General issues on studying Computer Science

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Outline

- Important guides and links
- Teaching periods
- Ways of completing a course, grading
- Registration for courses
- Library
- Computing facilities
- Planning of studies
- Language studies
Important guides and links

- The university-level orientation page http://www.helsinki.fi/orientation/
  - Orientation Handbook for International Students
- The main page of the Department of Computer Science http://www.cs.helsinki.fi/en
  - Especially the sub-page of studies http://www.cs.helsinki.fi/en/studies
- Study guide
- Teaching programme
Teaching periods

- 4 periods (6 weeks teaching, one exam week)
  - I  Period: September 3 - October 21
  - II Period: October 29 - December 16
  - III Period: January 14 - March 3
  - IV Period: March 11 - May 19 (May 5)

Registration for courses
- in period I begins on Tue 28 August 2012 at 9:00
- in period II begins on ?? October 2012 at 9:00
Completing a course

- Two ways
  - Lecture course
  - Separate exam

- Both require advance registration
Lecture courses

Usually 4-10 credits
Consist of
- lectures
- weekly exercises
- sometimes a project work
- one or two course exams (2.5 hours); some courses have also a renewal exam

Always check details from the course homepage!
If you want the exam questions in English, contact the examiner two weeks before the exam.
Separate exams

- Independent of the lecture courses
- Requirements are based on the material in the course description
- Duration 3.5 hours
- Schedule for separate exams can be found at the studies web page http://www.cs.helsinki.fi/en/studies
- If you want the exam questions in English, contact the examiner two weeks before the exam.
Grading

- The grading scale is divided into six steps (0-5)
- To gain the lowest passing grade, 1/5, a student usually needs to gain half of the maximum points
- 5/6 of the maximum points usually gives grade 5/5
Laboratory Work (for exchange students)

- In the Bachelor’s degree 3 individual laboratory works
  - The Programming project
  - The Database application
  - The Data Structures project

- Each laboratory work lasts 6 weeks
- Registration for a laboratory work is binding

*Projects at master’s degree have more variety in their formats*
Registration for courses

- Registration system at the Department of Computer Science [http://ilmo.cs.helsinki.fi](http://ilmo.cs.helsinki.fi)
- See the section Important dates (in the study guide) to find out when registration for courses begins
- For separate and renewal exams you should register about two weeks before the exam.
- If you want the exam questions in English, contact the examiner two weeks before the exam.

Some other disciplines use f.e. WebOODI for registration
The collections contain material in the fields of physical sciences, geology, chemistry, geography, mathematics and statistics, computer science and seismology.

Web page: http://www.helsinki.fi/library/kumpula

Either of the following two cards can be used as a library card:

- HELKA card
- UniCard or Lyyra card
Computing facilities

- Accounts for two systems are automatically created for major-subject students in computer science:
  1. The main university account by IT Department (AD) and
  2. The Computer Science Department system (cs),

- User account’s directly from IT Department!!!
- CS account is self-activated
- User account manager at the CS department: Pekka Niklander, room A230, luvat@cs.helsinki.fi
Computing facilities

- Workstations in
  - computer class rooms B121, B221, CK110, DK108, and DK110, and
  - halls C202 and D202
- Each workstation in the computer classrooms/halls has 2 operating systems:
  - Cubbl (Ubuntu 9.10)
  - Windows 7 Enterprise
- OR only MacOS (in halls C202 and D202)
Tour at the Department

- Exactum floor plans
Planning of studies

- The size of the MSc degree is 120 credits and the optimal study time 2 years
  - 2 years = 4 terms
  - About 120/4 = 30 credits per term

- A course that yields 4 credits requires, for example, a minimum of about 100 hours of work.
Planning of studies

- The basic planning rule:
  schedule some 2 hours of independent work per every classroom or exercise hour.

- The number of lectures and other contact teaching per course (and credit) varies
  - If there are uncommonly few teaching hours in relation to the number of credits a course yields, the portion of independent work is even larger than described above.
Courses for the first period

• ALL: Introduction to the use of computers
  • Introduction to the department environment and Linux
  • hands-on course in paja, no lectures
  • (Can be expanded to 4cr, by doing the optional ICT-driving license, obligatory only for our bachelors)

• Masters:
  • Scientific writing for MSc in computer science
  • Academic Writing for … (few alternative courses)
Language studies

- Finnish language course and exams
  http://www.helsinki.fi/fus/studying/finnishforinternationalstudents.html
  - Finnish Language Courses for International Degree Students
  - Finnish Language Courses for Exchange Students

- Language centre
  - Course list available in WebOODI
Break 10 min

MSc degree students D122

Exchange students C222
Study planning for MSc degree students
Model schedule of MSc studies

1st autumn term, 30 credits
- FM-HOPS work (start)
- Compulsory or optional advanced courses, 16 cr
- Other courses, including language studies agreed on in your FM-HOPS, and Scientific Writing, 14 cr

1st spring term, 30 credits
- Compulsory or optional advanced courses, 12 cr
- Seminar, 3 cr
- Other courses, 15 cr
Model schedule of MSc studies

2nd autumn term, 30 credits
- Optional advanced courses, 6 cr
- Seminar, 3 cr
- Occupational studies, 2 cr
- Master’s thesis (Pro gradu) work (start)

2nd spring term, 30 credits
- Master’s thesis (Pro gradu) work, 40 cr
- FM-HOPS, 1 cr (final)
1. Period
(no seminars allowed)

Credits.

OBLIGATORY OTHER STUDIES (ALL)

• Scientific Writing for MSc in Computer Science
• Introduction to the Use of Computers (Tietokone työvälineenä)

LINE SPECIFIC (either one, unless select both)

• Algorithms designing and analysis
• Distributed Systems
1. period continues: (2-3 courses)

Algorithms and Machine learning

• Mathematics and Statistics courses

• Other advanced CS courses based on selection

• Interesting (or required) intermediate level courses
  • Model of computation (Laskennan mallit)
  • Algorithms for Bioinformatics
1. period continues: (2-3 courses)

Networking and Services

- Mathematics and Statistics courses, if you wish
- Other advanced CS courses based on selection
- Interesting (or required) intermediate level courses
  - Programming in C (C-ohjelmointi)
Study plan (submitted in September)

- List of all courses in your degree
  - Obligatory and optional
  - Check the additional obligatory ones with special tutor before making the plan final.
    - Programming in C, amount of math, etc.
- For each course determine the planned period
  - Use PSP in WebOODI or a spreadsheet program

- Must be submitted for approval to special tutor
- Can be changed later!
Whole degree, minimum 120 credits

Advanced CS Studies, min 80
  courses  min 34
  seminars min 6 (two seminars)
  thesis    40

Other CS Studies (Intermediate), min 0

Mathematics or method sciences, min 0
  or some other minor (min 25)

Other studies, min 6 cr
  writing, language, internship, …
1. period

ALKO
- Orientation
- Scientific Writing
- Academic Writing
- Intro to Comp.Use
- Design & Anal Algorithms

- 1-3 other courses: math or CS

NESE
- Orientation
- Scientific Writing
- Academic Writing
- Intro to Comp.Use
- Distributed Systems
- Programming in C

- 1-2 more course