Freie Universität Bozen
Libera Università di Bolzano
Università Liedia de Bulsan

Syllabus
Course description

Course title	Fundamentals of Programming
Course code	42307
Scientific sector	INF/01
Degree	Bachelor in Wood Engineering
Semester	II
Year	I
Academic Year	2021-2022
Credits	6
Modular	no

Total lecturing hours	36 hrs
Total lab hours	24 hrs
Total exercise hours	
Attendance	Attendance at assigned laboratory sections is required; lecture attendance is very strongly recommended.
Prerequisites	Registration in the Bachelor in Wood Engineering study program
Course page	

Specific educational objectives	The course introduces the basic concepts of programming, particularly those topics of fundamental importance to Engineering.

Lecturer	Prof. Karl von Ellenrieder Facoltà di Scienze e Tecnologie, Building L, Room 6.02 Tel.: +39 0471 017172 E-mail: karl.vonellenrieder@unibz.it Web : https://www.unibz.it/faculties/person/37038-karl-dietrich-von-ellenrieder
Scientific sector of the lecturer	ING-INF/04 - Automatica
Teaching language	English
Office hours	As listed on Cockpit or by appointment
Laboratory Instructor	
Teaching Assistant	
Office hours	As listed on Cockpit or by appointment
List of topics covered	The course covers the following topics: 1. Basic programming syntax and structure in Python 2. Functions 3. Conditional control structures 4. Arithmetic, comparison and Boolean operators 5. Data types
Teaching format	Classroom lectures and laboratory exercises

Learning outcomes (ILOs)	Knowledge and understanding 1. Basic software design procedures. 2. How to develop simple Python programs. Applying knowledge and understanding 3. Laboratory exercises complement lectures and require you to devise and sustain arguments. Making judgements 4. On the choice of the right tools such as data types and programming approaches. The labs will also require you to generate and interpret relevant data. Communication skills 5. Lab reports will require you to present information, ideas, problems and solutions in clear and simple language. Learning Skills 6. Basic foundations for further study in more advanced courses in Engineering.

Assessment	**Formative assessment** **Form** | **%** | **Length /duration** | **ILOs assessed** Labs | 40 | 24 hours total | 1-7 **Summative assessment** **Form** | **%** | **Length /duration** | **ILOs assessed** Final Exam | 60 | 4 hours | 1-4,6,8
Assessment language	English
Evaluation criteria and criteria for awarding marks	Labs: Completeness and correctness of reports; quality Written Final Exam: Completeness and correctness of answers. Students must receive an overall grade of greater than 60/100 points in order to pass the course.

Required readings	
Supplementary readings	Instructor-provided notes.