Valid from 2024.HS

Module description: Project Thesis: Mechanical Engineering

Module Code	t.BA.MT.PA.19HS
ECTS Credits	6
Language of Instruction/Examination	German
Organizational Unit	MEA Ltg.
Module Coordinator	Thomas Wenzler
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	In their project thesis, students perform their individual analyses of a topic which is centred on the topic of the study specialisation they have chosen for their mechanical engineering studies, working in close collaboration with partners from industry and the supervising lecturer.
Module Content	• Students work independently on a small-scale, practice-related technical/scientific problem under the supervision of a lecturer. The project can originate from an Institute's R&D unit or directly from an industry partner. In the course of the project, they are expected to analyse the problem and to structure and plan the working process according to a schedule. Depending on the nature of the project, they may have to conduct experiments and/or construct models and carry out simulations. The results they achieve from these steps allow them to solve the problem.While working on their project, students make regular reports on their progress and discuss the next steps. They document the course of the project and the results in the form of a written report and submit a summary of the report in German. They also give an oral presentation of their results.
Prerequisite Knowledge	

Learning Objectives (Competences)

Students...	Competencies	Taxonomies
Students are able to understand the task and plan the working process independently.	M, F	K2
Students are able to access independently relevant technical and scientific knowledge from the literature and specialist publications.	M, F	K4
They are able to document the results of their study in a technical report and to present these results orally.	SO, SE, M	K5
As a rule, students work in pairs and communicate with the client and their supervisor.	F, M	K6
By working on a practice-related problem from the field of general mechanical engineering, if possible in close collaboration with an industry partner, students demonstrate their ability to think and act according to engineering principles.	SE, F, M, SO	K5
In dealing with the problem, they are able to apply the knowledge and skills they have acquired during their studies and to develop new solutions based on this knowledge and their new findings from the literature.	SO, M, SE, F	K5
They are able to document the results of their study in a technical report and to present these results orally.	SE, SO	K4

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Performance Assessment

End-of-module exam	Assessment	Length (min.)	Weighting	Form
written + oral	Grade		100	acc. to module agreement

Performance assessment during the semester	Assessment	Length (min.)	Weighting	Form
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Classroom Attendance Requirement	None
Learning material	
Comments	