



Initiative for International Master's Program in Photogrammetry at the Helsinki University of Technology, Finland

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Content

- Introduction
- Bologna agreement
- Current curricula at the TKK
- Two initiative models
- Conclusion

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Introduction

- Academic interest and chairs has declined in Europe
- Change in research:
 - Traditional questions has been solved
 - New technologies are growing, e.g. laser → Need of research is increasing
- Photogrammetric research problems are slipping to other fields
- Adjust into change: capable students → competent research

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Bologna Agreement

"European Higher Education Area" in 2010

1. Readable and comparable degrees
2. Two main cycles
3. Increase student mobility
4. Uniform system of credits
5. Quality assurance

(European Ministers of Education 1999)

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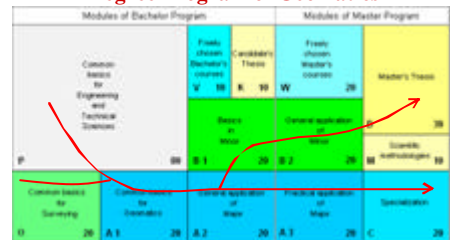
Current Curriculum of Photogrammetry at the TKK

- Reform of university degrees in fall 2005
 - 3 + 2 + 3+ years for
 - Bachelor's Degree, 180 cr
 - Master's Degree, 120 cr
 - Doctor's Degree, 70 cr + Thesis
 - ECTS (European Credit Transfer and Accumulation System)
 - Quality assurance in 2006-2007
 - Mandatory, personal study plans
 - Modular system
 - Progressive study hierarchy for each discipline, e.g.:
 - A1 Basic Module in Major, 20 cr
 - A2 Intermediate Module in Major, 20 cr
 - A3 Advanced Module in Major, 20 cr

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Degree Program of Geomatics



Studies of Photogrammetry

- A1: Geomatics
- A2: Geodesy and Photogrammetry
- A3: Photogrammetry and Remote Sensing
- C: Photogrammetry

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Courses of Photogrammetry

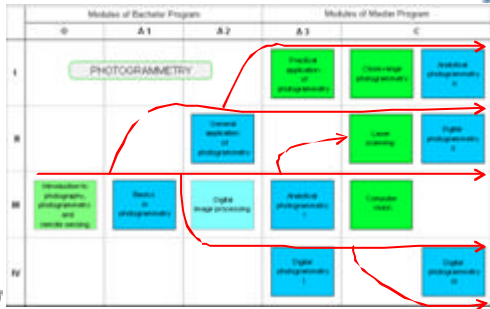


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Two Initiative Models for International Master's Program in Photogrammetry

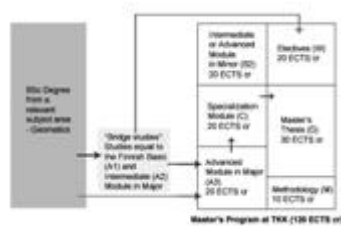
- 1) Offered by the TKK
- 2) Collaborative among assembled universities in Europe

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Model I: Program Offered by the TKK



- Student admission:
- compatibility of BSc
 - language skills
 - prerequisites of photogrammetric courses
 - amount of students

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Model II: Collaborative Program

- Tight cooperation
 - Exchange students and teachers
- Coordinator university
- Flexibility and restrictions
 - Specialization studies
 - Time limits, grade point averages
- Student intake
 - Quality and amount (app. 10-15)
 - Entrance exams, language tests, prerequisites

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Model II: Collaborative Program

- Aims:
 - graduates for heterogenous markets with broad knowledge
- Focus:
 - Data acquisition and accuracy concerns covering both terrestrial and aerial acquisition
- Funding:
 - Erasmus, Erasmus Mundus, Sponsors?

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Conclusions

- Model II is more beneficial and effective way to construct Master's studies of photogrammetry in Europe.
- International Master's programs have been successful in attaining their objectives (Lehoux et al. 2005; Thian 1996; Haux and Schmidt 2002; TKK 2006b).
- Tight cooperation, proficient coordinator, qualified students and teaching resources are needed.
- Opportunity in the middle of changing needs of the discipline.

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