



# 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
11/9/11	<a href="#">HT2007</a>
12/16/14	<b>HT2014</b>

<b>Level</b>	G1N
<b>Education level</b>	First cycle
<b>Course identifier</b>	SB230A
<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** On completion of the course, the student should be able to:

- 1, understand 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, understand how geographic data is collected, stored and searched for in geographic databases

- have knowledge of the possible uses of GIS
- have knowledge of cartographic visualisation
- be familiar with the basic principles of geographic techniques, such as remote sensing or marketing

**Course content**

- geographic data and databases
- 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, exercises and self-studies.		
<b>Prerequisites</b>	General entry requirements		
<b>Examination</b>	Written Examination Approved Exercises The student must have achieved a passing grade on the written examination and exercises		
<b>Grade</b>	A, B, C, D, E, Fx, F		
<b>Other regulations</b>	Course certificates are only awarded for whole, completed courses and only on request by the student.		
<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
	0030	Exercises	4 cr      Grade: UG