

**Annual SILVA NETWORK Conference at the Aristotle University of Thessaloniki
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Topical structure and first results of the Forest Sciences Curricula at the Technische Universität Dresden

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Content

- 1 OBJECTIVES AND CONTENT IN HIGHER EDUCATION OF FOREST SCIENCES
- 2 TOPICAL STRUCTURE IN EDUCATION OF BACHELOR AND MASTER COURSES
- 3 FIRST RESULTS

Objectives of the Bachelor study programme

- The study of Forestry focuses on the whole forest ecosystem including links to abiotic environment and society, also the sustainable management of the natural resource forest, the use of the raw material wood as well as trees and coppices in the open landscape.
- Knowledge is given in the following complexes:
 - Ecological interactions (Plants, Animals, Soil, Climate)
 - Figures and models (Biometrics, Forest Growth/Timber Measurement, Economics / Management)
 - Human and Forest (Planning of Forests and Landscapes, Establishment and Management of Forests, Techniques and Technology, Nature Conservation, Forest Policy)
 - Benefits of Forests (Timber, Social Benefits, Conservation of Biodiversity)
 - International Aspects
- Beside the mediation of pure expertises "key qualifications / soft skills" become more important, e.g.
 - Team minded and social competences
 - Communication and rhetorical skills
 - Problem solution and decision making competences
 - Techniques and effective methods of scientific working

Bachelor of Sciences (B.Sc.)



employment

...the following Master of Sciences (M. Sc.) courses are offered:

Forestry

Management of
Forest-Resources

Biodiversity and
Organism

Forest environment
Systems in process of change

Wood Sciences and Technology

Tropical Forestry and Management

Spatial Development and Natural Resource Management

1 st Semester Wi/So	Forest Ecology	Forest related Development and Land Use Policy	Inventory and Assessment of Forest Resources	Forest Culture and Extension	Forest Plantations and Agroforestry	Forest Utilization
	1.1	1.2	1.3	1.4	1.5	1.6
	(5 ECTS)	(5 ECTS)	(5 ECTS)	(5 ECTS)	(5 ECTS)	(5 ECTS)

Example of the module detailed structure:

Master of science (M.sc.) course

“Tropical Forestry and Management”

2 nd Semester So	Forest Ecosystems, Silviculture and Forest Protection	Economics and Management of Forest Resources	Organisation and Management Systems	Project Planning and Evaluation	Tropical Soils, Soil Degradation and Rehabilitation	Management of Protected Areas, Wildlife and Tourism	Complex Thematic Seminars
	1.7	1.8	1.9	1.10	1.11A	1.11B	1.12
	(5 ECTS)	(5 ECTS)	(5 ECTS)	(5 ECTS)	(5 ECTS)	(5 ECTS)	(5 ECTS)

3 rd Semester Wi/So	Management Systems in Natural Forest of the Tropics	Management Systems in Forest Plantations of the Tropics	Urban Tree Management in the Tropics	Integrated Land use Management at Landscape Scale	Scientific Working Methods and Research Plan
	2.1	2.2	2.3	2.4	2.5
	(5 ECTS)	(5 ECTS)	(5 ECTS)	(5 ECTS)	(10 ECTS)

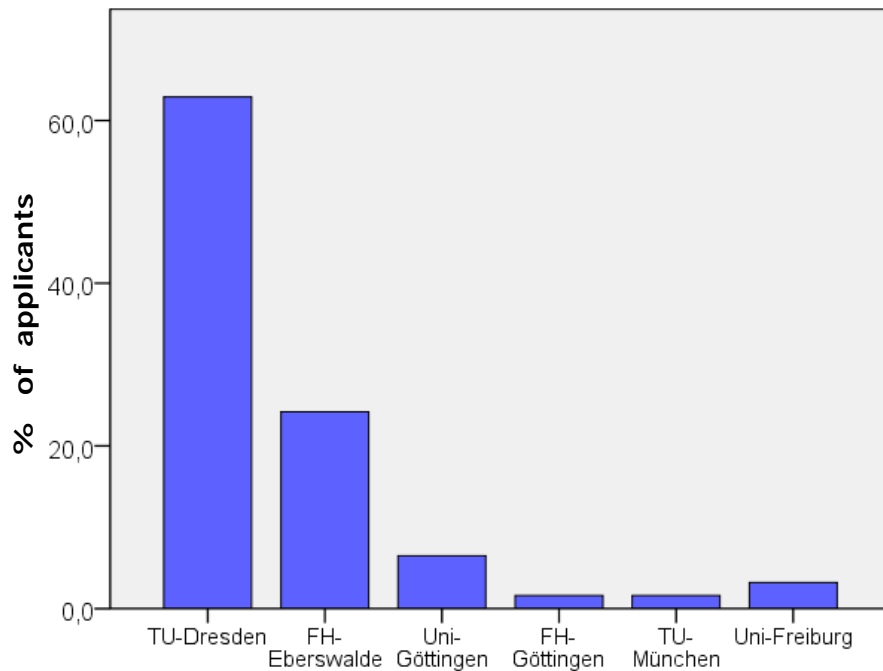
4 th Semester So	Master thesis and colloquium 2.6 (30 ECTS)
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 Compulsory

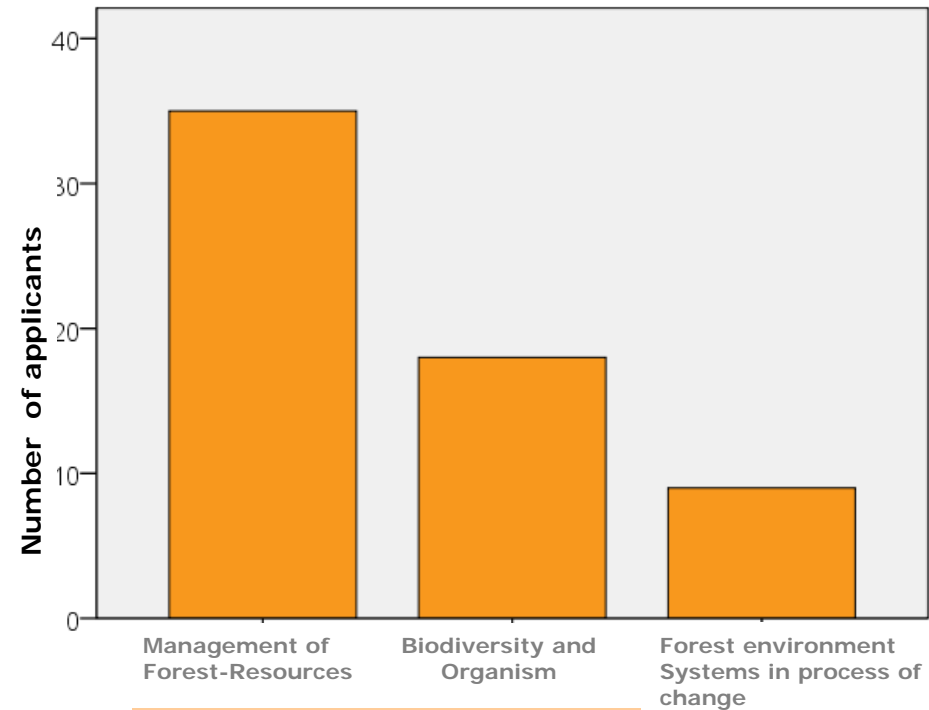
 Optional compulsory

Three remarks about the first results:

- Which number of applicants are in the different courses? Where do they come from?
- Which experiences the first Bachelor study course has delivered?
- "Light and Shadow"- Advantages and Disadvantages - first comments



University where the master-students completed their first degree



Proportion of chosen profiles in the master course forest sciences

FH ... University of applied science

University where the master-students completed their first degree and Chosen profiles in the master-course

A key idea for improvement and acceleration of the study course designing:

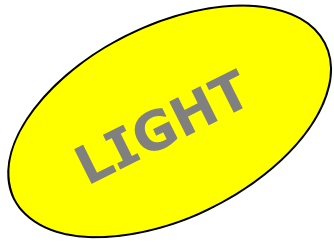
ADVISORY BOARD of Forest Sciences (appointed on February 1st, 2007)



- It is the first advisory board to the consultation in study affairs at the TU Dresden.
- Already before the official appointment numerous of institutions had cooperated in the reform of the Bachelor's study course.
- Because of the good experiences the Department of Forestry has decided to institutionalise this cooperation in the form of an advisory board for the further development of study courses.
- The appointment occurs for 4 years.
- The advisory board meets regularly to discuss topical developments.

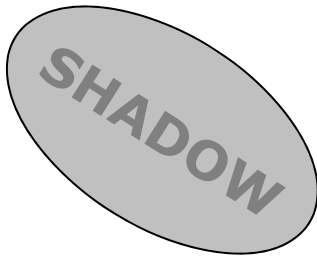
The members of the ADVISORY BOARD:

- Prof. Dr. H. Braun** (Director of the State Forest Enterprise of Saxony)
M. Funk (Director of „Zellstoff Stendal GmbH“)
P. Gaffert (Lord Mayor of Wernigerode, before Head of the „National Park Kellerwald-Edersee“)
Dr. J. Hess („Deutsche Gesellschaft für Technische Zusammenarbeit gtz GmbH“)
R. Pollmeier (Director of the „Pollmeier Massivholz GmbH“)
Dr. M. Sachse (Managing Director of the Saxony Forest Entrepreneur's association)
PD Dr. U. Seeling (Managing Director of „Kuratorium für Waldarbeit und Forsttechnik KWF“)
Dr. R. Stock (Deutschen Bundesstiftung Umwelt, Head of division „Nature conservation“)



- The study structure with 6 + 4 semester is more flexible compared to the former Diploma system.
- It is a personal decision of the student either to finish with the Bachelor degree or to continue the study up to the Master degree.
- Interdisciplinary modules create a well networking between the disciplines.
- The German-Laender-Forest-Chiefs conference has defined disciplines of compulsory demand for the Bachelor profile - these demands were accomplished.
- There are new job-offers for Bachelors in the German-Laender-Forest-Enterprises.

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- The balancing of the study content in terms of the offered optional compulsory modules will be more and more difficult.
- There are too many numbers of examinations (At the beginning the Ministry of Education in Saxony has required two academic records per module with 5 ECTS)
- There are enhanced problems in realising the offered number of optional compulsory modules – (deficit of money to finance the needed staff and equipment; increasing of trouble in organisation; limited number of participants in exercises and practical courses; very high teach load for the staff without redundancy)
- Bachelor and Master study courses are full-time jobs. Beside the study it is impossible to job a n d to finish regularly; so it is to notice an extension of the length of study permanently.



Heinrich Cotta (1763 – 1844)

The founding father of the Forest Academic Education in Saxony.

He established and directed in 1811 the
Forest Academy Tharandt



Thank you for attention !

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