

Pedagogical development of Master's Programmes for the Bologna Structure at Chalmers - IMPACT

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(Joint work with Claes Niklasson and Per Lundgren, Chalmers.)

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About me: Patrik Jansson

- Associate professor at the Computer Science and Engineering Department, Chalmers, Sweden.
- 65% research on Generic Programming (Software Technology, Functional Programming, eScience)
- 15% supervision of MSc thesis students
- 20% deputy project leader of the IMPACT project



This talk + context

Show how Chalmers deals with the transformation to the BSc/MSc structure (in the context of Accred. and Quality Assurance).

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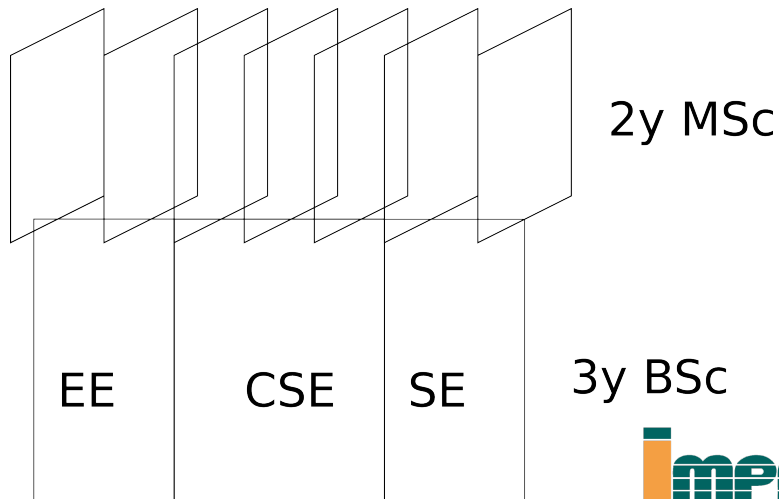
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Programme structure



Accreditation within Chalmers

Central committee reviewed all MSc programme proposals (2005)

- Common format of MSc programme curricula
 - 6 * 7.5 ECTS compulsory,
 - 6 * 7.5 ECTS elective,
 - 30 ECTS thesis
- CDIO inspired programme descriptions
 - CDIO = Conceive, Design, Implement, Operate
 - learning outcomes (for programme and all courses)
 - Introduce, Learn, Use/Apply (in different courses)
- All material in English
 - + Local and foreign students on common ground
 - Few native speakers is a limiting factor



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 - Exchange ideas
- Self-evaluation + group interviews
 - Forum for pedagogical discussions
 - Exchange ideas (again!)



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- Central courses in English and pedagogy



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Some further IMPACT sub-project examples

(there are 104 more at impact.portal.chalmers.se ...)

- MiniFAB — miniture factory (in LEGO, for production eng.)
- Improved industry connections for Radio and Space Science
- Study trips for programme development (teacher exchange)
- Integrating sustainable dev. in Communiation Engineering
- Individual preparation course (self-study modules)
- National coordination of road/traffic education
- Industry Internships after MSc thesis
- Handling and using student diversity



Discussion: your input wanted

- European accred. exp. (how hard/useful is EUR-ACE?)
- How to hand over / document? (IMPACT ends this year)
- Other questions / comments?

