

## MASTER OF SCIENCE IN SOFTWARE ENGINEERING

### Study plan Software Engineering from 2023/24

#### First Year

<b>1<sup>st</sup> Semester</b>		
<b>Course</b>	<b>CP</b>	<b>Exam</b>
Software Design and Implementation M1: Requirements Engineering M2: Advanced Software Design Techniques	12	Yes
Contemporary Software Development	6	Yes
Agile Software Development	6	Yes
<b>Catalogue 1</b>	6	Yes
	<b>30</b>	

<b>2<sup>nd</sup> Semester</b>		
<b>Course</b>	<b>CP</b>	<b>Exam</b>
Human Computer Interaction	6	Yes
Verification and Reliability	6	Yes
Software and Systems Security	6	Yes
Seminar in Software Engineering Advances	6	Yes
Cloud Computing and Distributed Systems	6	Yes
	<b>30</b>	

#### Second year

<b>1<sup>st</sup> Semester</b>		
<b>Course</b>	<b>CP</b>	<b>Exam</b>
Research Methods and Technology Transfer	6	Yes
<b>Catalogue 2</b>	6	Yes
Free Choice*	12	**
Internship	6	Pass or fail
	<b>30</b>	

<b>2<sup>nd</sup> Semester</b>		
<b>Course</b>	<b>CP</b>	<b>Exam</b>
Thesis***	30	Graduation
	<b>30</b>	
* The student can freely advance or postpone the Free Choice credit points ** The student can choose courses that foresee both exams with grades and pass/fail tests *** Starting from the second year the student can start with the Thesis Work.		

### **Catalogue1: Advanced Topics in Software Engineering**

The student has to choose one course from this catalogue.  
The Faculty Council decides annually which courses to activate.

First Semester

<b>Course</b>	<b>CP</b>	<b>Exam</b>
Software Maintenance and Evolution	6	Yes
Extended Reality: Augmented, Virtual and Mixed Reality	6	Yes
Software Quality and Metrics	6	Yes
Parallel Computing	6	Yes

### **Catalogue 2: Specialization Topics**

The student has to choose one course from this catalogue.  
The Faculty Council decides annually which courses to activate.

Third Semester

<b>Course</b>	<b>CP</b>	<b>Exam</b>
Embedded Systems Design and Implementation	6	Yes
Information Retrieval	6	Yes
Programming for Data Science	6	Yes
Mobile Robotics	6	Yes
Programmable Logic Controllers	6	Yes
Data Visualization and Exploration	6	Yes
Entrepreneurial Software Engineering	6	Yes
Design and Development of Business Software	6	Yes
Microcontroller Programming	6	Yes

<b>Free Choice</b>
The student is free to choose lectures for a total of 12 credits points. As alternative student can choose an additional Internship to 6 CP (150 h) or 12 CP (300h).
These educational activities must be consistent with the student's academic pathway.
The methods for verifying consistency are decided by the Course Council.
Examinations taken for lectures chosen as Free Choice count as a single examination for the purposes of calculating the total number of examinations taken by the student.