

SUCCESS WITH YOUR MASTER !



UNIVERSITY OF AMSTERDAM

Welcome to the *Meet & Ask Zoom webinar* of
Computer Science (Joint Degree with VU)



We start at **16:00**



Questions? Please ask them in the Q&A
(not in the chat).



This session is being recorded. Your camera and
microphone are automatically turned off.

Thanks and enjoy this presentation

#uvaopenhouse



UvA Master Introduction 16 Feb 2021: Computer Science

Your hosts today:

- ▶ **Alban Ponse**

UvA coordinator Master CS

Associate prof. Computer Science (UvA)

`A.Ponse@uva.nl /`

`https://staff.fnwi.uva.nl/a.ponse/`

- ▶ **Erik Link & Wolf bij 't Vuur**

Master students Computer Science



Welcome to Amsterdam!

As a Computer Science student you are offered the best of two universities within a single Master program.

- ◆ Vrije Universiteit Amsterdam, Dept. of Computer Science
- ◆ University of Amsterdam, Informatics Institute

You will take courses by lecturers from both universities, at both locations (VU campus and Science Park).

COMPUTER SCIENCE JOINT DEGREE

Joint degree: one diploma issued by both universities

Larger selection of courses

More research opportunities for graduation projects and world-class researchers at your finger tips

More of everything...

But you'll need to travel between two campuses and cope with two different administrative systems

FACT SHEET

2 years program

120 ECTS credits

taught in English

international student population

excellent job perspective in industry (in NL and abroad)

stepping stone for a career in industry or academia

COMPUTER SCIENCE PROGRAM

5 different tracks

- ◆ 5 compulsory courses per track
- ◆ Master core (for all tracks)
- ◆ constrained choices
 - ◆ programming
 - ◆ software engineering
 - ◆ security
 - ◆ foundations
 - ◆ mathematics
 - ◆ societal context
- ◆ free choices (some courses are pre-approved)

BIG DATA ENGINEERING

Focus: How to cope with the enormous amounts of data on e.g. the Internet and social media and in companies

Compulsory courses:

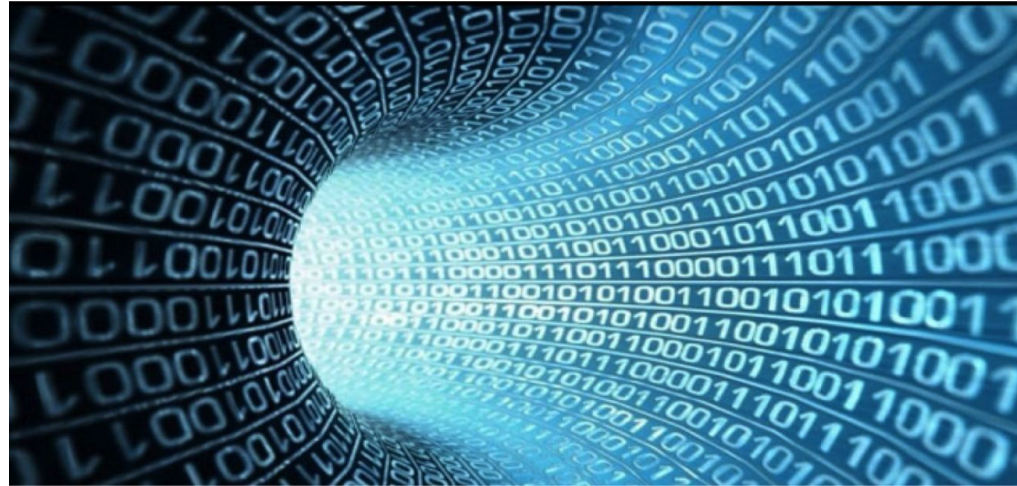
Information Visualization

Data Mining Techniques

Web Services and Cloud-based System

Web Data Processing Systems

Large Scale Data Engineering



FOUNDATIONS OF COMPUTING AND CONCURRENCY

Focus: Apply formal methods in computing and concurrency

Compulsory courses:

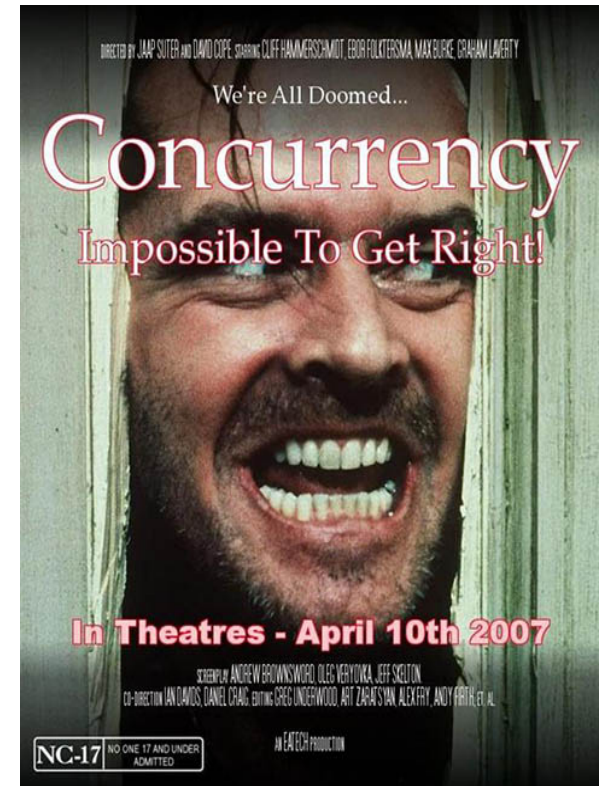
Protocol Validation

Logical Verification

Advanced Logic

Term Rewriting Systems

Distributed Algorithms



INTERNET AND WEB TECHNOLOGY

Focus: Technology for Internet and Web

Compulsory courses:

Advanced Computer Networks

Distributed Systems

Distributed Algorithms

Web Services and Cloud-based Systems

Performance of Networked Systems



PARALLEL COMPUTING SYSTEMS

Focus: Large-scale parallel computing
(clusters, grids, clouds, mainframes)

Compulsory courses:

Parallel System Architectures

Programming Large-scale Parallel Systems

Parallel Programming Practical

Programming Multi-core and Many-core Systems

Performance Engineering



SOFTWARE ENGINEERING AND GREEN IT

Focus: Mastering complex software systems for a sustainable digital society

Compulsory courses:

Green Lab

Service Oriented Design

Software Asset Management

Software Architecture

Software Testing



MASTER CORE

Constrained choice, social context of computer science:

- ***History of Digital Cultures*** on history of computing
- ***ICT for Development*** on ICT in developing countries
- ***ICT4D in the Field***, an ICT project in a rural community
- ***E-commerce Law*** on legal issues for on-line business
- ***Entrepreneurship in AI and CS*** on starting a company

Literature Study and Seminar

Master Project (30 ECTS)



CONSTRAINED CHOICE

Ensuring breadth of each individual study program

Constrained choice modules (18-24 ECTS):

- * *programming*
- * *software engineering*
- * *security*
- * *foundations*
- * *mathematics*

Each to be chosen from a predefined set of choices

Partially covered by your track's core

FREE CHOICE

Free choice (24-30 ECTS):

Courses from other tracks and other courses from constrained choices are pre-approved

Any course from a pre-approved list of suggestions

Other courses (at Master-level) from Computer Science, Computational Science, Artificial Intelligence, Bioinformatics, Logic, ... *(to be approved by the exam committee)*

YOU CAN TAILOR YOUR STUDY PROGRAM

Do you want to develop your own study program ?

Devise your own *free* Master program and get it approved by the exam committee

Want to go to industry ?

Do your graduation project as an internship with a company (or do an *Industrial Internship* for 6 ECTS)

Want to go for a larger research project ?

Combine *literature study*, *individual project*, and *Master project* into a scientific research project of up to 42 ECTS

Master program coordinators

- **CS tracks:**

- BDE: *Dr. Adam Belloum* a.s.z.belloum@uva.nl
- FCC: *Dr. Femke van Raamsdonk* femke@cs.vu.nl
- IWT: *Dr. Jacopo Urbani* j.urbani@vu.nl
- PCS: *Dr. Jacopo Urbani* j.urbani@vu.nl
- SEG: *Dr. Ivano Malavolta* i.malavolta@vu.nl



DOUBLE DEGREE

Double degree programs for MSc students (e.g. GSEEM for the SEG Track)

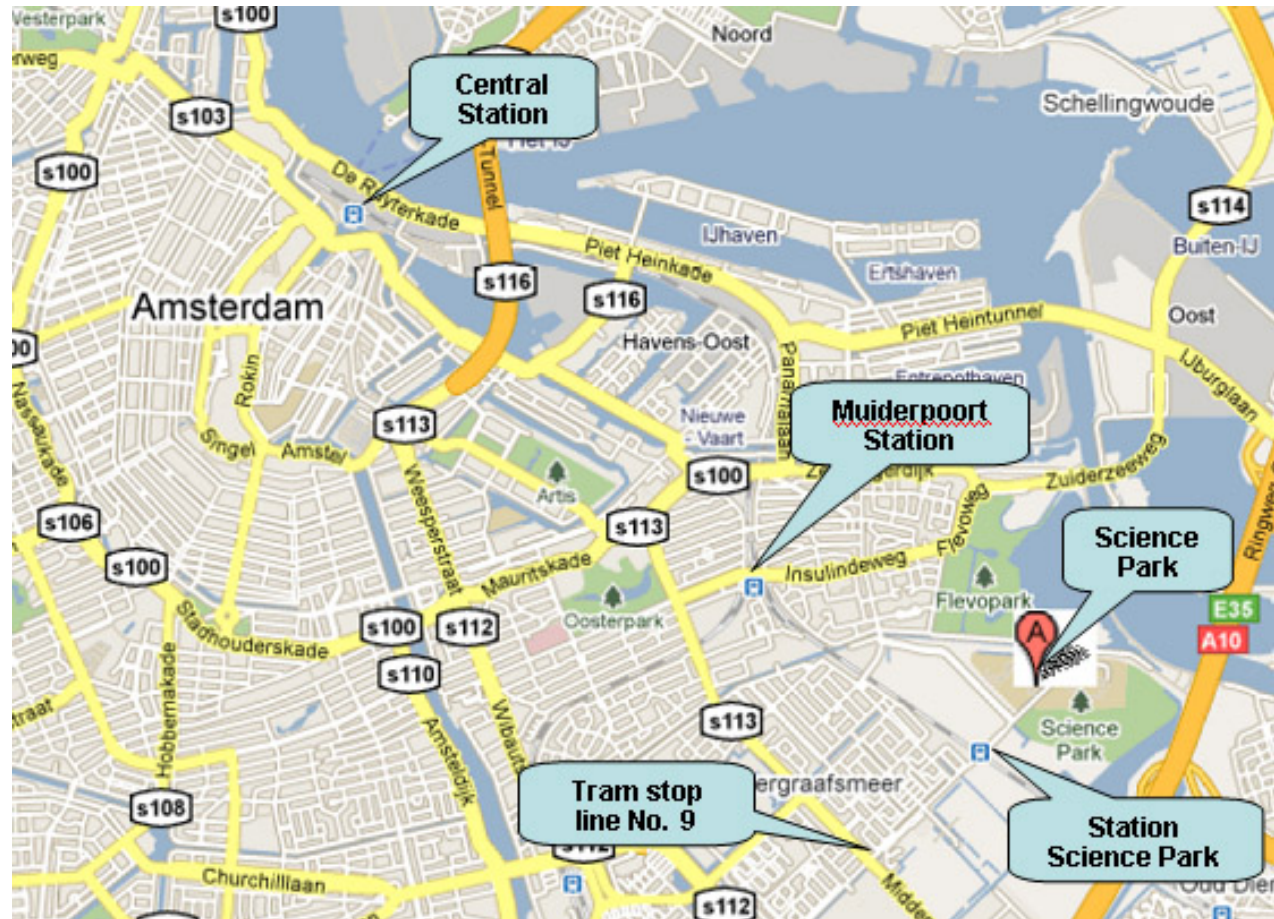
- You follow year 1 of the program at the VU
- You follow year 2 of the program at the partner university



COURSES AT THE UNIVERSITY OF AMSTERDAM

Several courses are at Science Park

Beware to register for UvA courses and exams in time





MSc Computer Science (student registration@VU)

Your courses at the University of Amsterdam (UvA)

Location: SCIENCE PARK AMSTERDAM

<http://www.scienceparkamsterdam.nl/en/contact/directions-by-public-transport>

Course-registration@UvA (theory):

- 1.you will receive a UvA-net-ID from the (UvA) Central Registration Office
- 2.then you can register for courses via <https://datanose.nl/#masterenrol>

Following courses@UvA (practice):

- 1.visit UvA-classes that you want/have to; timetable at <https://rooster.uva.nl/>
- 2.your registration is completed in 2 weeks

Contact person for your UvA-courses:

[dr. Alban Ponse](mailto:dr.Alban.Ponse@uva.nl)

<https://staff.fnwi.uva.nl/a.ponse/>

