Graduate Program Computer Science

kick-off meeting

Mark van den Brand
Kick-off: schedule

- welcome; short intro to the CS graduate program (common issues and rules)
- intro to all master programs/tracks (separately)
MetaForum: floor 3 to 7
CS Department: who are we?

**Algorithms and Visualization**
- Algorithms
- Applied Geometric Algorithms
- Visualization

**Information Systems**
- Architecture of Information Systems
- Data Mining
- Web Engineering

**Model-Driven Software Engineering**
- Formal Systems Analysis
- Software Engineering and Technology

**Security and Networked Embedded Systems**
- Security
- System Architecture and Networking
Graduate program Computer Science

Master Programs
- Business Information Systems (BIS)
- Computer Science and Engineering (CSE)
- Information Security Technology (IST)
- Data Science in Engineering (DSE)
- Embedded Systems (ES)
- EIT tracks
  - Embedded Systems
  - Data Science

Targeted at top students (average grade at least 8)
- Two research projects in 2nd and 3rd semester
- 1 day/week on top of regular program

Honors Program

Honors Academy

PDEng
2 years

PhD
4 years
Graduate Program CS: the people

Mark van den Brand  
director Graduate Program

Alexander Serebrenik  
vice-director Graduate Program

Natasha Stash  
study advisor  
internship coordinator  
coordinator premaster

Elmar Veenendaal  
coordinator international  
exchange programs

Mark de Berg  
coordinator honors programs

Julien Schmaltz  
program manager CSE

George Fletcher  
program manager DSE

Boris Skoric  
program manager IST

Dirk Fahland  
program manager BIS

Bas Luttik  
program manager ES  
program manager EIT-ES

Renata Medeiros de C.  
program manager EIT-DS
Graduate Program: the people

Mentors
• each student gets a staff member as mentor

• mentor assignments *depends on* 2IMCxx !
  (the student-mentor assignment depends on your *master program* and possibly stream)

• Who is your mentor
  • Check the study guide [http://tiny.cc/CSGP2017](http://tiny.cc/CSGP2017)
  • OSIRIS: Co-lecturer (but not Alexander Serebrenik)
Graduate Program: mentor vs study advisor

The mentor assists you in:

- professional skills [https://skillslab.tue.nl/C349-TUe-SkillsLab.html](https://skillslab.tue.nl/C349-TUe-SkillsLab.html)
  4 tests + create and execute a development plan
- declaration of scientific integrity (important!)
- making choices (elective courses that prepare you for the specialization area & supervisor you want)
- preparing for international experience

The study advisor + internship coordinator:

- approval of your study program (coherence check)
- approval of an internship proposal
- permission to start the masters project
About Studying and Assessment

- 2 years, 4 quartiles per year, 8 weeks per quartile + 2 exam weeks, 15 ects (3 courses) per quartile
- 1 ects = 28 hours of work (for the “average” student); 60 ects = 1680 hours; 1680 hours in 40 weeks = 42 hours per week
- you MUST register for courses AND for exams (not assignments)
  - you SHOULD register for courses 3 weeks before the start of the quartile (this helps in planning room sizes)
  - you SHOULD unregister for courses within the first 2 weeks if you want to discontinue following a course
  - you MUST register for exams for all courses that end with an exam (not for courses ending with assignments)
Rough indication of grading:

- 8 is a really good grade, translates roughly to A
- 9 and 10 are exceptionally good grades, A+ and A++
- 7 is like a B
- 6 is the minimum passing grade, like C with anything less than 6 being a fail

Failing a course once is not immediately a disaster: there are “resits”, one quartile later (or in interim)

- only your highest grade for a course appears on the final grade list (you can take a resit even when you pass a course, to go for a higher grade)
- all grades must be 6 or higher to pass the whole master
- average 8 and final project 9 = cum laude
Notebooks

• The TU/e expects an active participation of her students and assumes that students have a good notebook for educational purposes: exercises, exams, etc.

• If you do not have a TU/e notebook, you have to make sure that your notebook fulfills the TU/e HW requirements in order to run educational SW

• The GPU should allow the installation of the following packages, such as:
  • Revit
  • Autocad
  • Unigraphics NX10
  • SolidWorks

• In order to get support of ICTServices:
  • Dutch or English operating system (Windows, MacOS, Linux)
  • Installed and active virus scanner
  • Active and correctly working fire wall
  • Keyboard layout: English or international English

• TU notebook reduction program:
  https://educationguide.tue.nl/studying/services/notebook-reduction-program
CS honors program and academy

- **CS honors program:**
  - 12 ec on top of regular program
  - consists of two research projects (6 ec each), each in a different research group of the CS department
  - applications in February (via prof. Mark de Berg)
  - targeted to excellent students (avg grade at least 8 for first two quarters)
CS honors program and academy

- **Honors Academy:**
  - 20 ec in total, on top of regular program
  - Contents: 5 ec personal leadership, 15 ec professional development (see slides for examples)
  - Targeted to motivated students who want (and can handle) an additional challenge

**Application for Honors Academy**

- You must prove to be among the top of your class
- Motivation letter (deadline 13th of September) and interviews (18th-20th of September)
- Tentative plan for your professional development
- There is also an option for February (interesting for foreign students)
International Experience

• every CS master is encouraged to have international experience

  • some have this experience when they start (great!)
  • some still need to get this experience during the master
    - courses / internship at a company, research institute or university abroad

• discuss with your mentor what you want to do; the mentor will direct you to where you can then go and who can help you with practicalities

• the international activity should not interfere with your study progress: don’t miss exams, don’t plan a stay that does not fit our quartile system

• the international experience needs to be at least 15ec (e.g. courses, internship) but can be more (e.g. masters project)
Nov 23: GEWIS lunch
Master’s project

- Final 6-month project
  - ES: with an additional preparation phase
- Involves theory, practice, design, or combination
- Perform at the university or in industry
- Consider going abroad
Get Involved: influencing the program

- let us know what you like/dislike about courses: every course is followed by an evaluation questionnaire; please give us your feedback!

- GEWIS has an education officer: co@gewis.nl who communicates directly with the management

- you can also approach the GP management directly

- you can (volunteer to) participate in the educational committee for your master program and influence the future direction
ENJOY YOUR STUDIES at TU/e!

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<tr>
<th>Course</th>
<th>Location</th>
<th>Field</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Embedded Systems</td>
<td>AUD 3</td>
<td>Computer Science and Engineering</td>
<td>AUD 2</td>
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<tr>
<td>EIT ES</td>
<td>(here)</td>
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<td>Data Science in Engineering</td>
<td>AUD 1</td>
<td>Business Information Systems</td>
<td>MF</td>
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<td>EIT DS</td>
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