



## HÖGSKOLAN I GÄVLE

### Geographical Information Technology 7.5 cr

*Geografisk informationsteknik 7,5 hp*

Set by Faculty of Engineering and Sustainable Development

**Version**

**Set at**

**Valid from**

11/3/16

**HT2017**

<b>Level</b>	G1N
<b>Education level</b>	First cycle
<b>Course identifier</b>	SBG051
<b>Credits</b>	7.5 cr
<b>Main field of study</b>	Spatial Planning, Geomatics, Geography, Surveying Technology
<b>Subject group</b>	Geographic Information Technology and Surveying
<b>Disciplinary domain</b>	Technology 100.0 %

**Learning outcomes**

After completion of the course the student shall be able to

1. state for how geographic information systems function
2. describe the difference between raster and vector data, and be able to assess when to use the respective format
3. state for how geographic data is collected, stored and searched for in geographic databases
4. describe possible uses of GIS
5. state for cartographic visualisation
6. state for the basic principles of geographic techniques, such as remote sensing or marketing with GIS.

**Course content**

Analysis in raster and vector environments in GIS  
Cartographic presentation techniques  
Economical and organisational aspects  
Reference systems and map projections  
Creating maps for print or digital publication  
Topology  
Remote sensing  
GIS in marketing

<b>Teaching</b>	Lectures and exercises		
<b>Prerequisites</b>	General entry requirements		
<b>Examination</b>	Written examination and assignments		
<b>Grade</b>	A, B, C, D, E, Fx, F		
<b>Other regulations</b>	Degree criteria for final grade will be given by examiner or course responsible latest at the beginning of the course.		
<b>Sustainable environment</b>	A minor part of the course content deals with sustainable development.		
<b>Module</b>			
	0010	Written examination	3.5 cr      Grade: AF
	0020	Assignments	4 cr      Grade: UG