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
- Computing Facilities at the Department of Computer Science http://www.cs.helsinki.fi/en/compfac/

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
- 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 diciplines use f.e. WebOODI for registration*

Kumpula Science Library

- 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 diretly 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:
  - Cubbli (Ubuntu 9.10)
  - Windows 7 Enterprise

  - OR only MacOS (in halls C202 and D202)

Tour at the Department

- Exactum floor plans
- http://www.cs.helsinki.fi/contact/exactum-kartat.html

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

http://www.helsinki.fi/kksc/english/index.html

  - 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)**
3	• Scientific Writing for MSc in Computer Science
1 (+3)	• Introduction to the Use of Computers (Tietokone työvälineenä)
3	• Academic Writing for MSc students in …
4	•LINE SPECIFIC (either one, unless select both) • Algorithms desing 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 you 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!**

Degree structure

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, intership, …

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