

Specialisation: Geomatics for Mineral Resource Management

1. Semester (Freiberg)	2. Semester (Freiberg)	3. Semester (Freiberg)	4. Semester (Freiberg)
Applied Remote Sensing in Geosciences 6 CP	Geomatics for Resource and Reserve Management 6 CP	Project Management 3 CP	MSc Thesis 30 CP
Geomonitoring 5 CP	Applied Spatial Data Analysis and Modelling - Case Study 5 CP	Innovation Project Geomatics 10 CP	
Underground Mine Surveying 5 CP	Special Topics Geokinematics 4 CP		
Geomodelling - Geostatistics for Natural Resource Modelling 5 CP	Investment and Finance 3 CP		
Operations Management 6 CP	Reclamation 6 CP		
Information Management 6 CP	International Development and Resources 6 CP		
Industry Internship Geomatics 5 CP	Ore Deposits & Economic Ecology 3 CP	Free elective courses 10 CP	
Aspects of the International Law of Resources & Environment 1 3 CP	Aspects of the International Law of Resources & Environment 2 3 CP		
Introduction to Mining 3 CP	Human Resource Management and Organizational Behaviour (HRMOB) 3 CP		

CP = Credit Points

Core courses
Path specific courses
Pre-defined electives courses (10 CP total)
Free elective courses (10 CP total)

Specialisation: Mine Surveying				
1. Semester (Freiberg)	2. Semester (Freiberg)	3. Semester (Leoben)		4. Semester (Leoben)
Applied Remote Sensing in Geosciences 6 CP	Geomatics for Resource and Reserve Management 6 CP	Mines Surveying Project Study 4.5 CP	Automatic Surface Inspection 3 CP	MSc Thesis 30 CP
Geomonitoring 5 CP	Applied Spatial Data Analysis and Modelling (Case Study) 5 CP	Spatial Planning 1.25 CP	Environmental AspCP of Mineral Extraction 3 CP	
Underground Mine Surveying 5 CP	Mine Mapping, CAD and Geodatabases 5 CP	Geotechnical Monitoring and Instrumentation 1.5 CP	Computer Applications in Mining 2.5 CP	
Photogrammetric Surveying (every second year) 4 CP	Geodetic Adjustment Theory 5 CP	Mining Subsidence Engineering 3 CP	Instrumentation, Monitoring, Data Evaluation and Interpretation 6.75 CP	
Umweltingenieurgeologie* 8 CP		Surpac Introduction 2 CP	Risk Management in Mines 3 CP	
Applied Soil- and Hard Rock Mechanics 6 CP	Reclamation 6 CP	Untertagebergbau* 4.5 CP	Machine Vision 3 CP	
		Precalculation of Ground Movements 1.5 CP	Measurements of 3D-Objects 2 CP	
Project Management 3 CP	Bodenordnung* (every second year) 4 CP	Compulsary Internship 5 CP	Measurement Data Processing 3 CP	
			Geoinformatics 2.5 CP	
		Free elective courses - 6 CP		

CP = Credit Points

* = these courses are only offered in German

Core courses
Path specific courses
Pre-defined electives courses Freiberg (3 CP total)
Pre-defined electives courses Leoben (2.75 CP total)
Free elective courses (6 CP totals)