**Content**

| Course Code | Course Name | Semester | Theory | Practice | Lab | Credit | ECTS |
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| IND496 | Research Methods in Industrial Engineering | 7 | 3 | 0 | 0 | 3 | 4 |

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| Prerequisites | |
| Admission Requirements | |

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| Language of Instruction | French |
| Course Type | Compulsory |
| Course Level | Bachelor Degree |
| Objective | Objectives of the course Research Methods in Industrial Engineering,<br>- To provide students with the ability to conduct research on academic and industrial subjects in various databases.<br>- To provide students with technical reporting, technical writing and presentation skills.<br>- To provide students with the necessary knowledge on project management, occupational safety, business ethics, sustainability and entrepreneurship.<br>- To increase students' awareness of current problems and how these problems can be solved with Industrial Engineering methods.<br>- To provide students with the ability to work effectively in disciplinary and multidisciplinary teams and in different roles.<br>- To provide students with the necessary equipment and infrastructure for their final projects. |
| Content | Week 1: Introduction of the course - Giving preliminary information about academic career, industrial career and graduation projects<br>Week 2: Introduction of the course project - Giving examples of projects (Discussing course project topics, groups and possible competitions)<br>Week 3: Finalization of the project topics and possible competitions - Introducing the final project topics of the lecturers<br>Week 4 Seminar: Occupational Safety and Health - Sustainability - Social Responsibility<br>Week 5 Seminar: Agile Project Management<br>Week 6: Fundamentals of research - Research techniques - Matching students and professors for the final paper<br>o Literature review and identification of the research problem<br>o Reading and summarizing the sources obtained<br>o Determination of research and analysis methods<br>o Data collection and analysis<br>o Interpretation of findings<br>o Reporting the research process and findings<br>Week 7 Seminar: Agile Project Management and Applications<br>Week 8 Project interim report presentations<br>Week 9 Midterm Exam<br>Week 10 Graduation projects and coordination<br>Week 11 Seminar: Entrepreneurship and the Game Industry<br>Week 12 Seminar: Engineering, Professional and Academic Ethics<br>Week 13 Course project presentations<br>Week 14 Course project presentations |
| References | Presentation and sharing files of the guests who attended the course to give seminars. |

**Theory Topics**

| Week | Weekly Contents |
|---|---|
| 1 | Introduction of the course - Giving preliminary information about academic career, industrial career and graduation projects |
| 2 | Introduction of the course project - Giving examples of projects (Discussing course project topics, groups and possible competitions) |
| 3 | Finalization of the project topics and possible competitions - Introducing the final project topics of the lecturers |
| 4 | Seminar: Occupational Safety and Health - Sustainability - Social Responsibility |

| Week | Weekly Contents |
|---|---|
| 5 | Seminar: Agile Project Management |
| 6 | Fundamentals of research - Research techniques - Matching students and professors for the final paper |
| 7 | Seminar: Agile Project Management and Applications |
| 8 | Project interim report presentations |
| 9 | Midterm Exam |
| 10 | Graduation projects and coordination |
| 11 | Seminar: Entrepreneurship and the Game Industry |
| 12 | Seminar: Engineering, Professional and Academic Ethics |
| 13 | Course project presentations |
| 14 | Course project presentations |