

# NordSecMob

Master's Programme in Security  
and Mobile Computing

SCHOLARSHIPS  
FOR ALL NATIONALITIES



**2** ▶ YEARS  
▶ UNIVERSITIES  
▶ DEGREES (MSc)

- ▶ MOBILE COMPUTING
- ▶ INFORMATION SECURITY
- ▶ COMPUTER SCIENCE



# 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



## 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.

## 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



## 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)



## 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.

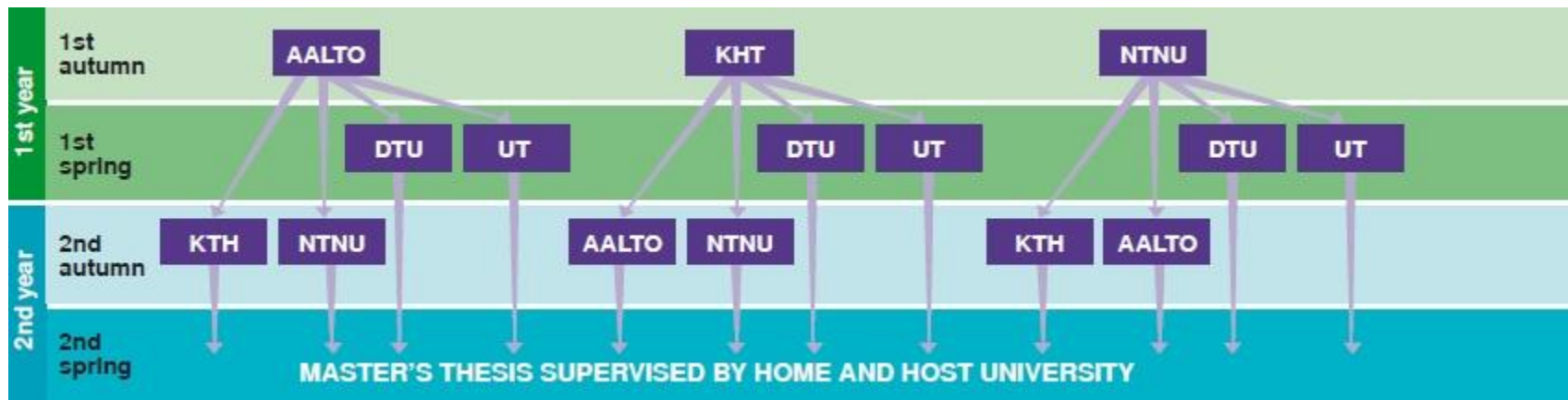


# Contents of scientific tracks

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

## Student Mobility – Study tracks





## Employability and career prospects

- 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 (contacts already established at two universities!)
- 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

# Scholarships



## Erasmus Mundus scholarships

- Awarded to the very top applicants, limited availability
- Full coverage of tuition fees for non-EU/EEA citizens
- 1000 EUR/month for max. 24 months
  - Monthly instalments are not paid for the period of stay in the country of residence (applicants from Finland, Sweden, Norway, Denmark or Estonia, please note this)
- Travel and installation support
  - 1000 EUR fixed amount if the student's country of residence is one of the Erasmus+ programme countries (all EU member states, Norway, Liechtenstein, Iceland, F.Y.R.O Macedonia, Turkey)
  - 2000 EUR/year + 1000 EUR fixed amount if the student's country of residence is located less than 4000 km from Aalto University (coordinating institution)
  - 3000 EUR/year + 1000 EUR fixed amount if the student's country of residence is located more than 4000 km from Aalto University (coordinating university)

## Other scholarships

- **Consortium Scholarships (non Erasmus Mundus scholarship holders):**
  - 1500-22 000€ for two-year studies, possibly including a programme fee waiver for non-EU/EEA students
  - To apply, just check in the box on NordSecMob application form
- **Programme fee waivers for non-EU/EEA students (non Erasmus Mundus scholarship holders):**
  - Full coverage of NordSecMob programme fees (16 000 EUR) for 24 months
  - To apply, just check in the box on NordSecMob application form
- **Nordplus Scholarships**
  - For all enrolled students except Erasmus Mundus scholarship holders\*
  - For the duration of their stay (4-10 months) at the host university
  - Max. 330 € for travel costs + 200 €/month for accommodation and living costs
  - Application announced during the 1<sup>st</sup> year of studies

\* Holders of consortium scholarships of more than 12 000 EUR are not eligible to apply for Nordplus scholarships.

# Admission criteria

- University background: recognized university (national education system, UNESCO)
- Student background:
  - BSc degree in **Engineering (Computer Science or Information technology)**
  - Content of degree
    - *Solid knowledge* of mathematics (discrete mathematics), programming skills, data structures and algorithms, computer architecture and basics of computer networks.
    - *Basic knowledge* of the following subject areas will be an advantage: databases and database management, principles of theoretical computer science, logic in computer science, software engineering, operating systems, concurrent programming.
- Language proficiency: very good command of English, proof is required. For example:
  - TOEFL internet-based test min. 92 (total) and 22 (writing).
  - IELTS academic test, 6,5 (total) and 5,5 (writing).
  - Exemptions to language test requirement listed at [http://nordsecmob.aalto.fi/en/for\\_applicants/admission\\_and\\_language\\_criteria/](http://nordsecmob.aalto.fi/en/for_applicants/admission_and_language_criteria/)

# Selection criteria

- Most importantly:
  - **Validity of the applicant's degree** in comparison to the NordSecMob programme and the content of the degree(s) (i.e. courses included in previous degrees), see admission criteria.
  - **Study success**
- In addition:
  - Recognition and quality of the home university
  - The applicant's motivation and interest in the programme as shown in the letter of motivation
  - Relevant work experience and recommendations, other relevant activities (patents, publications etc.)
  - Language skills
  - The application for admission as a whole (i.e. is the application complete)



## Application schedule

- The application period for admission 2015 will open on **1st October 2014** and close on **5th December 2014**
- Please see the detailed admission criteria at [http://nordsecmob.aalto.fi/en/for\\_applicants/](http://nordsecmob.aalto.fi/en/for_applicants/)
- Selection results published in end of February

