

Syllabus

Descrizione corso

Titolo insegnamento	Advances in SE and Communication
Codice insegnamento	76108
Titolo aggiuntivo	
Settore Scientifico-Disciplinare	INF/01
Lingua	Inglese
Corso di Studio	Corso di laurea magistrale in Ingegneria del Software
Altri Corsi di Studio (mutuati)	
Docenti	prof. Ilenia Fronza, Ilenia.Fronza@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/17458
Assistente	
Semestre	Secondo semestre
Anno/i di corso	1
CFU	6
Ore didattica frontale	60
Ore di laboratorio	0
Ore di studio individuale	90
Ore di ricevimento previste	18
Sintesi contenuti	<ul style="list-style-type: none"> • Sustainability in Software Engineering • AI and Software Engineering • Remote/Hybrid Software Engineering • Computing Education and Training • Communication challenges and strategies • Creating video seminars: guidelines
Argomenti dell'insegnamento	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.
Parole chiave	Seminars, Diversity, Sustainability, Artificial Intelligence, Computing Education.
Prerequisiti	
Insegnamenti propedeutici	
Modalità di insegnamento	Frontal lectures, hands-on activities, presentations, and discussion.
Obbligo di frequenza	Not compulsory, but strongly recommended.
Obiettivi formativi specifici e risultati di apprendimento attesi	<p>Knowledge and understanding</p> <p>D1.3 have an in-depth knowledge of the scientific method of investigation applied to even complex systems and innovative technologies that support Software Engineering and its various fields of applications.</p> <p>D1.8 ability to read, understand, and elaborate on specialist scientific documentation, such as conference proceedings, articles in scientific journals, technical manuals.</p> <p>Making judgements</p> <p>D3.5 ability to work with broad autonomy, taking responsibility for projects and structures.</p> <p>D3.6 ability to identify the various roles of software engineering in society and its social and environmental impact on society.</p> <p>Communication skills</p> <p>D4.1 ability to present the contents of a scientific/technical report in a set time in front of diverse audiences, including non-specialists.</p> <p>Learning skills</p> <p>D5.1 ability to independently extend the knowledge acquired during the course of study by reading and understanding scientific and technical documentation in English;</p>
Obiettivi formativi specifici e risultati di apprendimento attesi (ulteriori info.)	
Modalità di esame	<p>Attending students</p> <p>Coursework [30% of mark] + Video seminar [40% of mark] + Final exam (oral) [30% of mark]</p> <p>Coursework. During the course, students will actively participate by</p>

	<p>reading papers, critically analysing, presenting, and discussing their content. ILOs assessed: D1.8, D3.5, D3.6, and D4.1.</p> <p>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.</p> <p>Final exam (oral). Verification questions about the topics of the course. ILOs assessed: D1.3, D1.8, D3.6, and D5.1.</p> <p>To be classified as an "attending student," students must complete their coursework and attend at least 75% of the activities for video seminar preparation.</p> <p>Non-attending students</p> <p>Final exam (oral) [100% of mark]. Verification questions about the topics of the course. ILOs assessed: all.</p>
Criteri di valutazione	<p>Attending students</p> <p>To enroll in the oral exam, a student must:</p> <ul style="list-style-type: none"> • 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. <p>Relevant for assessment:</p> <ul style="list-style-type: none"> • 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. <p>Non-attending students</p>

	<p>Relevant for assessment:</p> <ul style="list-style-type: none"> • 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.
Bibliografia obbligatoria	<ul style="list-style-type: none"> • 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
Bibliografia facoltativa	
Altre informazioni	
Obiettivi di Sviluppo Sostenibile (SDGs)	Istruzione di qualità, Lotta contro il cambiamento climatico, Città e comunità sostenibili, Parità di genere