

Module description: Project Thesis: Electrical Engineering			
Module Code	t.BA.ET.PA.19HS		
ECTS Credits	6		
Language of Instruction/Examination	German		
Organizational Unit	IEM Ltg.		
Module Coordinator	Martin Loeser		
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 6 Project work		
Module Description	The project work answers a fairly small scientific question from an electrical engineering discipline. As a rule, students carry out this work in teams of two. In the written final report, students document the problem, the work order, the project implementation and the work results.		
Module Content	<ul style="list-style-type: none"> • The project thesis focuses on working on a smaller practice-relevant, scientific question using engineering methods. The students should apply the knowledge acquired during their studies in order to demonstrate their ability to solve engineering problems. • The work typically consists of a conceptual part, in which the question is limited and concretized, and an implementation part, in the course of which hardware and / or software is developed. • The main supervision of project theses is usually carried out by lecturers who give classes in the Electrical Engineering program. Any co-supervision can be provided by other specialists. • The supervisors offer professional support to achieve the goals according to the task. While working on the project work, the students regularly report the progress of their work and discuss the further process with their supervisor. • The results of the project thesis are documented in writing in a scientific-technical report. 		
Prerequisite Knowledge	https://gpmpublic.zhaw.ch/GPMDocProdDPublic/2_Studium/2_02_Grundlagen_Studium/T_C_L_Modulauspraegungen_SM2025.pdf		
Learning Objectives (Competences)	Students...	Competencies	Taxonomies
	Ability to independently work on a small scientific question from an electrical engineering discipline.	F, M	K3, K4, K5, K6
	Ability to independently acquire scientific knowledge from literature and specialist articles.	M, F, SE	K3, K4, K5, K6
	Ability to reasonably justify and defend one's own decisions and conclusions.	M, F, SE	K3, K4, K5, K6
	Ability to critically examine one's own results with regard to correctness and relevance.	F, SE, M	K3, K4, K5, K6
	Ability to document the task, the procedure and the work results achieved in a scientific report and to represent it in a colloquium.	F, SO, SE, M	K5
	Ability to understand a topic well and to narrow it down in an appropriate way with a view to one's own work.	M, SE, F	K3, K4, K5, K6
	Ability to prioritize tasks under time pressure.	M, SE, SO, F	K3, K4, K5, K6

Module description: Project Thesis: Electrical Engineering

Performance Assessment	End-of-module exam	Assessment	Length (min.)	Weighting	Form
	other			100	
	Performance assessment during the semester	Assessment	Length (min.)	Weighting	Form
-	-	-	-	-	
Classroom Attendance Requirement	None				
Learning material					
Comments	<p>The progress of the work is documented and verified during the semester through regular meetings with the supervisors. The "end-of-semester examination" includes at least the submission of an academic report. As a rule, at the end of the project thesis self-developed hardware or software is shown, documented and handed in in a suitable form. The exact evaluation criteria and weights are set in writing together with the supervisor before the start of the project thesis. See also guideline: "Evaluation grid for project and bachelor thesis at the SoE"</p>				