERM STUDIES** | **QUANTITY** | **PERCENTAGE (%)** |
| Midterm Exam | 1 | 40 |
| Homework |  |  |
| Laboratory works |  |  |
| Quiz |  |  |
| Final Exam | 1 | 60 |
| **TOTAL** |  | 100 |
| CONTRIBUTION OF INTERM STUDIES TO OVERALL GRADE |  | 40 |
| CONTRIBUTION OF FINAL EXAMINATION TO OVERALL GRADE |  | 60 |
| **TOTAL** |  | 100 |

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| **COURSE CATEGORY:** | **PERCENTAGE (%)** |
| Mathematics and Basic Sciences |  |
| Engineering | 50 |
| Engineering Design | 50 |
| Social Sciences |  |

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| **TABLE OF ECTS / WORKLOAD:** | | | |
| **Activities** | **QUANTITY** | **Duration**  **(Hour)** | **Total**  **Workload** |
| Course Duration | 13 | 4 | 52 |
| Hours for off-the-classroom study (Pre-study, practice) | 14 | 2 | 28 |
| Laboratory works |  |  |  |
| Mid-term | 1 | 2 | 2 |
| Final examination | 1 | 2 | 2 |
| Homework |  |  |  |
| Quiz |  |  |  |
| **Total Work Load** |  |  | 84 |
| **Total Work Load / 30** |  |  | 2,8 |
| **ECTS Credit of the Course** |  |  | 3 |

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|  | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** |
| **LO1** | 3 | 0 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| **LO2** | 3 | 0 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
|  | PO: Program Outcomes | LO: Learning Outcomes  Values: 0: None | 1: Low | 2: Medium | 3: High | | | | | | | | | | |

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| **INSTRUCTOR(S):** | Asst.Prof.Dr. Dıa Eddın NASSANI |
| **FORM PREPARATION DATE:** | 22.05.2019 |

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| **LEARNING OUTCOMES OF THE COURSE:** | **PROGRAM OUTCOMES:** |
| **LO1:** Prepare structural drawings for any Project using AutoCAD software  **LO2:** Draw front view, left side view, right side view, back view, top view and bottom view of a 3D element | **PO1:** Adequate knowledge in mathematics, science and engineering subjects pertaining to the relevant discipline; ability to use theoretical and applied knowledge in these areas in complex engineering problems.  **PO2:** Ability to identify, formulate, and solve complex engineering problems; ability to select and apply proper analysis and modeling methods for this purpose.  **PO3:** Ability to design a complex system, process, device or product under realistic constraints and conditions, in such a way as to meet the desired result; ability to apply modern design methods for this purpose.  **PO4:** Ability to devise, select, and use modern techniques and tools needed for analyzing and solving complex problems encountered in engineering practice; ability to employ information technologies effectively.  **PO5:** Ability to design and conduct experiments, gather data, analyze and interpret results for investigating complex engineering problems or discipline specific research questions.  **PO6:** Ability to work efficiently in intra-disciplinary and multi-disciplinary teams; ability to work individually.  **PO7:** Ability to communicate effectively in Turkish, both orally and in writing; knowledge of a minimum of one foreign language; ability to write effective reports and comprehend written reports, prepare design and production reports, make effective presentations, and give and receive clear and intelligible instructions.  **PO8:** Recognition of the need for lifelong learning; ability to access information, to follow developments in science and technology, and to continue to educate him/herself.  **PO9:** Consciousness to behave according to ethical principles and professional and ethical responsibility; knowledge on standards used in engineering practice.  **PO10:** Knowledge about business life practices such as project management, risk management, and change management; awareness in entrepreneurship, innovation; knowledge about sustainable development.  **PO11:** Knowledge about the global and social effects of engineering practices on health, environment, and safety, and contemporary issues of the century reflected into the field of engineering; awareness of the legal consequences of engineering solutions. |