Fakultät für Ingenieurwesen
Facoltà di Ingegneria
Faculty of Engineering

COURSE DESCRIPTION – ACADEMIC YEAR 2024/2025

Course title	**Software Project Management**
Course code	76425
Scientific sector	INF/01
Degree	Bachelor in Informatics and Management of Digital Business (L-31)
Semester	2
Year	3
Credits	6
Modular	No

Total lecturing hours	30
Total lab hours	30
Attendance	Attendance is not compulsory, but non-attending students are suggested to contact the lecturer at the start of the course to agree on the modalities of the independent study.
Prerequisites	Basic knowledge of software development processes and activities
Course page	MS Teams of the course

Specific educational objectives	The course belongs to the type "attività formative caratterizzanti – informatica". The course intends to provide the students with an in-depth understanding of the unique characteristics of software and software projects, and equip them with adequate mentality and knowledge to manage software projects effectively.

Lecturer	Xiaofeng Wang
Contact	Office B1.4.33, Faculty of Engineering, NOI Techpark, Via Bruno Buozzi 1, xiaofeng.wang@unibz.it, +39 0471 016181
Scientific sector of lecturer	INF/01
Teaching language	English
Office hours	During the semester time span, Fridays 13:00 - 15:00, arrange beforehand by email.
Lecturing Assistant	Dron Khanna
Contact LA	B1, Faculty of Engineering, NOI Techpark, Via Bruno Buozzi 1, dron.khanna@unibz.it
Office hours LA	During the semester time span, arrange beforehand by email.
List of topics	The students will learn the following topics based on the understanding of the difference between two major software project management paradigms: Plan-driven vs. Agile: ● Project Planning ● Team Building and Management ● Competitive Bidding and Client Interaction ● Risk Analysis and Management ● Quality Assurance - Monitoring and Evaluation ● Budgeting and Cost Control

Teaching format	Frontal lectures and team projects

Learning outcomes	Knowledge and understanding: • D1.18 - Understand the interdisciplinary approach to IT projects that takes into account technical foundations, business needs, social and dynamic aspects and the regulatory framework. Applying knowledge and understanding: • D2.3 - Ability to analyse business problems and to develop proposals for solutions with the help of IT tools. • D2.4 - Ability to formalise and to analyse procedures and operational processes, to recognise and use optimisation potentials. • D2.5 - Selective skills for the introduction, adaptation and maintenance of standard operating software and other IT solutions. • D2.10 - IT infrastructure and project management capabilities. • D2.18 - Know how to communicate with the client in written and oral form on a professional level in English, Italian and German. Making judgements • D3.2 - Be able to work independently according to your level of knowledge and understanding, also taking responsibility for development projects or IT consulting. Communication skills • D4.4 - Ability to structure and prepare technical documentation. • D4.5 - Ability to collaborate in interdisciplinary teams to achieve IT objectives. Learning skills • D5.2 - Learning ability to carry out strategic and IT project activities in corporate communities, also distributed. • D5.3 - Ability to follow rapid technological developments and to learn about innovative aspects of the latest generation of information technology and systems.

Assessment	**Exam type for regularly attending students**: • Project work (50% of the final mark): a good demonstration of applying various software project management concepts and techniques taught in the course (team score); • Written exam (50% of the final mark): to test the understanding of theories and knowledge application skills, and verification of project results (individual score). Note: Positive project result is necessary to attend the written exam. Both parts of the results must be positive to pass the exam. In case of a positive mark, the project will count for all 3 regular exam sessions.

	Exam type for non-attending students: • Written report on a piece of research related to software project management (agreed upon with the lecturer at the beginning of the course) (70% of the final mark); • Oral exam to test the understanding of theories and verification of written report (30% of the final mark). Note: Positive written result is necessary to attend the oral exam. Both parts of the results must be positive to pass the exam. In case of a positive mark, the written result will count for all 3 regular exam sessions.
Assessment language	English
Assessment Typology	Monocratic
Evaluation criteria and criteria for awarding marks	**For regularly attending students:** Evaluation criteria for project work: • effective application of software project management concepts and techniques • good teamwork • good quality of project output Evaluation criteria for written exam: • ability to elaborate, summarize, evaluate, and make connections between various topics • clarity of answers **For non-attending students:** Evaluation criteria for written report: • good understanding of the literature • clarity of the study method • convincing research results Evaluation criteria for oral exam: • ability to elaborate, summarize, evaluate, and make connections between various topics • clarity of answers

Required readings	• Highsmith, Jim. Agile Project Managment: creating innovative products, 2004

	Subject Librarian: David Gebhardi, David.Gebhardi@unibz.it
Supplementary readings	• Henry, Joel. Software Project Management : A Real-World Guide to Success, 2004
Software used	Based on types of projects, decided by project teams Communicate needed software and technical requirements in advance to cs-tech@inf.unibz.it