



## HÖGSKOLAN I GÄVLE

### Engineering Surveying and Management 7.5 cr

*Byggmätning och arbetsledning 7,5 hp*

Set by Faculty of Engineering and Sustainable Development

**Version**

**Set at**

**Valid from**

11/9/11

**HT2011**

<b>Level</b>	G1F
<b>Education level</b>	First cycle
<b>Course identifier</b>	SBG302
<b>Credits</b>	7.5 cr
<b>Main field of study</b>	Surveying Technology
<b>Subject group</b>	Geographic Information Technology and Surveying
<b>Disciplinary domain</b>	Technology 100.0 %

**Learning outcomes**

The aim of the course is to provide advanced knowledge of geodesic measurement in connection with project design and building of houses and facilities, knowledge of the Swedish regulatory framework governing these measurements, and knowledge of management on a building site. The course should also give the student a theoretical basis and practical skills in measurement and analysis of various types of precision measurement, especially deformation measurement of buildings and facilities.

On completion of the course, the student should be able to:

- 1, carry out special measurements on building sites to verify building site tolerances.
- 2, analyse the results of geodesic precision measurements, for example deformation measurement
- 3, evaluate and present digital terrain models
- 4, interpret and understand specifications and tenders
- 5, using the reference material, describe and understand the building permit process
- 6, account for the role and responsibility of the project manager for planning, control and follow-up of projects
- 7, discuss and promote sustainable development and be aware of the consequences of pollutive activities on building sites.

**Course content**

Instruments, methods, regulatory frameworks and programs for special measurement,

especially deformation measurement.

The different stages of the building process, contract law, management, organisation and production. Laws, ordinances and documents concerning the building process; focusing on those concerning surveying. Occupational safety, quality, security and environmental issues in connection with measurements on building sites.

<b>Teaching</b>	Carried out as lectures, calculation exercises, laboratory sessions and exercises.			
<b>Prerequisites</b>	Engineering Surveying and Organisation, 7.5 HE credits or equivalent.			
<b>Examination</b>	0010 Written Examination, 4.5 HE credits 0020 Laboratory Sessions and Exercises, 3 HE credits, grades Fail, Pass			
<b>Grade</b>	A, B, C, D, E, Fx, F			
<b>Limitations</b>	For each course occasion, there is one regular examination and one re-examination.			
<b>Other regulations</b>	Grading criteria are provided by the course coordinator or examiner 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	4.5 cr	Grade: AF
	0020	Laborations and exercises	3 cr	Grade: UG