

Syllabus

Course Description

Course Title	Seminar in Software Engineering Advances
Course Code	47218
Course Title Additional	
Scientific-Disciplinary Sector	IINF-05/A
Language	English
Degree Course	Master in Critical Creative Practices
Other Degree Courses (Loaned)	
Lecturers	Prof. Ilenia Fronza, Ilenia.Fronza@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/17458
Teaching Assistant	
Semester	Second semester
Course Year/s	2nd year
CP	6
Teaching Hours	40
Lab Hours	20
Individual Study Hours	90
Planned Office Hours	18
Contents Summary	The course provides students with a seminar-based overview of advanced topics in Software Engineering research. It addresses challenges and strategies related to the communication of research findings.
Course Topics	• Software Engineering in Society • AI and Software Engineering • Human and social aspects in Software Engineering • Computing Education • Communication challenges and strategies • Creating video seminars: guidelines

Keywords	Seminars, Diversity, Sustainability, Artificial Intelligence, Computing Education
Recommended Prerequisites	
Propaedeutic Courses	
Teaching Format	Frontal lectures, hands-on activities, presentations, and discussion.
Mandatory Attendance	Not compulsory, but strongly recommended.
Specific Educational Objectives and Learning Outcomes	Knowledge and understanding Know digital and analogue technologies and their applications in visual arts and design; Possess specific knowledge on the cultural, social and ethical implications of the use of technologies in artistic practices; Understand the processes of integrating technologies into creative contexts, analyzing them considering the connections with other fields of knowledge, such as the philosophy of technology, computer science and cognitive sciences. Applying knowledge and understanding Use advanced software and digital techniques to create innovative works of art and design; Experiment with augmented reality, 3D printing, artificial intelligence and other technological tools to expand the boundaries of artistic practices; Collaborate with engineers, programmers and other professionals to develop interdisciplinary projects that integrate art and technology. Making judgements Apply the knowledge acquired in the professional context. Learning skills The strengthening of the critical and operational autonomy of student; The development of their ability to choose, compare and adapt to new knowledge and technologies.
Specific Educational Objectives and Learning Outcomes (additional info.)	
Assessment	Attending students

	Coursework [30% of mark] + Video seminar [40% of mark] + Final exam (oral) [30% of mark] Coursework. During the course, students will actively participate by reading papers, critically analysing, presenting, and discussing their content. ILOs assessed: D1.8, D3.5, D3.6, and D4.1. Video seminar. Students will be assigned randomly to one of the course topics and prepare a 15-minute video seminar. In case of a positive mark, the mark will count for the remaining regular exam sessions of the academic year. A new video seminar needs to be submitted for the next exam session in case of a negative mark. ILOs assessed: D1.8, D3.5, D3.6, and D5.1. Final exam (oral). Verification questions about the topics of the course. ILOs assessed: D1.3, D1.8, D3.6, and D5.1. To be classified as an "attending student," students must complete their coursework by the specified deadlines and attend at least 75% of the activities related to video seminar preparation (lab hours). Non-attending students Final exam (oral) [100% of mark]. Verification questions about the topics of the course. ILOs assessed: all.
Evaluation Criteria	Attending students To enroll in the oral exam, a student must: • Deliver the video seminar (the video seminar must be evaluated BEFORE the final exam, otherwise the exam cannot be registered). • Earn a sufficient evaluation of both the coursework and the video seminar. Relevant for assessment: • Coursework: ability to read and understand specialist scientific documentation; ability to prepare and deliver presentations (in English) with scientific/technical content; ability to summarize in own words, evaluate, and establish relationships between topics; skills in critical thinking; methodological rigor. • Video seminar: quality of the video seminar (according to the guidelines provided during the course); ability to independently select documentation from various sources; ability to independently extend the knowledge acquired during the course; ability to summarize in own words, evaluate, and establish relationships between topics; skills in critical thinking; methodological rigor.

	- Final exam (oral): correctness of answers; clarity of answers; ability to summarize in own words, evaluate, and establish relationships between topics; skills in critical thinking. Non-attending students Relevant for assessment: - Final exam (oral): Accuracy of answers; clarity of explanations; ability to summarize concepts in one's own words, evaluate, and establish connections between topics; skills in critical thinking.
Required Readings	- Alley, Michael (2013): The craft of scientific presentations. Critical steps to succeed and critical errors to avoid. Second Edition. New York, NY: Springer - All the readings provided during the course
Supplementary Readings	
Further Information	
Sustainable Development Goals (SDGs)	Quality education, Climate action, Sustainable cities and communities, Gender equality