



# HÖGSKOLAN I GÄVLE

## GIS raster/vector 7.5 cr

*GIS raster/vektor 7,5 hp*

Set by Faculty of Engineering and Sustainable Development

**Version**

**Set at**

**Valid from**

2/26/18

**HT2018**

<b>Level</b>	G1F
<b>Education level</b>	First cycle
<b>Course identifier</b>	SBG382
<b>Credits</b>	7.5 cr
<b>Main field of study</b>	Spatial Planning, Geospatial Information Science, 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. apply different types of Geographic Information System applications
2. state how Geographic Information Systems (GIS) work
3. perform geographical analyses in raster and vector environments
4. summarise and evaluate scientific literature treating Geographic Information Technology (GIT)
5. perform a project work.

**Course content**

Methods for data gathering in raster and vector environments  
Integration and conversions of different spatial data  
Integration of spatial and non-spatial data  
Editing and updating methods  
Raster and vector analyses  
Digital elevation models  
Graphical presentation of analysis results

**Teaching**

Lectures, assignments, seminars, project

**Prerequisites**

Algebra and Geometry 7.5 credits or Methods in Spatial Planning and Geography 7.5 credits

	and Geographical Information Technology 7.5 credits, or equivalent		
<b>Examination</b>	Written examination, written assignments, seminars and project work. How the learning outcomes are examined are stated in the course's grading criteria.		
<b>Grade</b>	A, B, C, D, E, Fx, F		
<b>Limitations</b>	The course may not be included in a higher education degree together with the course GIT in land management 7.5 credits.		
<b>Other regulations</b>	Degree Criteria for final grade will be given by course responsible or examiner 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 cr      Grade: AF
	0020	Written Assignments, Seminars	1.5 cr      Grade: UG
	0030	Project Work	3 cr      Grade: AF