Study plan MSc "Geoscience" with focus "Tectonic Geodesy"					
Nachforderungen aus dem BSc		**Sem.**	**Weekly hours**	**Comment**	**recommended semester**
Mechanik für Geowissenschaftler	5	WS	3	for German speaking degree-seeking students	
Mathematische Methoden der Physik I	5	WS	3	for German speaking degree-seeking students	
Mathematische Methoden der Physik II	5	SS	3	for German speaking degree-seeking students	
Mandatory modules	**CP**	**Sem.**	**Weekly hours**	**Comment**	**recommended semester**
Measuring Earth surface motions with InSAR and GNSS	6	WS			1st semester
Measuring Earth surface motions with InSAR and GNSS			4		
Optimization methods for Geophysics	**6**	SS			2nd semester; either Python or Matlab required
Lecture			2	Start date in SS 26	
Exercise			2	Start date in SS 26	
Gravity and magnetics - Potential fields	6	SS			2nd semester
Potential fields			4	Details at the start of the SoSe 26	
Physics of the solid Earth	10			Courses alternate between WS	1st and 3rd semester
Continuum mechanics		WS	3	WS 25/26	
Physics of Earth materials		WS	3	WS 26/27	
Python programming for Geosciences	**10**				
Introduction to programming in Python	5	WS	3		1st
Advanced programming in Python	5	SS	3		2nd
Introduction to programming in Matlab	6	SS	4		2nd
Highly recommended modules and courses	**CP**	**Sem.**	**Weekly hours**	**Comment**	**recommended semester**
Earthquake processes	6			Co-requisite: Physics of solid Earth at least one course completed	2nd
Earthquake seismology and the seismic cycle		SS	4		
Seismotectonics and seismic hazard	6			Co-requisite: Physics of solid Earth at least one course completed	3rd
Seismotectonics and seismic hazard		WS	4		
Geophysical field practical	**5**				
Field exercise			6 days		after the 2nd semester (August)
Data analyses			4 days		
Geophysical Seminar	**6**	WS/SS			
Deformation mechanisms and tectonics of subduction zones		WS	2		1st
Induced and triggered seismicity		SS	2		2nd
Geology and geohazards in an active subduction zone	5				
Geology and geohazards in an active subduction zone		SS	3	Pre-requisite: completion of Earthquake processes and/or Seismotectonics; 7 day field exercise in Crete; cost of around 700€	Seminar and feld exercise, between WS and SS
Recommended modules	**CP**	**Sem.**	**Weekly hours**	**Comment**	**recommended semester**
Structural Geology	**10**				
Lectures, seminars and exercises in structural geology		WS	2		3rd semester
Special methods in structural geology		WS	2		1st semester
Structural Geology field camp		SS	8 days	Field camp costs of around 500 €	after 2nd semester
Applied geophysics	**10**				2nd semester
Reservoir Geophysics		SS	3		
Rock Physics		SS	3		
Geophysical practical	**5**				recommended in 2nd or 3rd
Geophysical practical		SS,WS			
Masters thesis (Mandatory)	**30**				