

Module description: Project Module 1	
Module Code	t.BA.MT.PM1.19HS
ECTS Credits	4
Language of Instruction/Examination	German
Organizational Unit	IPP
Module Coordinator	Gabriel Schneider
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 4* 4 lab lessons per semester week and half-class
Module Description	Students learn to solve mechanical engineering tasks independently and in a team. Besides creative idea generation and the search for solutions, students learn to develop designs, to display them professionally by hand and with CAD, and to dimension them.
Module Content	<ul style="list-style-type: none"> • Solving of development tasks in mechanical engineering with practice-based communication Development and construction methodology with the aid of bearing and casting exercises Application of development tools • learning to use development- and design-methods by solving bearing- and casting excercises • Applying development tools
Prerequisite Knowledge	

Module description: Project Module 1

Learning Objectives (Competences)	Students...		Competencies	Taxonomies		
	...are able to methodically develop solutions to the problem with the help of various tools		M	K4		
	...learn to communicate ideas and solutions appropriate to the target group in a convincing fashion		M	K3		
	...are able to independently and correctly apply knowledge (especially machine elements and CAD) from other modules in the course of study (construction, I		F	K4		
	...learn to think in variations and to justify decisions based on those variations		M	K6		
	...deepen their knowledge in the fields of rota and milling and use it correctly in the constructive dimensioning of the assignment		F	K4		
	...learn to read problem definitions and to transform them into a project		M	K4		
	...are able to calculate the cost of components and assemblies		M	K3		
	...are able to realistically evaluate their job performance and workload		M	K3		
	...learn to present their own ideas with the help of schematic sketches.		F	K3		
	...are able to draw up the designs they have developed in CAD		F	K3		
	...develop knowledge about casting production processes and are able to graphically display correctly constructed castings		F	K3		
	...learn to clarify the demands based on an assignment and inquire about necessary information or obtain it through research		M	K5		
	...are able to document the progress of their project appropriate to the target group		M	K3		
...are able to correctly display machinery concepts graphically in the fields of bearings, castings and gearboxes in design drawings and assembly drawings according to the norm.		F	K3			
Performance Assessment	End-of-module exam		Assessment	Length (min.)	Weighting	Form
	written exam		Grade	300	60	acc. to module agreement
	Performance assessment during the semester		Assessment	Length (min.)	Weighting	Form
	report		Grade		40	acc. to module agreement

Module description: Project Module 1	
---	--

Classroom Attendance Requirement	None
Learning material	
Comments	