NordSecMob

Master's programme in
Security and Mobile Computing

http://nordsecmob.tkk.fi

NordSecMob consortium

- ❖ Aalto University (coordinator),
  Espoo, Finland

- ❖ Technical University of Denmark DTU,
  Lyngby, Denmark

- ❖ The Royal Institute of Technology KTH,
  Stockholm, Sweden

- ❖ The Norwegian University of Science and Technology NTNU,
  Trondheim, Norway

- ❖ University of Tartu UT, Tartu, Estonia

23.4.2012

NordSecMob

Master's Programme in Security and Mobile Computing

- Mobile computing
- Information security
- Computer science
- Double degree
- Scholarships

The courses address the modern data communications architecture evolution. Special attention is paid to information security.

The key subject areas are:

- network applications and services
- information security
- mobile networking

The students are required to study and create practical implementations based on the current technologies and to learn the emergent trends in the research community. The programme combines advanced studies on theory with practice in industrial applications.

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Learning outcomes

• broad knowledge of mobile communication, computing, technologies and services

• skills to develop new products utilizing the computing / communication technologies in a secure and safe manner

• competence in the design and development of solutions

• capability of technological management of research and development projects

• team-working skills and ability to work in multicultural groups

• networking skills

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Structure of studies and degrees

- A joint two year curriculum which involves studying at two of the five Nordic partner universities

- The 120 ECTS credit points will be divided into two blocks:
  - ✓ 1-2 semesters of teaching (30-60 ECTS) will be provided by a <u>home</u> university
  - ✓ 1-2 semesters of teaching (30-60 ECTS) will be provided by a <u>host</u> university

- The programme includes three semesters of courses + a fourth research semester (Master's thesis, 30 ECTS)

- Double degree: All students graduate with M.Sc degree or equivalent from both their <u>home</u> university and a M.Sc degree or equivalent from their <u>host</u> university.
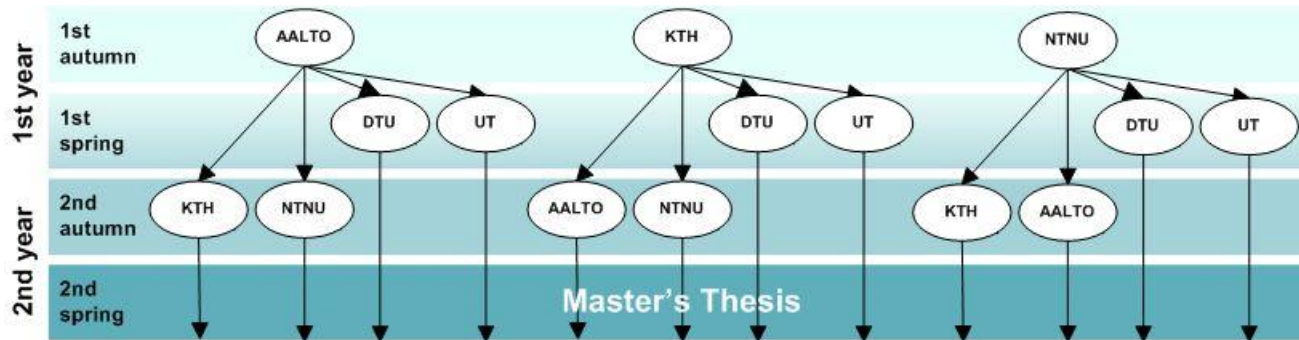
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Student mobility

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Admission criteria

- A high quality Bachelor's degree (a minimum of 180 ECTS) in Engineering (Computer Science or Information Technology) or equivalent studies.

- The applicants should have:
  - ✓ solid knowledge of mathematics, programming skills, data structures and algorithms, computer architecture and basics of computer networks

  - ✓ basic knowledge of the following subject areas is an advantage: databases and database management, principles of theoretical computer science, logic in computer science, software engineering, operating systems and concurrent programming

- Admission to the programme is granted on a competitive basis: the applicants are assessed on the basis of their previous academic record.

- A good command of English language is required: TOEFL minimum score 580/237/92 or higher, IELTS score 6,5 or higher.

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Scholarships

- **Erasmus Mundus scholarships**:
  - Both EU/EEA/EFTA nationals as well as non-EU/EEA nationals can apply for Erasmus Mundus scholarships
  - <u>Category A scholarships</u> (non-EU/EEA nationals):
    - can be awarded to masters students selected by the consortium who are not residents nor have carried out their main activity (studies, work, etc.) for more than a total of 12 months over the last five years in the EU/EEA countries (by the end of February 2012)
      - → contribution to travel: 8000 €
      - → monthly allowance 1000 €/month x 24 = 24000 €
      - → programme fee contribution up to maximum of 8000 €/year

  The programme fee is charged from any other student than EU-member state and EEA nationals. The programme fee for 2011 intake is maximum of 8000 €/year.

Scholar opportunities

Erasmus Mundus scholar is an academic and/or professional of outstanding experience who carries out teaching or research assignments and scholarly work in the institutions participating in the NordSecMob programme. Erasmus Mundus scholarships allow non-European scholars to perform the tasks defined by the consortium.

- Non-European nationals who are not nationals of the EU/EEA states or candidate countries for accession to the EU (nor may he/she will have carried out his/her main activity for more than a total of 12 months over the last five years in these countries)
  → The amount of scholarship for the scholars is 1200€/week for a maximum duration of 3 months per scholar (up to a maximum of 14 800€).

- Criteria at NordSecMob consortium
  - ✓ a PhD in Computer Science
  - ✓ teaching and research experience in some of the areas described as the research area of the scholar
  - ✓ a good command of English

Other Master's Programmes in English offered by Aalto University School of Science

- Master's Programme in Bioinformatics (jointly with University of Helsinki)
- Master's Programme in Foundations of Advanced Computing (FAdCo)
- Master's Programme in Machine Learning and Data Mining (Macadamia)
- Master's Programme in Mobile Computing - Services and Security
- Master's Programme in Service Design and Engineering (SDE)
- Master's Programme in ICT Innovation (EIT ICT Labs Master School), starting 2012
- Master's Programme in Service Management and Engineering (SeM)
- Master's Programme in Strategy
- Master's Programme in Applied and Engineering Mathematics, starting 2012
- Master's Programme in Physics of Advanced Materials, starting 2012
- Master's Degree Programme in Brain and Mind, starting 2012
- euSYSBIO - Master's Degree Programme in Computational and Systems Biology (Erasmus Mundus programme)
- Master's Programme in International Design Business Management (IDBM) (Cross-disciplinary Aalto programme**)**

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Further information

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