



Valid from 2026.HS

Module description: Front End, Web and Software Engineering			
Module Code	t.BA.DS.PM3.26HS		
ECTS Credits	4		
Language of Instruction/Examination	German		
Organizational Unit	InIT		
Module Coordinator	Stephan Roth		
Legal Framework	The module description is part of the legal basis in addition to the general academic regulations. It is binding. During the first week of the semester a written and communicated supplement can specify the module description in more detail.		
Module Characteristic	Type 3f 2 asynchronous lessons per semester week for each yearly starting-class + 2 weekly lab lessons per semester week in half-class groups		
Module Description	Students learn different frontend development technologies, starting with an introduction to web server development in Python. Afterwards, the focus is on the development of web pages for showing charts, employing technologies like HTML, CSS and JavaScript.		
Module Content	<ul style="list-style-type: none"> The module covers the following topics: <ul style="list-style-type: none"> - Introduction to Web Server programming with Flask - Introduction to HTML and CSS - Infrastructure of today's Web Solutions - The JavaScript programming language - Introduction to JavaScript - Introduction to JavaScript chart libraries 		
Prerequisite Knowledge	https://gmpmpublic.zhaw.ch/GPMDocProdDPublic/2_Studium/2_02_Grundlagen_Studium/T_C_L_Modulauspraegungen_SM2025.pdf		
Learning Objectives (Competencies)	Students...	Competencies	Taxonomies
	Participants of this course get an overview of the most important standard technologies that are used for building web pages. They know the problems when accessing different devices as well as further aspects that are to be considered when developing a web page.	F	K1
	A webpage source can be read and understood. This includes the architecture and used libraries. Students can adapt the webpage.	M, F	K1, K2, K3
	Participants can develop their own web page using HTML and JavaScript as well as a chart library. They can deploy their page on a web server.	F, M	K1, K2, K3, K4, K5, K6

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Performance Assessment	End-of-module exam	Assessment	Length (min.)	Weighting	Social Form	Scenario/Format
	other		0	0%	acc. to module agreement	
		Assessment	Length (min.)	Weighting	Social Form	Scenario/Format
	Web Application Development <i>This goal of this project module is to develop and present a Web Application</i>	Grade		100%	acc. to module agreement	
Classroom Attendance Requirement	None					