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**From teaching to learning – the developments of  
the forest sciences education in Estonia**

**From teaching to learning – when will we take it seriously  
in forest sciences education**

**01. 11.2013 – 3.11.2013**

**Istanbul**

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# Forestry education in 2013

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## **Bologna principles since 2002**

- Bachelor (3 years)**
- Master (+2 years)**
- Doctor of philosophy (Forestry) 4 years**



# Curricula

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## Bachelor

Forestry

Natural resources management

## Master

Forest management

Forest industry

Natural resources management

## Doctor Forestry

# Accreditation of curricula

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All curricula have “**Full accreditation**” awarded by the Estonian Higher Education Accreditation Centre

The centre invited an international team of experts to assess curricula, last visit in November 2006

In spring 2010 the transitional accrediting of forestry curricula took place. Result: EMU is the only university having right to give higher education in group “Agriculture, forestry, fishing” in Estonia

# Suggestions made by accreditation team in November 2006

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The masters' programs should be made available for European without proficiency in the local language

To design just one Bachelors programme, providing capabilities for further specialisation within any of several Masters programmes other than Forest Management and Forest Industry

International talent should be attracted by developing staff promotion procedures

# Students

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Governmental financing per year until 2013:

15 masters in forest management – enrollment at BSc level 23

15 masters in forest technology – enrollment at BSc level 23

11 masters in nature resources management – enrollment at  
BSc level 17

4...5 PhD students

# PhD students and number of dissertations

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- **Number of dissertations:**

– 2006	1	- 2010	1
– 2007	0	- 2011	3
– 2008	2	- 2012	1
– 2009	4	- 2013	3

- **Forestry PhD students:**

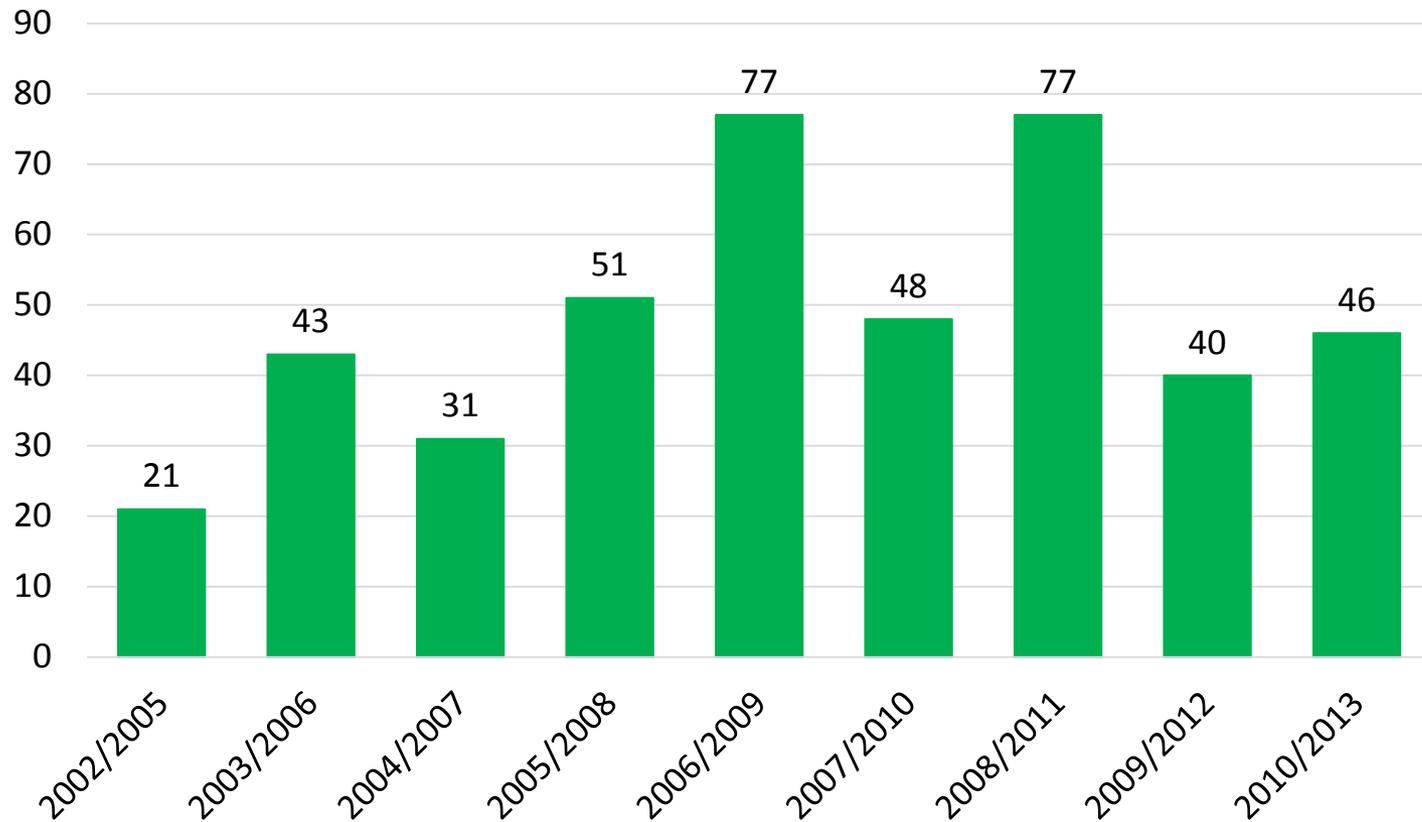
- $(4...5 + 2...3) \times 5...6 = \sim 40$

- **Need for people having PhD in forestry?**

# Numbers of students studying Forestry at BSc level and Forest management and Forest Industry at MSc level

Starting year	BSc		MSc		% of students started at BSc level graduated BSc level	% of students started at BSc level continuing at MSc level	% of students started at BSc level graduated MSc level
	Enrolment	Graduation	Enrolment	Graduation			
2002	111	23	32	8	21	29	7
2004	135	42	29	17	31	21	13
2006	70	54	33	22	77	47	31
2008	71	55	40	24	77	56	34
2010	83	38	22	will graduate in 2015	46	27	
2012	80	will graduate in 2015	enrolment 2015				

# % of BSc graduation



[www.emu.ee](http://www.emu.ee)



**Eesti Maaülikool**  
Estonian University of Life Sciences

# Enrolment and graduation, MSc

Year	Forest management		Forest industry	
	Enrolment	Graduation	Enrolment	Graduation
2007	14	6	15	2
2008	17	5	10	8
2009	13	9	20	8
2010	14	12	15	9
2011	20	12	20	10
2012	20	12	6	12
2013	8	15	14	9

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# Suggestions made by Assessment Committee in 2012

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1. **Marketing** in its widest sense needs to be improved and become pro-active including marketing for some weaker subject areas. The planning and monitoring of media communications and public-orientated activities should be undertaken together with collecting, assessing, and communicating feedback from these events by the Department of Marketing and Communication. This might influence the optimisation of the workload of the teaching and research staff of the institutes.

# Suggestions made by Assessment Committee in 2012

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2. The Department of Marketing and Communication also needs to improve EMÜ's English internet pages. It needs to have a specific focus on wider **internationalisation** embedding it across EMÜ. An international office might help to expand numbers further upon the already increasing, in some areas, student and staff mobility both outwards and incoming. 'EMÜ' in English is a very effective logo and might be more widely used to good effect – may be to increase the number of senior post applications at EMÜ as there are few applications currently.

# Suggestions made by Assessment Committee in 2012

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3. **More use of English** is needed across EMÜ's programmes from bachelor level upwards. This includes the teaching, the student learning, the writing, and the oral work. Estonia is member of the EU where English is the official business language. English is important for students to obtain a wide range of careers including jobs with international businesses both inside Estonia and externally. The Assessment Committee are concerned if the Estonian language only is to be adopted for EMÜ's bachelor programmes and also partly for master programmes as is suggested by a new law yet to be legally adopted. EMÜ graduates would then become less competitive in the careers/jobs market, particularly with international companies and international trade.

# Suggestions made by Assessment Committee in 2012

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4. **The effectiveness of the feedback systems** is variable. Feedback from ÕIS is low at 20-15%. The Assessment Committee recommends a review of the feedback systems for overall coherence and effectiveness.

5. The Assessment Committee recommends that **library** staff provide guidance on literature searches to groups/classes of students, instead of individually, early in their studies and make attendance compulsory.

# Suggestions made by Assessment Committee in 2012

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6. Although there is an effective management system in place at EMÜ, there is a very long list of management features including plans, strategies, sub-strategies, priorities, fields of activity, and a plethora of indices. Too many and used too often can dilute the **effectiveness of management**. Thus, the Assessment Committee recommends that regular checks and evaluations are made on these many management features (as has been undertaken in the past) and adjustments and refinements made where appropriate in order to provide a sharp management system and greater clarity.

# Suggestions made by Assessment Committee in 2012

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7. There should be an improvement in the overall standard of research supervision including the **supervision of PhD students** researching off-site. An analysis of staff workloads between teaching and research duties would be beneficial to attain an appropriate balance overall.

# Suggestions made by Assessment Committee in 2012

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8. With benefit both to EMÜ, to Tartu University, to the city, and to the Tallinn University of Technology, the Assessment Committee recommends continuing with and increasing the **collaboration** overall between students, between staff, between the infrastructures and between programmes/curricula. There is collaboration currently but the Assessment Committee believes that this should be enhanced. It might also be possible to establish Tartu as a scientific centre for Estonia, even the Baltic states, and maybe for wider regions too. More collaboration internationally would also be of benefit.

# Suggestions made by Assessment Committee in 2012

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9. A constant vigil is needed for **plagiarism**. It is too easy for students to use the internet and plagiarise other people's work/ideas. It is a world-wide problem in higher education particularly. Although there is no evidence of recent cases at EMÜ, checks must be maintained and the EMÜ policy, with penalties clearly provided, should become more widely known and embedded with all staff and students.

# In Forestry specialities 2013 ?

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- expected learning outcomes (ELO) ????
  - Practical training in state forests and private companies
    - Good knowledge in forestry
  - 1990 more: economy, ecology, English, computers
  - 2013 more??? More learning???
  - skills about communication
  - correct behavior
  - low ability to start new (ideas - companies)
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# New reform: 2013 no tuition fee

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- High education: Free of charge since 2013 intake
  - Low birth rate since 1990ties
  - Priority areas for every university
    - Forestry
    - Veterinary
    - Agriculture
  - New financial system
    - Between universities
    - Between faculties
  - Popularity: economy and environmental sc.



# Teaching and learning

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- Courses for teaches
- More practical training
- More learning at Msc level
- E - learning ?



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**THANK YOU**