

# Syllabus HOT0020E Introduction into Programming with Python Prof. Dr. Michael Paetsch, PhD (CPU)

Sommer Semester 2024

Level	Bachelor		
Credits	3 ECTS		
Student Contact Hours	2 (45 minutes)		
Workload	60 hours within class and 90 hours for self-study		
Prerequisites	none		
Time	see LSF		
Room	see LSF		
Start Date	see LSF		
Lecturer	Name	Prof. Dr. Michael Paetsch, Ph.D.	
	Office	W2.3.13	
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	Colloquium	see LSF	
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# Summary

The Python course is extremely "beginner-friendly". No knowledge of a programming language is required. Through interactive exercises, participants will be able to programme their first Python programs themselves.

# **Outline of the Course**

What is Python and why is it useful?

Python basic knowledge (the 1x1 of a programs)

Python data structures

Python Programming Basics

Python - Playing with data

Outlook - Marketing, Data & Python

# Course Intended Learning Outcomes and their Contribution to Program Intended Learning Outcomes / Program Goals

Program Intended Learning Outcomes		Course Intended Learning Outcomes	Assessment Method	
	After completion of the program the students	After completion of the course the students will be able	Essay	
	will be able		100%	
			Individual	
1	Expert Knowledge			
1.1	to demonstrate their distinguished and sound competencies in General Business Administration.	to carry out programming of business management tasks.	x	
2	Digital Skills			
2.1	to know and understand relevant IT soft- ware tools used in business and their fea- tures and have a solid understanding of dig- ital technologies.	have an understanding of the programming language and, in addi- tion, of the programming procedure, in particular the importance of in- terfaces, for example to CRM, web analytics tools etc	x	
2.2	to effectively use and apply information systems to develop solutions in business settings.	to solve simple to medium data problems using programming.	x	
2.3	to effectively use digital technologies to in- teract, to collaborate and to communicate.	to exchange ideas with programmers systematically and precisely in later professional life.	x	
2.4	to handle the professional use of digital technologies in a responsible manner.	to communicate responsibly and professionally via digital technolo- gies.	x	
3	Critical Thinking and Analytical Competence			
4	Ethical Awareness			
5	Communication and Collaboration Skills			
6	Internationalization			
6.1	to understand and explain business chal- lenges in an international context.	to understand and demonstrate business contexts in an international context.	x	
6.2	to articulate themselves in a professional manner in international business.	to express themselves professionally in international business.	х	

# **Teaching and Learning Approach**

Through interactive exercises, the participants are enabled to program their first Python programs themselves and to solve business tasks.

# Literature and Course Materials

References to literature are given in the respective documents of the courses.

#### Assessment

The method of assessment is a programming assignment for which the student has approx. two weeks to complete (100% of the overall grade).

Further option: Students decide whether they want to receive credit for the grade or only have the participation confirmed.

The grading is as follows:

"Sehr gut" (1.0)	Very good, a performance significantly above the average	
"Gut" (2.0)	Good, an above average performance	
"Befriedigend" (3.0)	Satisfactory, average performance, which is deficient but basically meets the	
	requirements	
"Ausreichend" (4.0)	Adequate, a below average performance with noticeable shortcomings	
"Mangelhaft" (5.0)	haft" (5.0) Fail, an unacceptable performance	

# Code of Conduct for online Teaching

Link to the Code of Conduct for online Teaching