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| Course number and name | END 339 / Project Management |
| Credits, contact hours, categorization of credits | 3 credits / 42 hours / Engineering topic |
| Instructor or course coordinator | Ayberk SOYER, Ayşe Elvan BAYRAKTAROĞLU |
| Text book and other supplemental materials | <ul style="list-style-type: none"> • Kerzner, H. (2017). “Project Management: A systems Approach to Planning, Scheduling, and Controlling”, 12th ed., John Wiley & Sons, Hoboken, NJ. • Project Management Ins. (2013), “A Guide to the Project Management Body of Knowledge”, PMBOK Guide, Newtown Square, Pennsylvania, USA. • MS Project |

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| Course information | |
| Content | Main Stages of Project Management, Project Management Techniques, Computer Aided Project Management. |
| Prerequisites | None |
| Type | Selected elective |

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| Course learning outcomes |
| <p>Students who pass the course will have knowledge about:</p> <ol style="list-style-type: none"> I. Preparation and evaluation of project proposals. II. Main stages of project management. III. Project scheduling techniques. IV. MS Project program. V. Team management and conflict management in projects. VI. Project organization structures. VII. Project crashing. |

| Student outcomes | Level of contribution |
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| SO1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics. | Partial |
| SO2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors. | Partial |
| SO3. An ability to communicate effectively with a range of audiences. | Partial |
| SO4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts. | Partial |
| SO5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives. | High |
| SO6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions. | Partial |
| SO7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies. | Partial |

| Week | Topics | Learning outcome(s) |
|-------------|---|----------------------------|
| 1 | Project Definition, Preparation and Evaluation of Project Proposals, Phases of Project Planning | I, II, |
| 2 | Main Stages of Project Management-I | II |
| 3 | Main Stages of Project Management-II | II |
| 4 | Main Stages of Project Management-III | II |
| 5 | Arrow Diagrams | III |
| 6 | Critical Path Method (CPM) | III |
| 7 | Program Evaluation and Review Technique (PERT) | III |
| 8 | Block Diagrams | III |
| 9 | Computer Aided Project Management (MS Project Application) | IV |
| 10 | Team Management and Conflict Management in Projects | V |
| 11 | Project Organization Structures | VI |
| 12 | Linear Programming at Determination of Improvement Cost and Critical Time | VII |
| 13 | Project Crashing | VII |
| 14 | Term Project Presentations | I, II, III, IV, V, VI, VII |