

# MANAGEMENT ENGINEERING (LM54)

(Lecce - Università degli Studi)

## Teaching Advanced Project Management

GenCod A007883

**Owner professor** Alessandro MARGHERITA

**Reference professors for teaching** Alessandro MARGHERITA, Valentina NDOU

**Teaching in italian** Advanced Project Management

**Teaching** Advanced Project Management

**SSD code** ING-IND/35

**Reference course** MANAGEMENT ENGINEERING

**Course type** Laurea Magistrale

**Credits** 6.0

**Teaching hours** Front activity hours: 54.0

**For enrolled in** 2024/2025

**Taught in** 2024/2025

**Course year** 1

**Language** ENGLISH

**Curriculum** PERCORSO COMUNE

**Location** Lecce

**Semester** First Semester

**Exam type** Oral

**Assessment** Final grade

**Course timetable**  
<https://easyroom.unisalento.it/Orario>

## BRIEF COURSE DESCRIPTION

The course focuses on project management methodologies and tools. At the end of the course the student has the basic and advanced knowledge to organize, plan and control a project and to identify the development and launch strategies of a new product and service. In particular, the student knows the dynamics and critical aspects of project management, planning tools (scope statement, WBS, RAM, Gantt, Diagram, Network Diagram), tools for stakeholder and risk management, tools for controlling a project using the EVM methodology. The Project Management course aims to provide knowledge and competences and skills in three important aspects of project management:

- a) the project planning methodologies according the standard of Project Management Institute (PMI);
- b) the theory, methods, quantitative tools and software used to effectively plan, organize, and control projects;
- c) hands-on, practical project management knowledge from on-site situations and the development of a Project Management Plan as project work activities for the course.

The course contents relies on the standard of the Project Management body of Knowledge (PMBOK® Guide) Seventh EDITION . Within the framework, students learn the methodologies and tools necessary for each aspect of the process as well as the theories upon which these are built.

## REQUIREMENTS

Basic knowledge about Business management and Cost accounting

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## COURSE AIMS

**At the end of the course the students should be able to:**

- describe the **10 knowledge area of the Project management** according to the Project Management body of Knowledge (PMBOK® Guide);
- define the **scope** of a project and develop the **project charter** and **project management plan**;
- use **Gantt charts** to present the activities of a project and Apply **PERT Techniques** for project planning;
- apply the **International Project Management Standards** from the Project Management Institute (the PMBOK® Guide) to real-world situations;
- apply the indicators to assess the performance of a project (**EVA Earned Value Management Model**);
- **communicate effectively** and expressing arguments with preciseness, and debating findings;
- develop effective **writing skills** through assignment reports .

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## TEACHING METHODOLOGY

**The course consists of frontal lessons for about 50% of the course.** Lessons are integrated with exercise sessions (about 30% of the course) for the different areas covered: the project context and organisation, project planning, project control, risk management. Exercises sessions are based on short case and applications to the assigned project work.

**Laboratory activities and team work (about 10%) are foreseen on the following topics:** Project charter development, project management plan, project team management, project planning with the use of MS Project software, stakeholder management. The course requires students to carry out a group work and about 10% of the lessons will be dedicated to explaining and reviewing the work with the students.

**Seminars and guest lectures** will be organized in collaboration with the PMI Project management Institute and held by managers, focused on the behavioral skills and methodologies needed for the management of projects in complex organizations

Not attending students are required to contact the teacher ([valentina.ndou@unisalento.it](mailto:valentina.ndou@unisalento.it)) at the beginning of the course to decide together how to manage the project work activities.

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## ASSESSMENT TYPE

**Group assignment (project work): 40% of the final mark.** The project work will be related to the development of a project charter and a project management plan starting from an idea developed by students. Students must deliver a final report at the end of the course (power point presentation), and they will use of a specific sw tool for project planning. The final project work will be presented in front of a scientific committee composed by expert in the field of Project management.

**- Individual oral exam: (60% of the final mark)** the oral exam lasting about 20 minutes based on theoretical questions in line with what was done in the Lessons in the classroom .

For not attending students the assessment methodologies will be the same. In this case the project work could be developed individually.

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## FULL SYLLABUS

The course contents relies on the standard of the Project Management body of Knowledge (PMBOK® Guide) sixth EDITION 2017. Within the framework, students learn the methodologies and tools necessary for each aspect of the process as well as the theories upon which these are built.

**Introduction to Project Management (10 hours):** Introduction to the Project Management Course, the importance of project, the project and the organisation, project manager role and competence, project life cycle,

**Project management Canvas (18 hours):** The project management canvas as a framework to design, manage, implement and control a project (. PM canvas pillars: project context, project infrastructure (resources and budget); System (coordination); project's impact (value); Life Cycle ( Activities and time)

**The Project Management Knowledge Area (PMBOK® Guide) (26 hours).** The Knowledge areas and Process of Project Management; Project Integration Management, Project Scope Management; Project Time Management; Project Cost Management; Project Quality Management; Project Stakeholder Management; Project Risk Management; Project Procurement Management; Project Communication Management; Project Human Resource Management

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## REFERENCE TEXT BOOKS

Project Management Institute "**A Guide to Project Management body of Knowledge (PMBOK® Guide)**" Seventh EDITION, 2021.

Alessandro Margherita, Gianluca Elia, Giustina Secundo (2018) "**Building a Project Mindset: A Canvas for Managing Project Complexity**" Franco Angeli.

Corbucci D "Agile Project Management-Overview delle principali metodologie Agile, Agile Mindset e guida all'esame di certificazione PMI-ACP®, 2019