Syllabus

Kursbeschreibung

Titel der Lehrveranstaltung	Advances in SE and Communication
Code der Lehrveranstaltung	76108
Zusätzlicher Titel der Lehrveranstaltung	
Wissenschaftlich-disziplinärer Bereich	INFO-01/A
Sprache	Englisch
Studiengang	Master in Software Engineering
Andere Studiengänge (gem. Lehrveranstaltung)	
Dozenten/Dozentinnen	Prof. Ilenia Fronza, Ilenia.Fronza@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/17458
Wissensch. Mitarbeiter/Mitarbeiterin	
Semester	Zweites Semester
Studienjahr/e	1
KP	6
Vorlesungsstunden	60
Laboratoriumsstunden	0
Stunden für individuelles Studium	90
Vorgesehene Sprechzeiten	18
Inhaltsangabe	• Sustainability in Software Engineering • AI and Software Engineering • Remote/Hybrid Software Engineering • Computing Education and Training • Communication challenges and strategies • Creating video seminars: guidelines

Themen der Lehrveranstaltung	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.
Stichwörter	Seminars, Diversity, Sustainability, Artificial Intelligence, Computing Education.
Empfohlene Voraussetzungen	
Propädeutische Lehrveranstaltungen	
Unterrichtsform	Frontal lectures, hands-on activities, presentations, and discussion.
Anwesenheitspflicht	Not compulsory, but strongly recommended.
Spezifische Bildungsziele und erwartete Lernergebnisse	Knowledge and understanding 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. D1.8 ability to read, understand, and elaborate on specialist scientific documentation, such as conference proceedings, articles in scientific journals, technical manuals. Making judgements D3.5 ability to work with broad autonomy, taking responsibility for projects and structures. D3.6 ability to identify the various roles of software engineering in society and its social and environmental impact on society. Communication skills D4.1 ability to present the contents of a scientific/technical report in a set time in front of diverse audiences, including non-specialists. Learning skills D5.1 ability to independently extend the knowledge acquired during the course of study by reading and understanding scientific and technical documentation in English;
Spezifisches Bildungsziel und erwartete	

Lernergebnisse (zusätzliche Informationen)	
Art der Prüfung	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 and attend at least 75% of the activities for video seminar preparation. Non-attending students Final exam (oral) [100% of mark]. Verification questions about the topics of the course. ILOs assessed: all.
Bewertungskriterien	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.
Pflichtliteratur	• 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
Weiterführende Literatur	
Weitere Informationen	
Ziele für nachhaltige Entwicklung (SDGs)	Hochwertige Bildung, Maßnahmen zum Klimaschutz, Nachhaltige Städte und Gemeinden, Geschlechter-Gleichheit