

Module description: CAD for AV					
Module Code	t.BA.AVI.CAD.19HS				
ECTS Credits	2				
Language of Instruction/Examination	German				
Organizational Unit	IPP				
Module Coordinator	Peter Hug				
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 1b 2 lecture lessons per semester week and half-class				
Module Description	CAx-Basics in practice Students are familiarised with the handling and application of modern CAx programs for product development and production. The module provides a broad overview of CAx tools such as sketching, modelling, simulating, visualising, animating, 3D documentation, 3D printing and VR (virtual reality).				
Module Content	<ul style="list-style-type: none"> - Introduction to the CAx technologies - Sketching -> with CAD - Individual parts (Part Design) - Combinations (Assembly Design) - Visualizations with rendering tools - 3D documentation/animation - VR in product development / for services / in training 				
Prerequisite Knowledge	https://gmppublic.zhaw.ch/GPMDocProdDPublic/2_ Studium/2_02_Grundlagen_ Studium/T_C L_Moduluspraegungen_SM2025.pdf				
Learning Objectives (Competences)	Students...		Competencies	Taxonomies	
	are able to model individual parts & assembly structures in the CAD		F	K2	
	are aware of methodologically good approaches for modeling individual parts and structuring assemblies		M	K2	
	receive knowledge about methods in a modern CAD/PLM environment		M	K2	
	recognize the application of the basic CAD functions (Sketcher, PartDesign, Assembly)		F	K2	
	recognize CAx applications for visualization, simulation, 3D documentation/animation, 3D printing, VR		F	K2	
	Can independently pick up knowledge from tutorials and put it into practice		M	K2	
Performance Assessment	End-of-module exam	Assessment	Length (min.)	Weighting	Form
	written exam	Grade	90	100	acc. to module agreement
	Performance assessment during the semester		Assessment	Length (min.)	Weighting
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Classroom Attendance Requirement	None
Learning material	
Comments	CAD lessons take place in half-classes (max 20 people) in classrooms specially equipped with CAD workstations. For students without prior technical knowledge, we recommend visiting the "Technical Drawing/CAD" pre-course.