Syllabus

Course Description

Course Title	High-Performance Buildings: Seismic Design and Fire Resistance
Course Code	42643
Course Title Additional	
Scientific-Disciplinary Sector	CEAR-07/A
Language	German
Degree Course	Professional Bachelor in Wood Technology
Other Degree Courses (Loaned)	
Lecturers	dr. Thomas Schrentewein, Thomas.Schrentewein2@unibz.it
Teaching Assistant	
Semester	First semester
Course Year/s	3
CP	4
Teaching Hours	40
Lab Hours	0
Individual Study Hours	60
Planned Office Hours	12
Contents Summary	Construction systems and basics of multi-storey wooden buildings, seismic basics and terms, seismic loads and load-bearing capacity, earthquake resistant planning and design, introduction into seismic calculation and assessment, legal basics and terms of fire prevention, fire behavior and fire resistance of timber components, fire prevention of multi-storey wooden buildings, introduction into Fire Safety Engineering (FSE).
Course Topics	
Keywords	
Recommended Prerequisites	None.
Propaedeutic Courses	

Teaching Format	Frontal lectures and discussions.
Mandatory Attendance	Recommended.
Specific Educational Objectives and Learning Outcomes	The purpose of the course is to provide the basic knowledge and the theoretical background on seismic design and fire resistance of timber buildings. The aim of the course is to provide students with an adequate command of general structural principles and fire design methods. Learning outcomes Intended Learning Outcomes (ILO): Knowledge and understanding 1. Knowledge of essential wooden construction systems 2. Understanding of earthquake resistant planning and design 3. Understanding of fire behavior of wood materials and fire resistance of timber components Ability to learn 4. Development of abilities and strategies to apply the learned skills into professional life.
Specific Educational Objectives and Learning Outcomes (additional info.)	
Assessment	Formative assessment: - Lectures and discussions; length/duration: 40 h (total length of course); ILOs assessed: 1-4. - Summative assessment/final exam: Oral exam: 100%; length/duration: 45 min.; ILOs assessed: 1-4.
Evaluation Criteria	Evaluation criteria of the oral exam: correct and complete response of oral questions, comprehension, technical competence.
Required Readings	Lecture notes.
Supplementary Readings	Is provided during the course.
Further Information	
Sustainable Development Goals (SDGs)	