

SECULO

Master's Programme in Security
and Cloud Computing

(Erasmus Mundus)



Co-funded by the
Erasmus+ Programme
of the European Union



About us

- Erasmus Mundus Joint Master's Degree programme in Security and Cloud Computing (120 ECTS credits)
- 2 years, 2 countries, 2 universities, 2 MSc degrees
 - *Studies at two of the six European partner universities*
 - *A double degree programme leading up to two MSc degrees*

SECCLO consortium



1. Aalto University, Finland (coordinator)
2. KTH Royal Institute of Technology, Sweden
3. The Norwegian University of Science and Technology (NTNU), Norway
4. The Technical University of Denmark (DTU), Denmark
5. University of Tartu (UT), Estonia
6. EURECOM, France

What you will learn in SECCLLO

- We aim to educate professional engineers who are able to take on the most demanding R&D tasks and drive the development of future products and services.
- Our graduates
 - *will have theoretical understanding of information security and practical skills for designing and analysing secure computing systems.*
 - *will understand the architectural principles of distributed services and applications.*
 - *will be able to design, analyse and implement distributed, cloud and mobile computing systems.*

Why SECCLLO?

Industry demand for IT security professionals

Innovation and R&D focus in studies

International experience: 2 countries, 2 universities

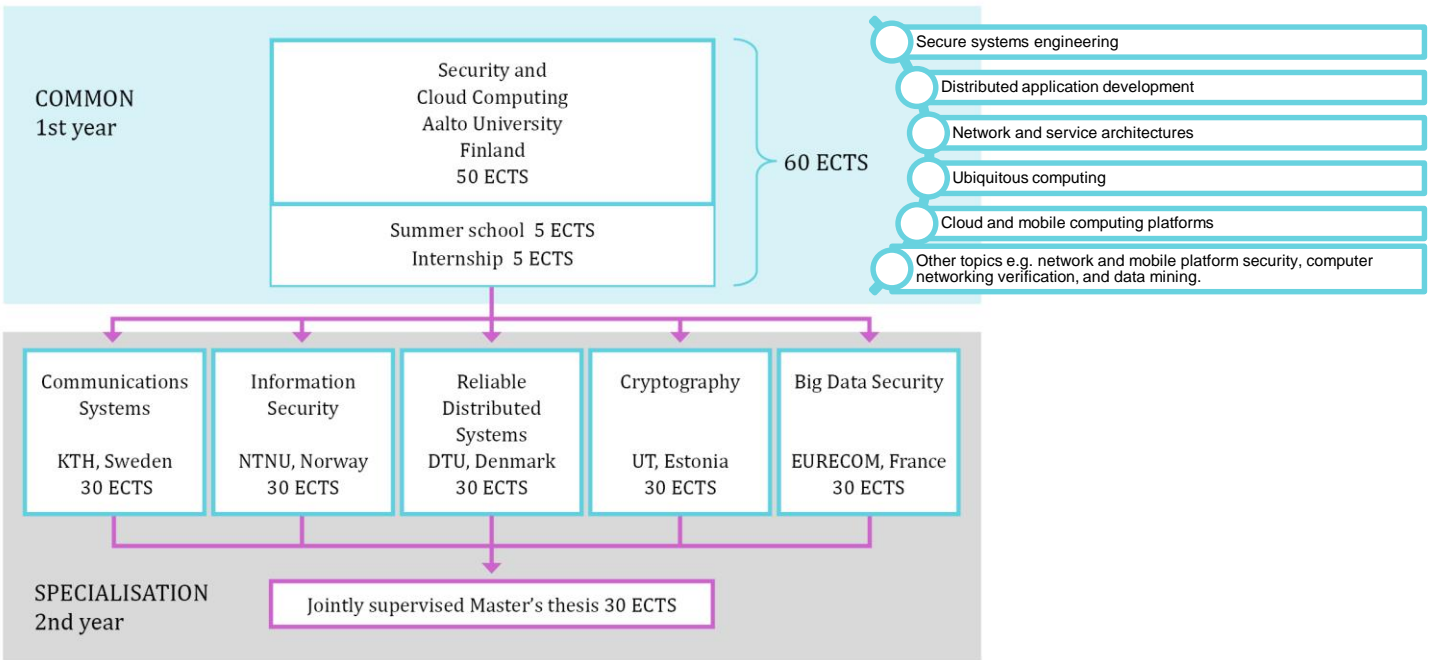
Industry contacts already during studies

Competitive Erasmus Mundus scholarships

Proven success of our predecessor, NordSecMob

SECCLLO

Programme structure



Industry and research collaboration

- Mandatory summer internship between first- and second-year studies
- Our **associate members** promote the future employability of the students by offering internship and thesis positions, company visits and contributions to the course contents



- NordSec Conference
- Helsinki-Aalto Center for Information Security (haic.aalto.fi).

Careers and employability

- Excellent career prospects
- Graduates are well prepared for industrial R&D jobs, security engineering and consulting, various expert roles, as well as doctoral studies at the consortium universities or abroad.
 - *typical job titles of graduates include Software Engineer, Security Analyst, Development Engineer, Software & Systems Reliability Engineer, IT Security Specialist, R&D Engineer, Wireless Engineer, Enterprise Data Architect, Security Architect, Data Scientist, Web Developer, Security Engineer, Mobile Developer,...*
- The alumni of our predecessor, NordSecMob, are employed in all the biggest ICT companies including *Ericsson, Microsoft, Nokia, Google, Facebook, Skype* and *IBM*, as well as in several prestigious universities in Europe, US and Australia.
 - *95% of over 200 graduates had a job within 6 months after graduation.*

Admission criteria 1/2

- A high-quality Bachelor's degree in Computer Science or Information Technology (to be completed by 31 July) from an officially recognised university.
 - The applicants should have sufficient studies in: *mathematics (linear algebra, calculus, probability theory, statistics, and discrete mathematics), programming, algorithms and data structures, databases, theory of computing, computer networks, and software engineering.*
 - Additional knowledge in the following areas is considered an advantage: *additional knowledge of mathematical methods, mobile applications, web software and online services, operating systems, distributed computing, embedded systems, advanced computer networking, information security and cryptography.*

Admission criteria 2/2

- An excellent command of English language is required to be proven by
 - a language test (*TOEFL, IELTS, CAE/CPE or Pearson Test of English*),
 - a degree completed in English in *Australia, Canada, Ireland, New Zealand, the United Kingdom, the United States, or an EU/EEA country*,
 - a degree or exchange studies at *SECCLLO consortium universities*.
- Admission to the programme is granted on a competitive basis and applicants are assessed on the basis of their previous academic record.

Participation costs

	Students from programme countries	Students from partner countries
Participation cost	€3 000/year	€9 000/year

Programme countries are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, former Yugoslav Republic of Macedonia, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Turkey, United Kingdom.

Partner countries are all countries not listed in the programme countries.

Participation cost covers:

- **tuition fees:** educational expenses such as courses, academic supervision, exams, counselling and university support services such as student services, use of library services and use of IT services in accordance with university regulations and policy concerning degree studies.
- **insurance:** including accident and health insurance satisfying the minimum requirements as published by the EACEA in its guidelines for Erasmus Mundus Joint Master Degrees.
- **compulsory summer school participation:** travel and accommodation costs.

Erasmus Mundus scholarships

	Students from programme countries	Students from partner countries
Contribution to participation costs	€3 000/year	€9 000/year
Contribution to travel costs*	€1 000/year	€2 000/year if residence is less than 4 000 km from Aalto University €3 000/year if residence is 4 000 km or more from Aalto University
Contribution to installation costs*	-	€1 000
Contribution to subsistence costs (max 24 months)	€1 000/month	€1 000/month
Max.	€32 000	€47 000/€49 000

**) Travel and installation costs depend on the place of residence at the time of applying.*

Other scholarships

- The number of Erasmus Mundus scholarships is limited and they will be allocated only to the best applicants.
 - *The allocation of all scholarships is based on academic merit and granted on a competitive basis.*
- Other scholarship opportunities are subject to available resources and include:
 - *Erasmus+ mobility scholarships*
 - *SECCLLO consortium scholarships*
 - *HAIC scholarships for excellent EU/EEA students*
- Programme admits also self-funded students
 - *National scholarships from the student's home country, Erasmus + Master Degree Loans, other funding pools (industry, foundations etc.)*

Application period

- **15 November 2018 – 4 January 2019**
 - *Selection results are published in March 2019*
- Possible second application round for self-funded students in March-April 2019
- Studies at Aalto University begin with Orientation Week in September 2019

Our consortium

- Consortium of six world-class universities



Aalto University
Helsinki/Espoo
Finland



KTH
Stockholm
Sweden



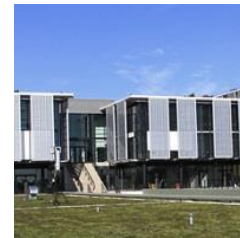
NTNU
Trondheim
Norway



DTU
Copenhagen
Denmark



University of Tartu
Tartu
Estonia



EURECOM
Sophia Antipolis
France



The world is becoming more digital.
*Can you keep up with its security and
privacy needs?*

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