

NordSecMob

Master's Programme in
Security and Mobile Computing

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



NordSecMob

Master's Programme in Security and Mobile Computing

16.11.2012

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What is NordSecMob?

- Master's programme in security and mobile computing
- A joint two year curriculum
- Two years of studying at two of the five Nordic partner universities.
- Double degree
- Erasmus Mundus programme with scholarships



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What can you study in NordSecMob?

- Modern data communications architecture evolution
- Special attention at 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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What can you learn in NordSecMob?

- 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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NordSecMob consortium

- Aalto University School of Science (Espoo, Finland) – coordinator
- KTH Royal Institute of Technology (Stockholm, Sweden)
- Norwegian University of Science and Technology (NTNU) (Trondheim, Norway)
- Technical University of Denmark (DTU) (Copenhagen, Denmark)
- University of Tartu (Tartu, Estonia)



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Structure of studies and degrees awarded

- A joint two year curriculum includes 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 home university
 - 1-2 semesters of teaching (30-60 ECTS) will be provided by host 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 home university and a M.Sc. degree or equivalent from their host university.

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Contents of scientific tracks

The student takes courses focusing in a selected area of specialization:

- AALTO: Technical Information Security and Network Services
- KTH: Communications Systems Design
- NTNU: Information Security
- DTU: Reliable Software Systems
- UT: Mathematical Foundations of Cryptography

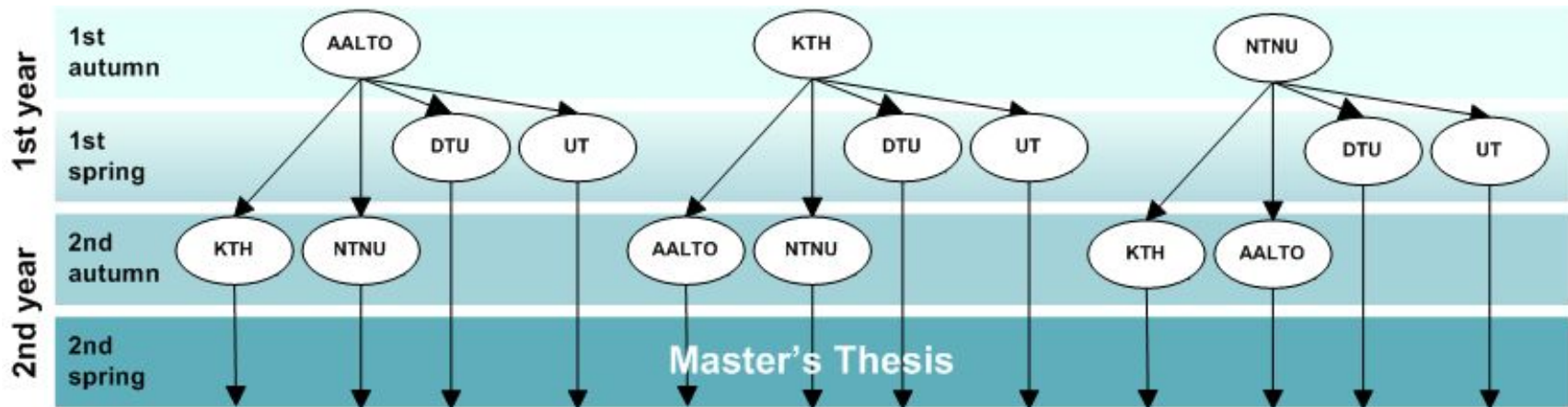
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Student Mobility – Study tracks



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Employability and future academic opportunities

- The NordSecMob graduates are equipped to be employed internationally by both industry and academia, for example in:
 - expert roles, R&D, research and management positions
 - academic career leading to doctoral level
- Employability is promoted by the thesis project: theses are written in research projects at university, in companies or in research organizations → job offers
- Employment rates: over 90 % employed within 6 months after graduation, more than half employed before graduation

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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.

An excellent command of English language is required to be proved by language test (TOEFL, IELTS or Cambridge), by a degree in English or by a degree from NSM Consortium universities' partner universities.

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Scholarships

Erasmus Mundus scholarships

- Category A scholarships (non-EU/EEA nationals)
 - 1000€/month for 24 months + 2 x 4000€ travel support
 - For non-EU/EEA nationals who have not resided in EU/EEA countries for more than 12 months within the past five years (for admission 2013, this means February 2008 – February 2013)
- Category B scholarships
 - For EU/EEA nationals and for non EU/EEA nationals who don't fulfill the criteria for Category A
 - 500€ monthly for 24 months
- Scholarships are applied with the same form as the admission to the programme



European Commission
**ERASMUS
MUNDUS**

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Other scholarships:

- Nordplus Scholarships
 - All nationalities except Erasmus Mundus scholarship holders can apply for Nordplus scholarship for the duration of their stay (4-10 months) at the host university.
 - the maximum amount is 330 € for travel costs + 200 €/month for accommodation and living costs
 - Application announced during the 1st year of studies
- Consortium Scholarships for excellent EU/EEA citizens (non Erasmus Mundus scholarship holders):
 - 1500-5000 € for two year studies
 - Announced annually when the selection results are published
 - Cannot be applied for – NSM consortium decides on the allocation for the best applicants





Tuition fees:

- Programme fee 8000€/academic year (i.e. 16 000 € for the two-year programme) for non-EU/EEA nationals
- Erasmus Mundus scholarship holders: the programme fee is covered by the European Commission
- Programme fee waivers
 - Depending of the available funds, the consortium decides annually on granting selected top-non-EU/EEA nationals with programme fee waivers (i.e. no programme fee charged)
- No programme fee for EU/EEA nationals

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Application period is on!

- The application period for admission 2013:
1 October to 30 November
- Please see the detailed admission criteria at
http://nordsecmob.aalto.fi/en/for_applicants/
- Selection results published in February 2013.



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Scholar opportunities for academics

- Tasks
 - The scholar visits one of the NordSecMob consortium universities and makes a shorter visit to another consortium university.
 - The selected scholars are expected to participate in the research activities of the groups and to provide some teaching in their areas of expertise to advanced graduate students and postgraduate students (e.g., seminars, tutoring and/or short intensive courses), bringing **concrete added value** to the Master's programme.
- Duration and scholarship
 - Erasmus Mundus scholarships for scholars: 1200€/week for a min. period of 2 weeks and max. of 12 weeks (3 months = 14 400€). All expenses before and during the period should be covered by the scholar. The period can be split into shorter periods according to the scholar's wishes.



Scholar positions in NordSecMob

- Eligibility
 - Non-EU/EEA nationals or EU-candidate state nationals who have not carried out their main activity for more than a total of 12 months over the last 5 years in these countries.
- Application criteria of NordSecMob consortium for scholars
 - 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
- Application time
 - Applications accepted continuously, but scholarship allocation made in February
 - Application deadline for scholar positions for the academic year 2013-2014 is **31 December 2012**
 - Application form can be found at http://nordsecmob.aalto.fi/en/for_academics/
 - Send the application by e-mail to nordsecmob@aalto.fi



Available positions

- Position 1: Scholar in services and security in mobile environments / Aalto
- Position 2: Scholar in language based technology / DTU
- Position 3: Scholar in cryptology / UT
- Position 4: Scholar in cryptology / NTNU

More information at: http://nordsecmob.aalto.fi/en/for_academics/

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Further information

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