

**Master Civil Engineering**

Specialization **"Construction Management and Project Management"**

1 <sup>st</sup> Semester (winter)		2 <sup>nd</sup> Semester (summer)		3 <sup>rd</sup> Semester
	Construction Costs - Controlling		Supplementary Work and Construction Interferences	Master Thesis with Colloquium
	Building Processes 2		Elective Project (BBPM, KPTA, MKTB or PIPL)	
	Elective Module Area Project Management		Elective Module	
	Elective Module		Elective Module	
	Elective Module		Elective Module	



<b>Elective Modules of the specialization "Construction Management and Project Management"</b>		<b>Pt.</b>	<b>CrP</b>
Area Project Management	Tendering, Awarding of Contracts and Accounting M		6
	Civil Engineering Management Project (BBPM)		6
	Construction Logistics		6
	Visiting Construction Sites		6
	Lean Management		6
	Project Leadership and Project Organization		6
	Expert Practice and Principles		6
	Turnkey Construction		6
	Awarding and Construction Contract Law		6
Area Fire Protection	Preventive and Technical Fire Prevention		6
	Fire Prevention in Building Redevelopment		6
	Engineering Methods in Fire Prevention / Fire Prevention Assessment		6
	Engineering Methods in Fire Prevention / Fire Prevention Simulation		6
	Fire Protection Planning		6
	Preventive Constructional Fire Protection		6
Area Construction	Structural Dynamics		6
	Soil Mechanics 2		6
	Bridge Engineering		6
	Facade Engineering		6
	Geotechnical Engineering		6
	Timber Engineering		6
	Numerical Methods for Structural Mechanics		6
	Structural Engineering Project		6
	Special Fields of Construction Civil Engineering		6
	Prestressed Concrete		6
	Steel Construction and Stability		6
	Composite Construction		6
Area BIM	5D Lab – Integration, Coordination and Optimization		6
	BIM 3D – Object-Oriented Modeling		6
	BIM 4D/5D- Cost Management, Scheduling and Tendering (KPTA)		6
	BIM 4D/5D Model-Based Calculation, Scheduling and Building Organization (MKTB)		6
	BIM 5D Modeling: Technology and Management Basics		6
	BIM in Infrastructure		6
	BIM in Structural Planning		6
	Sustainable Building (6D)		6
	Integrated Design Project (PIPL)		6
Comprehensive Modules	Building Informatics M		6
	Building Physics Concepts		6
	Renewable Energy		6
	Mathematics		6
	International Consulting		6
	Parametric Modelling		6
	Project: Approval Planning		6
	Elective Module (Department Marketing and Communication)		6
	Elective Module (THM)		6

**Master Civil Engineering**

Specialization „**Construction und Structural Design**“

1 <sup>st</sup> Semester (winter)		2 <sup>nd</sup> Semester (summer)		3 <sup>rd</sup> Semester
	Geotechnical Engineering		Timber Engineering	Master Thesis with Colloquium
	Numerical Methods for Structural Mechanics		Structural Engineering Project	
	Special Fields of Construction Civil Engineering		Composite Construction	
	Elective Module		Elective Module	
	Elective Module		Elective Module	



Elective Modules of the specialization "Construction and Structural Design"		Pt.	CrP
Area Project Management	Tendering, Awarding of Contracts and Accounting M		6
	Civil Engineering Management Project (BBPM)		6
	Construction Costs - Controlling		6
	Construction Logistics		6
	Visiting Construction Sites		6
	Building Processes 2		6
	Lean Management		6
	Expert Practice and Principles		6
	Turnkey Construction		6
	Supplementary Work and Construction Interferences		6
	Project Leadership and Project Organization		6
	Awarding and Construction Contract Law		6
Area Fire Protection	Preventive and Technical Fire Prevention		6
	Fire Prevention in Building Redevelopment		6
	Engineering Methods in Fire Prevention / Fire Prevention Assessment		6
	Engineering Methods in Fire Prevention / Fire Prevention Simulation		6
	Fire Protection Planning		6
	Preventive Constructional Fire Protection		6
Area Construction	Structural Dynamics		6
	Soil Mechanics 2		6
	Bridge Engineering		6
	Facade Engineering		6
	Prestressed Concrete		6
	Steel Construction and Stability		6
Area BIM	5D Lab – Integration, Coordination and Optimization		6
	BIM 3D – Object-Oriented Modeling		6
	BIM 4D/5D- Cost Management, Scheduling and Tendering (KPTA)		6
	BIM 4D/5D Model-Based Calculation, Scheduling and Building Organization (MKTB)		6
	BIM 5D Modeling: Technology and Management Basics		6
	BIM in Infrastructure		6
	BIM in Structural Planning		6
	Sustainable Building (6D)		6
	Integrated Design Project (PIPL)		6
Comprehensive Modules	Building Informatics M		6
	Building Physics Concepts		6
	Renewable Energy		6
	Mathematics		6
	International Consulting		6
	Parametric Modelling		6
	Project: Approval Planning		6
	Elective Module (Department Marketing and Communication)		6
	Elective Module (THM)		6

**Master Civil Engineering**  
Specialization **"Fire Protection"**

1 <sup>st</sup> Semester (winter)		2 <sup>nd</sup> Semester (summer)		3 <sup>rd</sup> Semester
	Preventive and Technical Fire Prevention		Fire Prevention in Building Redevelopment	Master Thesis with Colloquium
	Engineering Methods in Fire Prevention / Fire Prevention Simulation		Engineering Methods in Fire Prevention / Fire Prevention Assessment	
	Preventive Constructional Fire Protection		Fire Protection Planning	
	Elective Module		Elective Module	
	Elective Module		Elective Module	

Elective Modules of the specialization "Fire Protection"		Pt.	CrP
Area Project Management	Tendering, Awarding of Contracts and Accounting M		6
	Civil Engineering Management Project (BBPM)		6
	Construction Costs - Controlling		6
	Construction Logistics		6
	Visiting Construction Sites		6
	Building Processes 2		6
	Lean Management		6
	Supplementary Work and Construction Interferences		6
	Project Leadership and Project Organization		6
	Expert Practice and Principles		6
	Turnkey Construction		6
	Awarding and Construction Contract Law		6
Area Construction	Structural Dynamics		6
	Soil Mechanics 2		6
	Bridge Engineering		6
	Facade Engineering		6
	Geotechnical Engineering		6
	Timber Engineering		6
	Numerical Methods for Structural Mechanics		6
	Structural Engineering Project		6
	Special Fields of Construction Civil Engineering		6
	Prestressed Concrete		6
	Steel Construction and Stability		6
	Composite Construction		6
Area BIM	5D Lab – Integration, Coordination and Optimization		6
	BIM 3D – Object-Oriented Modeling		6
	BIM 4D/5D- Cost Management, Scheduling and Tendering (KPTA)		6
	BIM 4D/5D Model-Based Calculation, Scheduling and Building Organization (MKTB)		6
	BIM 5D Modeling: Technology and Management Basics		6
	BIM in Infrastructure		6
	BIM in Structural Planning		6
	Sustainable Building (6D)		6
	Integrated Design Project (PIPL)		6
Comprehensive Modules	Building Informatics M		6
	Building Physics Concepts		6
	Renewable Energy		6
	Mathematics		6
	International Consulting		6
	Parametric Modelling		6
	Project: Approval Planning		6
	Elective Module (Department Marketing and Communication)		6
	Elective Module (THM)		6

**Master Civil Engineering**

Specialization **"5D BIM – Virtual Design and Construction"**

1 <sup>st</sup> Semester (winter)		2 <sup>nd</sup> Semester (summer)		3 <sup>rd</sup> Semester
	BIM 5D Modeling: Technology and Management Basics		5D Lab – Integration, Coordination and Optimization	Master Thesis with Colloquium
	BIM 3D – Object-Oriented Modeling		Sustainable Building (6D)	
	BIM 4D/5D- Cost Management, Scheduling and Tendering		BIM 4D/5D Model-Based Calculation, Scheduling and Building Organization	
	Elective Module		Elective Module	
	Elective Module		Elective Module	



Elective Modules of the specialization "5D BIM – Virtual Design and Construction"		Pt.	CrP
Area Project Management	Tendering, Awarding of Contracts and Accounting M		6
	Civil Engineering Management Project (BBPM)		6
	Construction Costs - Controlling		6
	Construction Logistics		6
	Visiting Construction Sites		6
	Building Processes 2		6
	Lean Management		6
	Supplementary Work and Construction Interferences		6
	Project Leadership and Project Organization		6
	Expert Practice and Principles		6
	Turnkey Construction		6
	Awarding and Construction Contract Law		6
Area Fire Protection	Preventive and Technical Fire Prevention		6
	Fire Prevention in Building Redevelopment		6
	Engineering Methods in Fire Prevention / Fire Prevention Assessment		6
	Engineering Methods in Fire Prevention / Fire Prevention Simulation		6
	Fire Protection Planning		6
	Preventive Constructional Fire Protection		6
Area Construction	Structural Dynamics		6
	Soil Mechanics 2		6
	Bridge Engineering		6
	Facade Engineering		6
	Geotechnical Engineering		6
	Timber Engineering		6
	Numerical Methods for Structural Mechanics		6
	Structural Engineering Project		6
	Special Fields of Construction Civil Engineering		6
	Prestressed Concrete		6
	Steel Construction and Stability		6
	Composite Construction		6
Area BIM	BIM in Infrastructure		6
	BIM in Structural Planning		6
	Integrated Design Project (PIPL)		6
Comprehensive Modules	Building Informatics M		6
	Building Physics Concepts		6
	Renewable Energy		6
	Mathematics		6
	International Consulting		6
	Parametric Modelling		6
	Project: Approval Planning		6
	Elective Module (Department Marketing and Communication)		6
	Elective Module (THM)		6