SECCLO

Master's Programme in Security and Cloud Computing

(Erasmus Mundus)

















Information meeting 29th August 2023

SECCLO

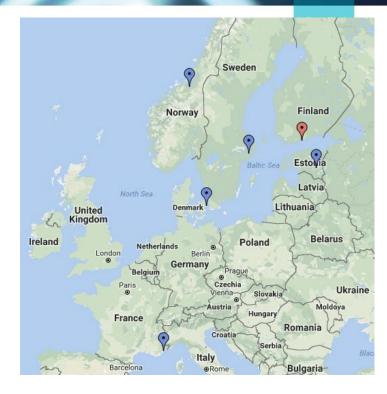


Topics of this session

- Introduction to SECCLO programme
- Key staff at Aalto
- General study issues and mobility
- Programme rules
- Scholarship regulations and payment of EM scholarships
- Study affairs

SECCLO consortium

- Aalto University, Finland (coordinator)
- KTH Royal Institute of Technology, Sweden
- The Norwegian University of Science and Technology (NTNU), Norway
- The Technical University of Denmark (DTU), Denmark
- University of Tartu (UT), Estonia
- EURECOM, France



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

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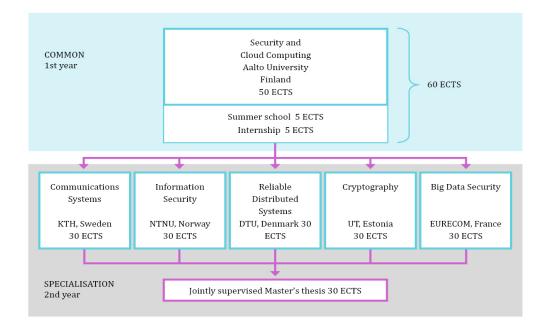
Associate members



Key staff at Aalto

- Computer Science building (CS), Konemiehentie 2
- Professor Tuomas Aura, Director of the programme
 - <u>tuomas.aura@aalto.fi</u>
- International Relations Manager Eija Kujanpää, room B153
 - <u>eija.kujanpaa@aalto.fi</u> , administrative coordinator of the programme
- Planning Officer Emma Tuomola
 - <u>emma.tuomola@aalto.fi</u>, Student Services
- Only by appointment

SECCLO curriculum



Programme structure: first-year common core (60 ECTS)

- Security and Cloud Computing at Aalto: minimum 50 ECTS courses +
 summer school 2-5 ECTS + internship 2-5 ECTS = total minimum 60 ECTS
 - Fundamental concepts, methods and the latest technologies on secure systems engineering
 - Distributed application development
 - Network and service architectures
 - Ubiquitous computing
 - Cloud and mobile computing platforms
 - Specialized courses on topics such as network and mobile platform security, computer networking, verification, and data mining

Summer School (2-5 ECTS)

- All SECCLO students are required to participate in the summer school.
- The one-week school is organized in spring 2024 (dates to be confirmed)
- 5 ECTS = 135 hours work & study
- Travel & accommodation will be organized and covered
 - 2019: Summer School in Blockchain Technologies, NTNU, Norway
 - 2020: Summer School in Cyber Security, online "Hack-the-box"
 - 2021: Summer School in Binary Exploitation Techniques, online (EURECOM)
 - 2022: Summer School in Cybersecurity in e-Governance with EIT Digital, Tallinn, Estonia
 - 2023: Summer School on Malware analysis, Vierumäki, Finland



SECCLO internship (2-5 ECTS)

- Between the first and second academic year (May/June-August 2024), students will complete an internship in <u>European industry or research</u> <u>institution</u>.
- 1-3 months: a 10-week internship that meets the program requirements results in 5 ECTS
- Students whose internship is shorter than 10 weeks and who still need credits for the first year will be given a special assignment, i.e. an individual research or software engineering project, to be completed.
- More information will follow in spring



Second-year specializations (30 ECTS)

- Communications Systems (KTH, Sweden)
- Information Security (NTNU, Norway)
- Reliable Distributed Systems (DTU, Denmark)
- Cryptography (University of Tartu, Estonia)
- Big Data Security (EURECOM, France)

• + Master's thesis 30 ECTS



Second year specialization

- Information meeting October/November
 - Consortium members introduce their specializations
- Students submit their application to specializations in December
- Selection is based on:
 - Availability of seats at each specialization (max 5-6 per exit)
 - Student's motivation and suitability for the studies in the specialization area
 - Students' preferences
- Consortium Committee selection meeting December/beginning of January



Programme rules

Some important rules ...

The student shall:

- Commence the studies in the beginning of the course and study <u>full-time</u> and comply with the established attendance rules.
- Pursue studies according to the Programme curriculum and according to the established schedule and rules.
- Abide by the Universities' regulations and statutes.
- Diligently and to the best of his/her ability apply himself/herself to the successful completion of the course.
- Notify Aalto coordinators and his/her current university immediately, in writing, of any changes in circumstances which may affect his/her ability to abide by the obligations.
- Students are obliged to answer to SECCLO feedback (and other feedbacks)
- Graduate in two years 🙂

Some important rules ...

- Study success (credits) reported to the SECCLO consortium committee after each semester + regular activity reports to European Commission
- Limitation of scholarships: maximum of 2 academic years
 - The student will receive the scholarship for a **maximum of 24 months** for the academic years 2023-2024 and 2024-2025.
 - A student's failure to abide by the scholarship obligations may result in suspension and possible reimbursement of the scholarship. Reasons for exclusion from the programme and for suspension of Erasmus Mundus scholarship include but are not limited to:
 - lack of study activity (active participation)
 - lack of study progress and success (insufficient performance)
 - misconduct, plagiarism, violation of ethical code

Some important rules ...

- If the student fails to achieve 24 ECTS per semester, the student will be asked to submit a clear updated study plan for the successful accomplishment of the programme.
- The consortium maintains the right to accept, to accept with modifications or to decline the presented plan. In this case, the <u>mobility of the student to the</u> <u>exit point university may be stopp</u>ed and the payment of the scholarship can be suspended.
- No <u>extra</u> re-sits for exams: The students must take exams during the regular exam dates and time
 - The student makes necessary travel arrangements as well as cover the related expenses.



Scholarship



Erasmus Mundus scholarships

- Aalto coordinates the Erasmus Mundus scholarship payments during the whole programme (no changes during the second year)
- Scholarship payments normally on the last banking day of each month
- EM first payment: travel+installation / +1-2 monthly payment, then monthly payments roll (1000 Eur/last banking day of each month)
- Payments to European bank account (IBAN/BIC code account)
- Problems with scholarship installments \rightarrow notice Eija immediately
- All communication about accounts via eija.kujanpaa@aalto.fi.s
- All changes will require at least 2 weeks processing time with finance dept



Requirements for scholarship students

Scholarship payments are launched after arrival to Finland and once following conditions are fulfilled:

- You have enrolled as attending
- You have created a personal study plan (HOPS)
- You have registered to courses which start in the 1st period
- You have completed **pre-orientation material** on MyCourses by 30.8.
- You have participated to **SECCLO orientation meetings (29.8.2023**) and other meetings/events during the orientation week 28.8.-1.9.2023
- You have met personally SECCLO administrative staff on campus in the orientation meeting at the latest





Planning your studies



Academic year

- Divided into five periods
- Autumn term, periods 1-2 (weeks 36-50)
- Spring term, periods 3-5 (weeks 2-23)
 - Less courses in period 5
- We may have programme activities/events even if you do not have courses running.
- Academic break; weeks 51, 52 and 1
- Additional public holidays in Finland
- See more; <u>https://www.aalto.fi/en/student-guide/academic-</u> <u>calendar</u>



Student information system Sisu

- Your Personal Study Plan (HOPS in Finnish = Henkilökohtainen OPintoSuunnitelma)
- Course registrations, grades
- Official documents: electronic transcript of records and certificate of student status
- Remember to update your address in the personal information if you happen to move
 - If your Finnish personal ID is not yet registered to Sisu, send it to emma.tuomola@aalto.fi.s (use secure mail Deltagon with your Aalto mail)



What is your personal study plan (HOPS)?

- Personal study plan (HOPS) is a tool for designing your Master's degree studies and registering to courses: <u>https://www.aalto.fi/en/programmes/masters-programme-in-</u> <u>security-and-cloud-computing-secclo/planning-your-studies#0-what-is-a-personal-study-plan-</u>
- How to make a personal study plan see further instructions in Aalto.fi

https://www.aalto.fi/en/applications-instructions-and-guidelines/sisu-instructions-front-page

- You can find the SECCLO curriculum in Student Guide: https://www.aalto.fi/en/programmes/masters-programme-in-security-and-cloud-computing-secclo/curriculum-2022-2024
- You can find model schedules here: <u>https://www.aalto.fi/en/programmes/masters-programme-in-security-and-cloud-computing-secclo/recommended-timetable</u>



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About your HOPS

- You will create the study plan for the whole 1^{st} year
- Study plan can be modified during the 1st year, different status of your HOPS in Sisu:
 - Selections done = you are following the degree structure
 - Against the rules = you will need to send the study plan for approval (goes to Planning officer) as you are deviating from the degree structure
 - *Against the rules* occurs also if you take extra credits that will not be part of your degree. Once you receive credits for extra courses, remove them from the HOPS
 - Approved = you are following the degree structure
 - Approved conditionally = follow the given instructions

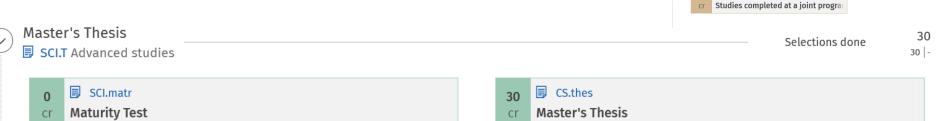
About your HOPS... continued

- Deviations from SECCLO curriculum (e.g. more advanced courses in the same topic): please <u>always</u> ask for written permission from Prof. Tuomas Aura by email
- → forward the email to Emma and send your study plan in Sisu for approval
- Please have your study plan ready by <u>11 September</u>



Making your HOPS, please note...

- There are courses with varying scope, so the amount of credits does not show correctly on the study plan until you have finished all the courses → Therefore, make sure that you get at least 60 credits during the first year
- In the exit university module, activate/choose the JOI-SCI10 which is already visible. Courses will be added to this module only after the second year Autumn.
- Remember to choose also the CS.thes (Master's thesis)



Exit year at the partner university

IOI-SCI10

Taking extra courses

- You can take extra credits (=courses that will not be part of your degree)
- Add these to your primary HOPS so that you can enroll for the course. After you have received a grade for the course, you should remove them from the study plan.
- Extra courses will not be on your degree certificate transcript, but they will show on regular transcripts that you can take from the system.
- Credits that are not part of the degree can be used in the future to another degree



Language studies at Aalto University

- Compulsory advanced communication course in English is part of degree requirements (recommended: <u>LC-1310 Academic Communication for MSc</u> <u>Students (o, w), 3</u> ECTS) → choose the group which is integrated with Seminar in Computer Science in Spring term! Group Ho7 starting on 12.1.2024
 - If English is your first language, you may choose 3 ECTS of Finnish or Swedish courses instead by filling in a form to ask for exemption
 - Also some other language on an advanced level can be taken, course needs to have (o, w) for oral and written skills
- All SECCLO students are welcome to take Finnish or Swedish courses as extra studies



Finnish and Swedish language studies 1/2

FINNISH

- <u>LC-7003 Survival Finnish Online</u>
- <u>LC-7004 Survival Finnish 1</u>
- <u>LC-7005 Survival Finnish 2</u>
- <u>LC-7009 Get to know Finland</u>
- LC-72XX Finnish 1-8

LC-7271 Finnish for Work (CEFR B2)

https://www.aalto.fi/en/language-andcommunication-studies/finnish-as-a-secondlanguage-and-as-a-foreign-language

Finnish and Swedish language studies 2/2

SWEDISH

- LC-5771 Swedish for International Students 1A
- <u>LC-5772 Swedish for International Students 1B</u>

https://www.aalto.fi/en/language-and-communicationstudies/swedish

More help for making your HOPS

- Tuesday 13:15 16:00 Orientation for SECCLO and Security major students: Academic session (compulsory), room T3 in Computer Science-building
 - Speakers: Professor Tuomas Aura (Director of the Programme) and other academic staff
- Appointment with Planning Officer
- Please book an appointment if needed, link is in <u>Student Guide</u> → Contact information
 - Technical aspects of the study plan and other questions (not about content of courses)
- Thursday 10:00-11:00 Information session on courses, room T6 in Computer Science-building, (compulsory)
- Thursday afternoon at 12:15-16:00, optional
 - Smaller group sessions for study plans where you can ask questions
 - Y227 Mylly, Undergraduate centre, Otakaari 1



Registering to courses 1/3

- Enroll to courses in Sisu
- The course needs to be on your primary study plan
- Choose lectures (L01) and normally one exercise group (H01, H02, H03 etc.)
- See recommended timetables; <u>https://www.aalto.fi/en/programmes/masters-programme-in-security-and-cloud-computing-secclo/recommended-timetable</u>
- More information here:

https://www.aalto.fi/en/applications-instructions-andguidelines/registration-for-courses-on-sisu-a-quick-guide



Registering to courses 2/3

- Please register to following compulsory courses during Autumn semester (starting in 1st period):
 - *CS-C3130 Information Security* (5 ECTS), registration by 11.9.2023
 - *CS-E4190 Cloud Software and Systems* (5 ECTS), registration by 28.8.2023
 - *CS-E4340 Cryptography* (5 ECTS), registration by 11.9.2023
 - *CS-E4670 Full Stack Web Development* (5 ECTS) (online course)



Registering to courses 3/3

- In addition, it is recommended to take two of the following elective courses in autumn term
 - CS-C3170 Web Software Development (5 ECTS) (online course)
 - CS-E4260 Multimedia Services in Internet (5 ECTS), registration by 11.9.2023
 - CS-E3190 Principles of Algorithmic Techniques (5 ECTS), registration by 11.9.2023
 - CS-E4770 Designing and Building Scalable Web Applications (5 ECTS), period 1: online self-study, period 2: lectures, registration by 16.10.2023
 - CS-E4300 Network Security (5 ECTS), registration by 30.10.2023
 - CS-C3240 Machine Learning (5 ECTS), registration by 11.9.2023
 - CS-E4650 Methods of Data Mining (5 ECTS) registration by 28.8.2023



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Course registration periods

- If a limited number of students will be admitted to a course, the registration period usually ends <u>7 days before</u> the teaching period begins.
- If there's no limitations, the registration period usually ends <u>7 days</u> <u>after the teaching period has begun.</u>
- You need to register separately for examinations that are not included in the registration for the course. The registration period ends 7 days before the examination.
- Registration for the spring semester starts usually 1 month before courses start (for ex. 11.12.2023)

Teaching	
Lecture 5.9.2023–12.10.2023	
Basic information Registration	Groups and teaching times
·	
Registration period: 7.8.2023 09.00-1	1.9.2023 23.59





- **1** Go to the 'Completion methods' tab.
- 2 In the 'Teaching' section, open the course implementation in question.
- **3** Go to the 'Registration' tab.



The registration period on a course information sheet



Information sources

MyCourses https://mycourses.aalto. <u>fi/</u> Course materials, information Sisu Sisu.aalto.fi Sisu instructions at Aalto.fi

https://www.aalto.fi/en/applic ations-instructions-andguidelines/sisu-instructionsfront-page

Student Guide https://www.aalto.fi/en/ programmes/mastersprogramme-in-securityand-cloud-computingsecclo



Whom to contact?

Questions related to scholarships Questions related to studies

Eija Kujanpää, Manager of International Relations Emma Tuomola, Planning Officer Use secure mail to send sensitive personal information (Deltagon) - Adding .s at the end, e.g. emma.tuomola@aalto.fi.s **SECCLO**

secclo@aalto.fi \rightarrow not to be used, only for admissions

Secclo2O23 mailing list → important info from Eija and Emma



SECCLO meetings and events

- We will inform you by email to the list secclo2023
- By default, SECCLO meetings are compulsory
- Events will be listed at 'Key dates' in Student Guide
- Breakfast meeting on 5 September, 8.45-10.15

https://www.aalto.fi/en/programmes/mastersprogramme-in-security-and-cloud-computingsecclo/planning-your-studies#1-key-dates



Services during Orientation week on campus

- HSL Helsinki Region Transport travel card pop-up service point, Undergraduate centre, Otakaari 1
 - Tue Thu 10.00- 16.00
- DVV pop-up stand Thursday at 10-16 at Aalto Welcome Fair (residency registration and home municipality)
 - Thu 10.00-16.00
- <u>Starting Point service</u> desk for students, Undergraduate Centre, room Y199a
 - Mon-Thu 12.00–15.00
- IT Service Desk, Undergraduate Centre, room U133a
 - Mon-Wed 9-11 and 12-15, Thu-Fri 9-11 and 12-14

Health care

- Finnish Student Health Service
 - Remember to pay the health care fee to Kela, if applicable, by 30 September
 - <u>https://www.kela.fi/how-to-pay-the-student-</u> <u>healthcare-fee-in-higher-education</u>
 - FSHS: during the day on business days <u>https://www.yths.fi/en/services/student-</u> healthcare-services/

- Private doctors during weekends and nights, urgent care. I.e.:
- Terveystalo www.terveystalo.com/en/
- Mehiläinen <u>ajanvaraus.mehilainen.fi/?language=en</u>
 Please print the insurance certificate and keep it
 with you especially when visiting private
 hospitals

https://www.aalto.fi/en/international-students/health-care-forstudents#0-degree-and-double-degree-students

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Any questions or comments?

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Thank you & welcome to study in Aalto University!

SECCLO in social media

youtube.com/seccloerasmusmundus instagram.com/seccloerasmusmundus – tag us in your stories! facebook.com/secclo linkedin.com/school/secclo-erasmus-mundus

