

Building Capacity

Diversification of the Swedish Land Surveying Educations

Klas Ernard Borges

PhD, Director of Studies,
MSc Programme in Land Surveying and Management
Lund University

Leif Eidenstedt

Senior Lecturer, Director of Studies,
MSc Land Management programme,
Royal Institute of Technology (KTH)



Land surveyor or urban/land developer?



Major curriculum areas

- Geomatics
- Building and infrastructure engineering
- Cadastral development
- Land management and policies
- Physical planning
- Real estate economics & management
- Real estate law

EU on land tenure

- EU Treaty: mobility
 - Land
 - Capital
 - People
- => European land market



Land Surveying & Management



Engineering + Economics + Law



Land surveying educations in Sweden

Stockholm	Lund	Trollhättan	Gävle	Luleå
Civ.Eng & Urb. Dev.	Land Surv. Managem.	Land Surv. Managem.	Geomatics	Civ.Eng. Arch. Eng.
30-40 (enrolment)	60	45	40	20
MSc	MSc	BSc	BSc + MSc	MSc
1932 (Start)	1992	1996	1990	2007



The Bologna process – main profile

- **Three cycle system (BSc, MSc & PhD)**
- **Quality assurance**
- **Recognition of qualifications and periods of study**



Main indicators

- **unified system of comparable exams (BSc and MSc)**
- **unified credit system (ECTS – European Credit Transfer System)**
- **promotion of mobility**
- **promotion of European cooperation on quality assurance**
- **promotion of the European dimension in higher education**



Mobility of students – Swedish case

	2001	2007	2010 (objective)
Exchange students (no)	9,600	11,200	
Free movers (no)		16,700	
Swedish students abroad (Lund Univ.)	...	30 %	40-50 %



Market expansion of Swedish land surveyors



1628- Land Surveying authorities

...

1950's +Agricultural & county boards

1960's +Municipalities

1970's +Public & private companies in:
infrastructure, real estate valuation, planning, land
development, international consultancies

1980's +Real estate analyses, R E agencies



The European higher education area ... in Sweden



Swedish system prepared for Europeans...

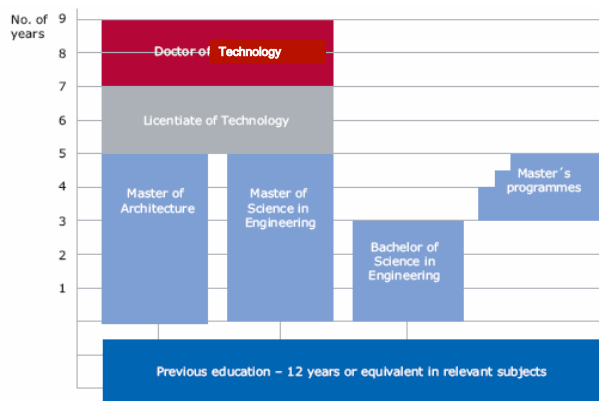
- 20 universities + 41 other univ. colleges
- 1,800 university programmes
- enrolment of 60,000 students
 - 3,200 BSc engineering students
 - 6,200 MSc engineering students

Europe as university exchange market

- 50 % Swedes with international/MSc degree
- 50 % foreign students at Swedish (MSc) programmes



Educational Structure at KTH



Study programmes given in Swedish

5 years of studies:

The Master of Science (MSc) programmes
Engineering
Master of Architecture

3 years of studies:

Bachelor of Science (BSc) programmes in
Applied Engineering

The programmes lead to one of the
following professional degrees:

MSc in Engineering (Civilingenjör)

Master of Architecture (Arkitekt)

BSc in Engineering (Högskoleingenjör)

Swedish is the main language of instruction
and knowledge in the Swedish language is
required in order to be admitted.

Master's programmes given in English

KTH offers MSc programmes entirely
taught in English (Teknologie magister).

The duration of these programmes is **2**
years

2 types:

in-depth programmes with a major subject
and broad programmes not connected to a
major subject.

A bachelor's degree and good knowledge of
English is required.



Department of Real Estate and Construction Management

Divisions of:

- Real Estate Planning and Land Law
- Building and Real Estate Economics



Education

- Civil Engineering Programme
- Master Programme in Land Management
- Master in Real Estate management
- Bachelor Programme in Real Estate and Finance
- Open Courses in Law



Department of Urban Planning and Environment

Responsible for:

Division of Geoinformatics

- Geodesy and geoinformatics in the civil engineering programmes


- Master Programme in Geodesy and Geoinformatics




	MSc/BSc programmes (engineering, law & economics)	No of applications 2008	Universities
1		1756	
2		1110	
3		443	
4		370	
5		319	
6		132	
7		72	
8		63	




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1	Industrial management engineering	1756	Lund, Karlskr., Växjö, Gbg, Linköping, Sthlm, Luleå
2	Real Estate Brooker	1110	Malmö, Halmstad, Borås, Trollhättan, Gävle, Luleå
3	Real Estate Management/ Economics	443	Malmö, Halmstad, Trollhättan, Sthlm, Gävle
4	Civil engineering	370	Lund, Göteborg, Luleå
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Land Surveyor – Land developer Géomètre-Aménageur/Lotisseur



**Engineering + Economics + Law in
world-wide integration**

