Master Program
Computer Science and
Engineering

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MF 6.071b
Goals and vision

• Graduate has developed
  • *scientific engineering* attitude towards computer science with emphasis on design, construction, and validation of computing systems

• CSE provides
  • sound theoretical foundations
  • methodical application in design & analysis
  • contact with research and industry

• CSE prepares for
  • jobs: sw developer/engineer (31%), consultant (7%), …
  • training: researcher (PhD: 13%), designer (PDEng: 4%)
Computer Science and Engineering

- Sound theoretical foundations
- Methodological design and analysis
- Contact with research and industry
- stream mandatory + stream electives + seminar + graduation project
- Three streams
  - Software, Web, and Systems
Three Streams - Illustrative courses

**Software Science**
- Generic language theory
- Software evolution

**Web Science**
- Web information retrieval
- Visualisation

**System Science**
- Real-time systems
- System validation
As an example: System Science

General issues:
- large software code base
- systems-of-systems
- high assurance required

Internet of vehicles (SAN group)
Electives, Capita Selecta, and Internships

We offer >50 electives and any course taught on a master level at any university in any country may be suitable, if approved in advance.

Capita Selecta: research assignment by invitation only.

Internships (abroad).
Thesis project

• **Crucial: duration!**
  • 6 months
  • Supervisor can grant an extension up to 3 months
  • Examination committee can grant another extension up to 3 months
  • After 12 months: *finita*

• **Find yourself**
  • favorite specialisation
  • supervisor (can also help with selecting electives)
QUESTIONS ?