

Module: Bachelor-Thesis and Oral Examination

Level	Bachelor	Short Name	
Responsible Lecturers	Kral, Roland, Prof. Dr.-Ing.		
Department, Facility	Mechanical Engineering and Business Administration		
Course of Studies	Mechanical Engineering, Bachelor		
Compulsory/elective	Compulsory	ECTS Credit Points	15
Semester of Studies	1	Semester Hours per Week	
Length (semesters)	1	Workload (hours)	450
Frequency	SuSe	Presence Hours	
Teaching Language	English	Self-Study Hours	450

The following section is filled only if there is **exactly one** module-concluding exam.

Exam Type		Exam Language	
Exam Length (minutes)		Exam Grading System	
Learning Outcomes			
Participation Prerequisites			

The previous section is filled only if there is **exactly one** module-concluding exam.

Consideration of Gender and Diversity Issues	<ul style="list-style-type: none"> ✓ Use of gender-neutral language (THL standard) ✓ Target group specific adjustment of didactic methods ✓ Making subject diversity visible (female researchers, cultures etc.)
Applicability	
Remarks	<p>This module consists of the two parts Bachelor-Thesis (project) and the final oral examination (colloquium).</p> <p>Both parts will be completed in Milwaukee, Wisconsin. The Bachelor-Thesis will be advised by the TH Lübeck (mainly e-mail) with support from colleagues of the MSOE (direct consultation).</p>

Module Course: Bachelor-Thesis (Project)

(of Module: Bachelor-Thesis and Oral Examination)

Course Type	Project Work	Form of Learning	Presence
Mandatory Attendance	no	ECTS Credit Points	12
Participation Limit		Semester Hours per Week	0
Group Size		Workload (hours)	400
Teaching Language	English	Presence Hours	0
Study Achievements ("Studienleistung", SL)		Self-Study Hours	400
SL Length (minutes)		SL Grading System	One-third Grades

The following section is filled only if there is a course-specific exam.

Exam Type	Thesis	Exam Language	English
Exam Length (minutes)		Exam Grading System	One-third Grades

Learning Outcomes	The Bachelor-Thesis should show the student's ability to solve an application-orientated problem from the field of mechanical engineering and/or material science within a period of 10 weeks, Scientific and practical methods must be used to show the handling of technical and non-technical details; this is expected under the scope of target orientation and gaining of meaningful results.
Participation Prerequisites	<ul style="list-style-type: none"> • Examination prerequisites according to the examination regulations for the study program Bachelor of Science Maschinenbau. • Coordination of the final assignment with the assigned advisor from the official teaching staff of the TH Lübeck. • Approval of the provided assignment prior to the start of the Bachelor-Thesis by the examination board of the department.

The previous section is filled only if there is a course-specific exam.

Contents	<p>The contents of the Bachelor-Thesis follows the given, special assignment. The thesis should contain at least the following elements:</p> <ul style="list-style-type: none"> • Introduction • State of the art • Analysis, scope and approach • Concept for realization and implementation • Critical vies on results • Conclusion and future prospects <p>The executed work is put down in a scientific documentation (Bachelor-Thesis). The above mentioned elements should be considered in an adequate manner. The typical length of a thesis is about 50 to 80 pages without annex.</p>
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	Introduction and instruction to scientific procedure and scientific work are important background for the thesis.
Literature	<ul style="list-style-type: none"> • Leaflet for the submission of a Bachelor-Thesis. • Literature related to the given assignment. • Papers and materials of the institution, where the Bachelor-Thesis is executed at.
Remarks	The Bachelor-Thesis is a written scientific report. It is executed e.g. in industry or in public institutions and either an independent investigation or examines a known topic from the mechanical engineering field and/or material science field under new aspects. The Bachelor-Thesis may be pure theoretical or practical orientated work, in which theoretical knowledge is used to generate practical solutions.

Module Course: Final Oral Examination / Colloquium

(of Module: Bachelor-Thesis and Oral Examination)

Course Type	Project Work	Form of Learning	Presence
Mandatory Attendance	no	ECTS Credit Points	3
Participation Limit		Semester Hours per Week	0
Group Size		Workload (hours)	50
Teaching Language		Presence Hours	0
Study Achievements ("Studienleistung", SL)		Self-Study Hours	50
SL Length (minutes)		SL Grading System	

The following section is filled only if there is a course-specific exam.

Exam Type	Colloquium	Exam Language	English
Exam Length (minutes)	60	Exam Grading System	One-third Grades
Learning Outcomes	The student is able to present scientific and technical contents and results in an appropriate way. He or she is able to defend his/her results in a scientific or technical discussion.		
Participation Prerequisites	<ul style="list-style-type: none"> • The Bachelor-Thesis must have been handed in in time and must have been graded at least with passed (ausreichend). • Successful completion (at least passed) of all other teaching modules. 		

The previous section is filled only if there is a course-specific exam.

Contents	The Bachelor-Thesis is the foundation for the final colloquium. The contents of the thesis is presented during the colloquium focusing on the results. Afterwards it is defended against questions of the examiners related to the closer and wider field of the thesis.
Literature	<ul style="list-style-type: none"> • Leaflet for the submission of a Bachelor-Thesis • Literature regarding presentation techniques.
Remarks	The colloquium will be held at the MSOE in Milwaukee.