

ENGINEERING PROJECT MANAGEMENT

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| 1 | Course Title: | ENGINEERING PROJECT MANAGEMENT | |
| 2 | Course Code: | BMB4008 | |
| 3 | Type of Course: | Optional | |
| 4 | Level of Course: | First Cycle | |
| 5 | Year of Study: | 4 | |
| 6 | Semester: | 8 | |
| 7 | ECTS Credits Allocated: | 5.00 | |
| 8 | Theoretical (hour/week): | 3.00 | |
| 9 | Practice (hour/week): | 0.00 | |
| 10 | Laboratory (hour/week): | 0 | |
| 11 | Prerequisites: | None | |
| 12 | Language: | Turkish | |
| 13 | Mode of Delivery: | Face to face | |
| 14 | Course Coordinator: | Prof. Dr. KEMAL FİDANBOYLU | |
| 15 | Course Lecturers: | - | |
| 16 | Contact information of the Course Coordinator: | e-posta: kfidan@uludag.edu.tr Uludağ Üniversitesi, Bilgisayar Mühendisliği Bölümü Görükle Kampüsü, 16059 Nilüfer, Bursa | |
| 17 | Website: | | |
| 18 | Objective of the Course: | To provide the students with basic knowledge about project management in engineering. | |
| 19 | Contribution of the Course to Professional Development: | Project Management: 80%; Engineering Science: 15%; Engineering Design: 5% | |
| 20 | Learning Outcomes: | | |
| | | 1 | Apply project selection methods to evaluate the feasibility of projects |
| | | 2 | Assess project contribution to business strategy, purpose and plans |
| | | 3 | Select appropriate project management practices, tools, and methodologies |
| | | 4 | Define and document project schedule, budget, resources, and quality |
| | | 5 | Develop a project plan |
| | | 6 | Develop a Work Breakdown Structure (WBS) |
| | | 7 | Analyze and refine project time and cost estimates to define project baseline, schedule and budget |
| | | 8 | Develop criteria for selecting, leading, and managing project teams |
| | | 9 | Recognize risk events and issues |
| | | 10 | Define performance criteria to support quality assurance |
| 21 | Course Content: | | |
| | | Course Content: | |
| Week | Theoretical | Practice | |
| 1 | Overview of Project Management | | |
| 2 | Project Management Growth: Concepts and Definitions | | |
| 3 | Organizational Structures | | |

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| 4 | Organizing and Staffing the Project Office and Team | |
| 5 | Management Functions | |
| 6 | Communications Management; Conflicts; Special Topics | |
| 7 | The Variables for Success; Working with Executives | |
| 8 | Planning | |
| 9 | Network Scheduling Techniques | |
| 10 | Pricing and Estimating; Cost Control | |
| 11 | Metrics; Trade-off Analysis in a Project Environment | |
| 12 | Risk Management | |
| 13 | Learning Curves; Contract Management | |
| 14 | Quality Management | |
| 22 | Textbooks, References and/or Other Materials: | 1. H. Kerzner, Project Management: A Systems Approach to Planning, Scheduling, and Controlling, 12th Ed., Wiley, 2017. 2. A Guide to the Project Management Body of Knowledge (PMBOK Guide), Project Management Institute, 6th Ed., 2017. |
| 23 | Assesment | |
| TERM LEARNING ACTIVITIES | | NUMBER |
| | | WEIGHT |
| Midterm Exam | | 1 |
| Quiz | | 0 |
| Home work-project | | 1 |
| Final Exam | | 1 |
| Total | | 3 |
| Contribution of Term (Year) Learning Activities to Success Grade | | 40.00 |
| Contribution of Final Exam to Success Grade | | 60.00 |
| Total | | 100.00 |
| Measurement and Evaluation Techniques Used in the Course | | Classical and test problem-solving ability will be measured in midterm and final exams. The project will include research, report writing and presentation on a subject related to the course content. |
| 24 | ECTS / WORK LOAD TABLE | |

| Activites | Number | Duration (hour) | Total Work Load (hour) |
|----------------------------|--------|-----------------|------------------------|
| Theoretical | 14 | 3.00 | 42.00 |
| Practicals/Labs | 0 | 0.00 | 0.00 |
| Self study and preperation | 14 | 3.00 | 42.00 |
| Homeworks | 0 | 0.00 | 0.00 |
| Projects | 1 | 31.00 | 31.00 |
| Field Studies | 0 | 0.00 | 0.00 |
| Midterm exams | 1 | 15.00 | 15.00 |
| Others | 0 | 0.00 | 0.00 |
| Final Exams | 1 | 20.00 | 20.00 |
| Total Work Load | | | 150.00 |
| Total work load/ 30 hr | | | 5.00 |
| ECTS Credit of the Course | | | 5.00 |

| 25 | CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS | | | | | | | | | | | | | | | |
|---|---|-----|-------|-----|----------|-----|--------|-----|-------------|------|------|------|------|------|------|------|
| | PQ1 | PQ2 | PQ3 | PQ4 | PQ5 | PQ6 | PQ7 | PQ8 | PQ9 | PQ10 | PQ11 | PQ12 | PQ13 | PQ14 | PQ15 | PQ16 |
| ÖK1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 5 | 4 | 0 | 0 | 0 | 0 |
| ÖK2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 5 | 4 | 0 | 0 | 0 | 0 |
| ÖK3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 5 | 4 | 0 | 0 | 0 | 0 |
| ÖK4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 5 | 4 | 0 | 0 | 0 | 0 |
| ÖK5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 5 | 4 | 0 | 0 | 0 | 0 |
| ÖK6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 5 | 4 | 0 | 0 | 0 | 0 |
| ÖK7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 5 | 4 | 0 | 0 | 0 | 0 |
| ÖK8 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 1 | 3 | 4 | 5 | 4 | 0 | 0 | 0 | 0 |
| ÖK9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 5 | 4 | 0 | 0 | 0 | 0 |
| ÖK10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 5 | 4 | 0 | 0 | 0 | 0 |
| LO: Learning Objectives PQ: Program Qualifications | | | | | | | | | | | | | | | | |
| Contribution Level: | 1 very low | | 2 low | | 3 Medium | | 4 High | | 5 Very High | | | | | | | |