

OTTO VON GUERICKE UNIVERSITY MAGDEBURG

Humanities, Social Science & Education



**Module handbook / graduate catalog
for the Master's Program in
International Technical and
Vocational Education and Training**

dated 05-05-2025



CONTENTS

Explanation of Key Competences	3
Recommended progression of studies	5
Module overview	7



EXPLANATION OF KEY COMPETENCES

Methodical competence: includes learning strategies, media skills, information acquisition, planning, project and innovation management, and teaching, consulting and research skills.

Social competence: aims to convey transfer, team, conflict, moderation and leadership skills, entrepreneurial behavior, international orientation and multilingualism.

Self-competence: includes self-management, motivation, professional flexibility, mobility, creativity, empathy and ethical behavior.

In the description of the individual modules the item "objectives" sets out not only the relevant professional skills but also the key competences to be acquired.



BASICS

The course of study is based on the “International framework for a Master’s degree for TVET teachers and lecturers” (Hangzhou Declaration, 2004) published by UNESCO. The academic profile focuses on the design of vocational training processes and includes modules in vocational didactics, curriculum and media development, vocational training management and vocational training evaluation. Practical studies offer the possibility of deepening the knowledge acquired in fields of application. Within the framework of optional compulsory modules, it is possible to select content-related areas of focus, for example in organizational development and human resource management, education planning, in-company vocational training or international vocational training management.

The Master’s degree is awarded by Otto von Guericke University Magdeburg [Master of Science (M.Sc.)].



RECOMMENDED PROGRESSION OF STUDIES

The Master's program in *International Technical and Vocational Education and Training* comprises assessments and examinations equating to 120 CP.¹ These are divided into the following areas of study:

- Compulsory modules worth 70 CP
- An elective part/area of specialization worth 30 CP
- Master's thesis worth 20 CP

In the subject-specific courses of study, the workload per semester may deviate by a maximum of 3 CP, provided that it is compensated for in the other semesters.

Modules:

Core studies (70 CP):

CM1 Principles of in-company vocational training and vocational didactics

CM2 Structures and theories of vocational education

CM3 Didactics of learning and teaching

CM4 International comparative VET

CM5 Management and evaluation of vocational education

CM6 Curriculum and media development

CM7 Practical studies

Specialization studies (3 out of 5 modules, 30 CP)

SM1 Organizational and Human Resources Development

SM2 Vocational training for sustainable development

SM3 Methods of in-company training

SM4 Further specialization modules within the course offering

CM8 Master's thesis (20 CP)

¹ 1 CP corresponds to 30 hours of work.

Modules	1st Semester						2nd Semester						3rd Semester						4th Semester						5th Semester						6th Semester						Work load		Proof of performance		
	CP	HpW			CP	HpW			CP	HpW			CP	HpW			CP	HpW			CP	HpW			CP	HpW			TP	SS	PS	TE									
		L	S	P		L	S	P		L	S	P		L	S	P		L	S	P		L	S	P		L	S	P					L	S	P	I					
CM 1	10	2	2	2	1																						98	202	***	W											
CM 2	10	2	2																								56	244	***	W											
CM3								10	4																		56	244	***	TP											
CM 4								10	4																		56	244	***	TP											
CM 5												10	4														56	244	***	TP											
CM 6												10	4														56	244	***	TP											
CM 7														10	2												28	272	***	R											
WP														10	4												168	732	***	**											
CM 8																											28	572	***	MA											
Sum per semester	20	4	4	2	1	20	8		20	8		20	8		20	6		20	8		20	2		20	8		602	2998													
Total-CP	120																																								

Specialization; Total per semester; workload; Internship [not intership]; AT = Attendance Time; IS = Independent Study; P/A = Proof of attendance



MODULE OVERVIEW

Core Studies

Otto von Guericke University Magdeburg M. Sc. International Technical and Vocational Education and Training					
Compulsory Module 1: Didactics and Methodology of Technical and Vocational Education and Training (CM1)					
Semester	Frequency of offer	Duration	Type	ECTS points	Student workload
1 st or 2 nd semester	WS	1 semester	Compulsory	10	4 contact hours per week per semester (CWS); 56h/244h/300h

Participation requirements	Applicability	Requirements for the award of CPs (form of examination / duration)	Teaching and learning methods	Responsible person(s)
None		SN: short papers / presentations, handouts (oN) LN: presentations / term papers (mN) Module completion: presentations / homework (mN) (as specified by the module coordinator)	Seminars	Prof. Dr. Frank Bünning (Chair of Engineering Pedagogics and Technical Education)

Qualification objectives
The students... - have an overview of core terminology of professional didactics and their epistemological classification,



- apply models of industrial and cognitive psychology and basic didactic models to the design of professional teaching / learning processes,
- can demonstrate methods of action-oriented learning with respect to their possible applications in vocational education and training and describe concepts for the design of training in the workplace,
- analyze curricula relevant for sites of company and school learning and assess their control function for vocational teaching / learning processes,
- work on current developments and issues from scientific discussions on didactics in technological areas based on their own literature and research work,
- deepen the skills they have acquired during their studies through independent explorations and exercises,
- develop their competences for oral presentation and argumentation of practical and scientific questions and problems as a basis for the skills required for the Master's degree,
- examine current problems in initial and continuing vocational education and training based on selected research questions.

Teaching content

Lecture / seminar in "Didactics and curriculum development" *)

- Learning and action theories
- Didactic models and their application in education and lesson planning
- Reform process in vocational education and training and consequences for the restructuring of vocational education
- Action-oriented methods in training and teaching
- Examinations in vocational education and training
- Exercises in the areas of didactic models, didactic concepts and curriculum theory, business and work process-oriented teaching and learning arrangements, planning structure for vocational teaching and learning processes

Elective didactic module as part of the course offering with reference to one of the fields of action:

- Vocational training for sustainable development
- Methods of in-company vocational training

Literature references are provided during each module.

Courses			
Lecturer	Course title	ECTS points	SWH
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Development of Learning and Teaching Media in Vocational Education	4	2



Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Didactics and Learning Theories in Vocational Education and Training	6	2
---	---	---	---

Otto von Guericke University Magdeburg M. Sc. International Technical and Vocational Education and Training					
Compulsory Module 2: Structures and Theories of Technical and Vocational Education and Training (CM2)					
Semester	Frequency of offer	Duration	Type	ECTS points	Student workload
1st or 2nd semester	WS	1 semester	Compulsory	10 CP	4 CWS; 56h/244h/300h

Participation requirements	Applicability	Requirements for the award of CPs (form of examination / duration)	Teaching and learning methods	Responsible person(s)
None		SN: short papers/ presentations, handouts (oN) LN: presentations/ term papers (mN) Module completion: presentations/ term papers (mN) (as specified by the module coordinator)	Seminars	Prof. Dr. Frank Bünning (Chair of Engineering Pedagogics and Technical Education)

Qualification objectives
The students... – have a deepened scientific understanding of central subject areas and issues of vocational and business education,



- can critically assess relevant research results and current know-how and practice in vocational education and training,
- can systematically and scientifically work on relevant topics and issues of vocational and business education to contribute to theory development,
- have a pedagogically reflected understanding of key characteristics of and developments in vocational education and training,
- can describe, compare and assess national and international developments in vocational education and training,
- can describe and discuss traditional and current concepts and theories of vocational education and training and assess their significance for the development of vocational education and training.

Teaching content

- Development and status quo of vocational education and training in Germany
- Modernization of vocational education and training in Germany
- Educational and vocational training theories
- Specialization of aspects of the development of vocational education and training in Germany, e.g. questions of financing, target groups in VET, transitions in VET, VET policy, etc.
- Vocational and business education research

Literature references are provided during each module.

Courses			
Lecturer	Course title	ECTS points	SWH
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Structures and Theories of Vocational Education	4	2
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Focus Seminar for Vocational Education	6	2



Otto von Guericke University Magdeburg M. Sc. International Technical and Vocational Education and Training					
Compulsory Module 3: Didactics of Vocational Learning and Teaching (CM3)					
Semester	Frequency of offer	Duration	Type	ECTS points	Student workload
3 rd or 4 th semester	WS	1 semester	Compulsory	10 CP	4 CWS; 56h/244h/300h

Participation requirements	Applicability	Requirements for the award of CPs (form of examination / duration)	Teaching and learning methods	Responsible person(s)
None		SN: short papers/ presentations, handouts (oN) LN: presentations/ term papers (mN) Module completion: presentations/ term papers (mN) (as specified by the module coordinator)	Seminars	Prof. Dr. Frank Bünning (Chair of Engineering Pedagogics and Technical Education)

Qualification objectives
The students can, – analyze vocational training curricula, – discuss and evaluate requirements for vocational education and training arising from curricula, – design learning units in vocational education and training, – evaluate lessons in vocational education and training, – apply theoretical principles to technical subject areas, – understand and structure the content of teaching, – use test environments for demonstration purposes, – plan and implement learner-centered learning and teaching approaches, – select appropriate forms of centered learning and teaching approaches according to the requirements of the learner and the curriculum, – evaluate learner-centered approaches to learning and teaching.



Teaching content	
– Typologies of curricula – Legal conditions for teaching in the field of vocational education and training – Principles of and approaches to teaching design – Methods of teaching evaluation – Preparation, design, implementation and evaluation of practical teaching concepts – Preparation of laboratory work and technical experiments – Didactical preparation of relevant content for teaching and learning situations – Integration of modern media, technical objects and experimental environments – Case studies, role-plays, project work, simulation and other learner-centered forms of learning and teaching – Simulated development of learning situations using a learner-centered approach – Development of technical experiments for teaching	
Literature references are provided during each module.	

Courses			
Lecturer	Course title	ECTS points	SWH
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Learning and Teaching Technologies in Practice	4	2
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Basics on Didactics for Specialization	6	2

Otto von Guericke University Magdeburg M. Sc. International Technical and Vocational Education and Training					
Compulsory Module 4: International Comparative Technical and Vocational Education and Training (CM4)					
Semester	Frequency of offer	Duration	Type	ECTS points	Student workload
1 st or 2 nd semester	SS	1 semester	Compulsory	10 CP	4 CWS; 56h/244h/300h



Participation requirements	Applicability	Requirements for the award of CPs (form of examination / duration)	Teaching and learning methods	Responsible person(s)
None		SN: short papers/ presentations, handouts (oN) LN: presentations/ term papers (mN) Module completion: presentations/ term papers (mN) (as specified by the module coordinator)	Seminars	Prof. Dr. Frank Bünning (Chair of Engineering Pedagogics and Technical Education)

Qualification objectives

The students...

- gain an understanding of the possibilities and limits of an international comparison of vocational education and training research,
- develop an understanding of vocational education and training in selected European and non-European countries,
- can contrast and compare vocational education and training in different countries in a scientifically justifiable way,
- can discuss the importance of international developments for vocational education and training in Germany,
- can assess the measures and instruments of European vocational training policy,
- assess the strategies and measures of international vocational training cooperation.

Teaching content

- Methods and methodology of international comparison in VET research
- Results of and approaches to quantitative and qualitative analyses of education and vocational training in international comparative studies
- Theory and scientific discourse of vocational education and training in selected European and non-European countries
- Topics and problem areas of VET in an international comparison
- Vocational training practice in selected European and non-European countries
- European vocational training policy
- International vocational training cooperation

Literature references are provided during each module.

Courses



Lecturer	Course title	ECTS points	SWH
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	International Vocational Education I	4	2
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	International Vocational Education II	6	2

Otto von Guericke University Magdeburg M. Sc. International Technical and Vocational Education and Training					
Compulsory Module 5: Management and Evaluation of International Technical and Vocational Education and Training (CM5)					
Semester	Frequency of offer	Duration	Type	ECTS points	Student workload
1 st or 2 nd semester	SS	1 semester	Elective	10 CP	4 CWS; 56h/244h/300h

Participation requirements	Applicability	Requirements for the award of CPs (form of examination / duration)	Teaching and learning methods	Responsible person(s)
None		SN: short papers / presentations, handouts (oN) LN: presentations / term papers (mN) Module completion: presentations / term papers (mN) (as specified by the module coordinator)	Seminars	Prof. Dr. Frank Bünning (Chair of Engineering Pedagogics and Technical Education)

Qualification objectives
The students can



- apply VET management principles,
- recognize decisive factors in VET management,
- evaluate knowledge management approaches in the context of the modules presented,
- understand and apply VET management on macro and micro levels,
- discuss questions, motivations, interests and incentives with respect to personnel and further training policy,
- develop and apply research approaches in VET management,
- recognize the importance of project management for change processes within an organization,
- recognize the relevance of project management to international development cooperation,
- initiate VET projects,
- assess the importance of motivation in the context of project work,
- understand and apply motivation and incentive theories,
- explain and implement leadership theories,
- explain methods of employee motivation and instruments for efficient cooperation,
- guide and supervise students and employees in VET,
- promote changes within organizations.

Teaching content

- Principles of VET management
- Decisive factors in VET management
- Macro- and micro-level of VET management
- Development of research approaches
- Knowledge and expertise: concepts
- Knowledge management models
- Methods and instruments in knowledge management
- Knowledge promoters
- Basics of project management
- Tools, techniques and methods of project management
- Fields of application for project management
- Interdisciplinary teamwork
- Organizational development
- Project organization
- Leadership theories
- Methods, instruments and measures of leadership in projects
- Behavioral training
- Employee motivation and group psychology
- Organizational psychology
- Incentive and motivation theory

Literature references are provided during each module.



Courses			
Lecturer	Course title	ECTS points	SWH
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Vocational Education Management	4	2
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Quality Management	6	2

Otto von Guericke University Magdeburg M. Sc. International Technical and Vocational Education and Training					
Compulsory Module 6: Curriculum and Media Development (CM6)					
Semester	Frequency of offer	Duration	Type	ECTS points	Student workload
3 rd or 4 th semester	SS	1 semester	Compulsory	10 CP	4 CWS; 56h/244h/300h

Participation requirements	Applicability	Requirements for the award of CPs (form of examination / duration)	Teaching and learning methods	Responsible person(s)
None		SN: short papers / presentations, handouts (oN) LN: presentations / term papers (mN) Module completion: presentations / term papers (mN) (as specified by the module coordinator)	Seminars	Prof. Dr. Frank Bünning (Chair of Engineering Pedagogics and Technical Education)
Qualification objectives				



The students develop the ability to

- plan, implement and reflect on learning sequences based on didactic models and concepts as well as curriculum theory considerations,
- plan, implement and reflect on business and work oriented learning sequences as well as project-oriented teaching and learning arrangements,
- describe the connection between motivation and performance and consider it in performance assessments,
- describe quality criteria of performance measurement and reference standards of performance assessment and take them into account in performance measurements and assessments in the company context,
- describe perceptive-psychological errors in performance measurement and assessment and minimize the corresponding measurement errors,
- understand different types of teaching and learning Applimedia,
- differentiate between a variety of teaching and learning media,
- apply teaching and learning media to different learning situations,
- use teaching and learning media to prepare and communicate educational content.

Teaching content

- Didactic models
- Curriculum development
- Planning, implementation and realization of teaching sequences
- Performance measurement and assessment / evaluation
- Teaching and learning media
- Tools and instruments of e-learning
- Curriculum development with the help of teaching and learning media
- Didactic models in relation to teaching and learning media

Literature references are provided during each module.

Courses			
Lecturer	Course title	ECTS points	SWH
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Development of Curricula	4	2
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Action Fields of TVET Trainers	6	2



Otto von Guericke University Magdeburg M. Sc. International Technical and Vocational Education and Training					
Compulsory Module 7: Professional Practical Studies (CM7)					
Semester	Frequency of offer	Duration	Type	ECTS points	Student workload
4 th or 5 th semester	WS and SS	1 semester	Compulsory	10 CP	2 CWS; 6h/294h/300h

Participation requirements	Applicability	Requirements for the award of CPs	Teaching and learning methods	Responsible person(s)
None		LN: presentation Module completion: scientific internship report (portfolio mN)	Preparatory and follow-up workshops, internship	Prof. Dr. Frank Bünning (Chair of Engineering Pedagogics and Technical Education)
Qualification objectives				
The students are familiar with the structure and procedures of in-company initial and continuing vocational training. They can... – analyze the action concepts practiced in in-company initial and continuing vocational training based on theoretically sound key objectives and models, – apply the theoretical concepts of vocational and in-company education to practical problems, – responsibly represent the assigned task area				

Teaching content
– Operational structures of training and further training processes – Macro planning of training oriented to work and business processes – Planning of courses and internships – Use of work equipment and media – Quality control – Work planning and organization Literature references are provided within the courses. Literature references are provided during each module.



Lecturer	Course title	ECTS points
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Practical Professional Studies	10
Selected internship company	Internship	



Specialist Studies

Otto von Guericke University Magdeburg M. Sc. International Technical and Vocational Education and Training					
Specialization Elective Module 1: Organizational and Human Resource Development (SM1)					
Semester	Frequency of offer	Duration	Type	ECTS points	Student workload
4 th or 5 th semester	WS and SS	1 semester	Elective module	10 CP	4 CWS; 56h/244h/300h

Participation requirements	Applicability	Requirements for the award of CPs (form of examination / duration)	Teaching and learning methods	Responsible person(s)
None		SN: short papers / presentations, handouts (oN) LN: presentations / term papers (mN) Module completion: presentations / term papers (mN) (as specified by the module coordinator)	Seminars	Prof. Dr. Frank Bünning (Chair of Engineering Pedagogics and Technical Education)

Qualification objectives
Students develop the ability to... – explain structures, interrelations of effects and meanings in organizations with findings from organizational research, – understand, stimulate, support and evaluate processes of organizational development and knowledge transformation, – describe the relationship between the learning individual and the learning organization and to assess the organizational possibilities of promoting learning processes, – describe and carry out or apply tasks and instruments of personnel development according to professional standards,



- conceive and implement company and inter-company further training,
- initiate, methodically design and evaluate learning processes in the workplace.

Teaching content

- Definitions and theories of organization and its design
- Behavior, leadership, and interaction in organizations
- Approaches and methods of organizational research and development
- Dilemmas of organization and leadership in organizations
- Criteria for personality-enhancing, socially appropriate, learning and innovation-enhancing design of working conditions
- Theories and research approaches of in-company educational processes
- Structures and processes of company training
- Theories and methods of learning in the work process
- Personnel development tasks

Literature references are provided during the courses. Literature references are provided during each module.

Courses			
Lecturer	Course title	ECTS points	SWH
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Organizational and Human Resource Development I	4	2
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Organizational and Human Resource Development II	6	2

Otto von Guericke University Magdeburg M. Sc. International Technical and Vocational Education and Training

Specialization Elective Module 2: Vocational Training for Sustainable Development (SM2)

Semester	Frequency of offer	Duration	Type	ECTS points	Student workload
4 th or 5 th semester	WS and SS	1 semester	Elective module	10 CP	4 CWS; 56h/244h/300h



Participation requirements	Applicability	Requirements for the award of CPs (form of examination / duration)	Teaching and learning methods	Responsible Person(s)
None		SN: short papers / presentations, handouts (oN) LN: presentations / term papers (mN) Module completion: presentations / term papers (mN) (as specified by the module coordinator)	Seminars	Prof. Dr. Frank Bünning (Chair of Engineering Pedagogics and Technical Education)

Qualification objectives

The participants are qualified to

- explain the current scientific concepts,
- identify the potentials of sustainable development,
- name and discuss the political and social foundations of the sustainability debate,
- explain various approaches to implementation,
- analyze implementation strategies and develop models,
- translate learning objectives into subject-specific curricula and/or didactic models and concepts,
- understand the concept of sustainability in vocational education and training and apply it in their didactic concepts and in the implementation of the transfer project,
- select suitable thematic focuses for the training of vocational training specialists and put them into practice,
- compare different forms of self-directed learning and apply them in a situation and target-oriented manner,
- plan, implement and reflect on business and work process-oriented learning sequences as well as project-oriented teaching and learning arrangements,
- name quality criteria of the performance measurement and apply methods of performance measurement and evaluation.

Teaching content

Vocational training for sustainable development

- Definition and historical background of sustainable development
- Concepts of strong and weak sustainability / green growth models
- Products and services of a green economy
- Principles and implementation strategies of a green economy
- Green jobs and green skills – requirements for skilled workers in new professions in the green economy



- Main features of the political sustainability debate
- Fields of action of energy and climate protection policies, concepts of climate protection
- Actors, processes and instruments of energy and climate protection policies
- Developments in the field of sustainable technologies
- Fundamental approaches and discussion of the potential for implementing sustainable development in vocational education and training
- Fundamental implementation strategies in vocational education and training and consequences for the training of skilled workers
- Sustainable development and requirements for teacher training
- Educational objective: competencies to design sustainable development

Didactics of vocational education and training for sustainable development

- Development of professional curricula for selected green jobs
- Planning, implementation and realization of teaching sequences
- Action-oriented training and teaching procedures
- Development of teaching and learning media.

Literature references are provided during the courses. Literature references are provided during each module.

Courses			
Lecturer	Course title	ECTS points	SWH
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Vocational Education for Sustainable Development	4	2
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Didactics for Sustainable Development	6	2

Otto von Guericke University Magdeburg M. Sc. International Technical and Vocational Education and Training					
Specialization Elective Module 3: Methods of In-Company Education (SM3)					
Semester	Frequency of offer	Duration	Type	ECTS points	Student workload



4 th or 5 th semester	WS and SS	1 semester	Elective module	10	6-8 CWS; 98h/202h/300h
---	-----------	------------	-----------------	----	---------------------------

Participation requirements	Applicability	Requirements for the award of CPs (form of examination / duration)	Teaching and learning methods	Responsible person(s)
None		SN: short papers / presentations, handouts (oN) LN: presentations / term papers (mN) Module completion: presentations / term papers (mN) (as specified by the module coordinator)	Seminars	Prof. Dr. Frank Bünning (Chair of Engineering Pedagogics and Technical Education)

Qualification objectives

Students are able to

- understand contents and terms of vocational training,
- master the basic principles and methods of vocational training,
- describe different characteristics of and necessary skills for vocational training,
- organize and develop vocational training work.

Teaching content

- Vocational training: terms and contents
- Fundamental principles and measures of vocational training
- Classification of different training occupations
- Skills and characteristics in vocational education and training
- Organization and further development of vocational training
- Vocational training practice

Literature references are provided during the courses. Literature references are provided during each module.



Courses			
Lecturer	Course title	ECTS points	SWH
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Workshop of Vocational Training	4	2
Prof. Dr. Frank Bünning Chair of Engineering Pedagogics and Technical Education	Methods of Vocational Training	6	2

Otto von Guericke University Magdeburg M. Sc. International Technical and Vocational Education and Training					
Specialization Elective Module 4: further specialization modules within the scope of the courses offered (SM4)					
Semester	Frequency of offer	Duration	Type	ECTS points	Student workload
4 th or 5 th semester	WS and SS	1 semester	Elective module	10 CP	4 CWS; 56h/244h/300h

Participation requirements	Applicability	Requirement for the award of CPs (form of examination / duration)	Learning and teaching methods	Responsible person(s)
<i>Determined by tutor</i>	<i>Determined by tutor</i>	<i>Determined by tutor</i>	<i>Determined by tutor</i>	Prof. Dr. Frank Bünning (Chair of Engineering Pedagogics and Technical Education)

Qualification outcomes



Determined by tutor

Teaching content

Determined by tutor

Courses

Lecturer	Course title	CWS
N.N.	<i>Determined by tutor</i>	2
N.N.	<i>Determined by tutor</i>	2

**Master's Thesis**

Otto von Guericke University Magdeburg M. Sc. International Technical and Vocational Education and Training					
Compulsory Module 8: Master's Thesis (CM8)					
Semester	Frequency of offer	Duration	Type	ECTS points	Student workload
6 th semester	WS and SS	1 semester	Compulsory	20 CP	2 CWS; 28h/872h/900h

Participation requirements	Applicability	Requirement for the award of CPs (form of examination / duration)	Teaching and learning methods	Responsible person(s)
Completed module examinations in accordance with Study and Examination Regulations		Participation in the Master's seminar / colloquium / passed expose Final module exam: Master's thesis (mN)	Presentations, Master's thesis	The Master's thesis is supervised by a university lecturer who is authorized to conduct examinations in the Master's degree program in International Technical and Vocational Education and Training (SER 2019 §12). Further details can be found in the Study and Examination Regulations (SER 2019 §22-24).

Qualification outcomes
The students should – work independently on an in-depth research question using methods of qualitative or quantitative vocational research and scientific theories within a given timeframe,



- prepare, present and justify their own research and development results in relation to the current state of research,
- present effective arguments justifying and critically reflect upon their choice of content and methodology for their own research and development project and make suggestions concerning the development of content and methods,
- utilize contemporary forms and techniques to present a complex piece of scientific research

Teaching content

- Current research issues with regard to in-company training and VET management
- Literature and methods for the development of scientific recognition of specific problems (technical literature, databases, relevant technical journals)
- Theoretical explanation
- Qualitative and quantitative research methods
- Specialized research approaches of VET and of the corresponding professional field or subject of specialization, respectively

Courses

Lecturer	Course title	CWS
Prof. Dr. Frank Bünning (Chair of Engineering Pedagogics and Technical Education)	Master's Seminar / Colloquium	0
Prof. Dr. Frank Bünning (Professorship of Engineering Pedagogics and Technical Education)	Master's Thesis	20