

School of Science

At the School of Science, most of the courses offered in English are on Master's level. However, Bachelor's degree students on the final stage of their degree can take master level courses provided that they fulfill the prerequisite skills and knowledge required for the courses.

[List of courses in English at the School of Science 2019-2020.pdf](#)

The School of Science offers courses for exchange students in the following fields of study:

Computer Science
Industrial Engineering and Management
Engineering Physics
Mathematics and Operations Research
Biomedical Engineering and Neuroscience
Special Minor Programmes:

- [Startup Minor](#) (entrepreneurship and innovation studies)
- [Multi-Disciplinary Energy Studies \(MES\)](#)
- [Aalto Nuclear Safety Minor \(ANS\)](#)

In some cases, there may be restrictions in participation for certain courses (e.g. the amount of students can be restricted or priority given to the degree students of the school).

Instructions for making Learning Agreement / study plan

- Exchange students to Aalto are expected to study full time while at Aalto and pass the courses with good grades. Full workload is equivalent to **30 ECTS credits per semester**.
- Please select at least 2/3 of the courses from one field of study at the School of Science - Computer Science, Industrial Engineering and Management, Engineering Physics, Mathematics and Operations Research or Biomedical Engineering and Neuroscience
- The rest 1/3 of courses may include:
 - courses from other fields of study offered by the School of Science
 - courses from other technical schools (the School of Chemical Engineering, School of Electrical Engineering and the School of Engineering)
 - language and intercultural communication courses
 - interdisciplinary courses
 - University Wide Studies -courses (including University Wide Art Studies and University Wide Business Studies)
 - cross-school courses
 - For more information, [please read our website on studies](#) for incoming exchange students at Aalto.
- Please note that courses from the Aalto University the School of Arts, Design and Architecture and School of Business can not be selected, apart from the Aalto cross-school courses, UWS- and interdisciplinary courses.
- When choosing courses, please check carefully the **prerequisite skills**, **language of instruction** and the **term when the course is offered**.
- When you choose courses for your learning agreement / study plan, **the detailed course information might not be available yet**. In this case, the study plan is made according to the course information of the previous academic year.
- Please be prepared to modify your study plan upon arrival. You might have to remove some courses due to conflict in schedule, difficulty level of the course, limited availability of places in the course or other reasons, and respectively select new courses. Study plan / learning agreement is not a course registration! You will register to courses at [WebOodi](#) upon arrival. For course registration you require Aalto username and password, which you will receive upon enrolling.

Instructions for submitting the online application

In the online application form, under "Studies", you are asked to select the "Stay opportunity". Some or all of the following options may be included in the list of possible study programmes. For the School of Science some of the programme abbreviations are in Finnish, which may be a little confusing, so here are the explanations:

SCI (LIFE): School of Science (Life Science Technologies / Bioengineering)

SCI (TIK): School of Science (Computer Science)

SCI (TUO): School of Science (Industrial Engineering and Management)

Phy/Math - SCI (TFM): Physics / Mathematics, accordingly

Final projects for incoming exchange students

In some special cases it might be possible to complete a Final project during the exchange period. A Final project is a written work that corresponds to the Master's thesis of Aalto University. In order to be able to do a final project, please contact a suitable professor at Aalto University School of Science, introduce yourself as a future potential exchange student at the School of Science, tell about your research interests and ask the professor if he could be your supervisor in the Final project.

If you want to work on your thesis or participate in Final project during your exchange, you should mention it in your exchange student application form for Aalto University and your Learning Agreement / Study Plan. Please include the following information: 1) final project + preliminary topic (it is okay if the topic changes during your exchange, 2) number of estimated credits (30 ECTS credits equals to a final project, less than 30 credits is called a special assignment), 3) the name of your supervising professor at the School of Science. You should specify the area of interest of the thesis or project work as there are no ready-made lists of topics.

In case you have not found a supervising professor by the application deadline, please prepare an alternative study plan as well including 30 ECTS credits courses for one semester or 60 ECTS credits for academic year. If you do not have a supervising professor or an alternative study plan including adequate amount of courses, you can not be accepted for exchange to Aalto University School of Science.

Please note: The realisation of the Final project depends on various aspects as well as the resources of the departments and **it cannot be guaranteed to all exchange students**. The acceptance procedures might take long and it is possible that the application is rejected.

Please note that it is generally NOT possible to complete a Bachelor's thesis/project during your exchange!

Final project instructions

The Final project must be supervised by the Faculty at Aalto, and the credits are taken to the Aalto transcript of records. The credit amount received for the Final project depend on the requirements of the student's home university. A Final project can be completed in two different ways: 1.) as Special Assignment course(s), or 2.) as a project equal to an Aalto Master's thesis.

1. A Final project is completed as Special Assignment course(s) if the scope of the work is less than that of a Master's thesis at Aalto. In this case the Final project does not need to adhere to the rules of the thesis process at Aalto. You will simply need to find a suitable lecturer / professor who is willing to supervise your work and who can credit you with the appropriate Special Assignment course(s). Each Special Assignment course can be credited 1-10 ECTS credits, so if your Final project is e.g. 15 credits, you can be credited with 2 courses, one with 10 credits and one with 5 credits.
2. If the scope of the work is equivalent to that of the Aalto Master's thesis, the work will be awarded with 30 ECTS. In this case, the work must follow the rules for the thesis process at Aalto*, and you will need to find an Aalto professor from a relevant field of research to supervise your work.

*in Final project, unlike in Aalto Master's thesis, the student does not have to complete a maturity essay.

We recommend that an exchange student wishing to complete a Final project stays here for the whole academic year. The exchange students who do their Final project and have been accepted for only one semester should notice that the credits cannot be registered at the Aalto University if the right to study has finished before the thesis work is ready. In this case the exchange period needs to be prolonged. It is the responsibility of the student to arrange this well before the new semester starts.

How to proceed?

If you are interested in completing a Final project during your exchange period, please follow these steps:

1. Determine your field of interest and preliminary project topic. Browse the websites of [the departments at the School of Science](#) and choose a research group where you would like to work. *Please note that there are no ready-made lists of topics!*
2. Discuss your plan and the project topic with your professor and the international coordinator of your home university.
3. Finally, you will need to find a supervisor. If the Final project is the scope of an Aalto Master's thesis (30 ECTS), the supervisor must be a professor at Aalto. Once you find a suitable supervisor or research group you can send them an email to introduce yourself, your educational background and research interest and to ask for a possibility of a Final project placement. Please note that we cannot guarantee Final project placements, as it depends solely on the professors if they have the possibility or time to accept you to do your final project in their research group.

Remember to start early! In order to avoid disappointments, you should find a supervisor before you begin your exchange. This means that you should also know the scope of the final project (ECTS) and the preliminary thesis topic. You will have time to discuss the details with your supervisor once you have arrived at Aalto, but it's good to secure the crucial elements earlier.

Language requirements

Completing a final project requires a very high level of English language skills, especially in academic writing. The preferable level of English language skills is C1 on the CEFR scale (or IELTS 6.5, TOEFL iBT 92). Students applying for a final project must submit a certificate stating the level of their English language skills.

The practical procedure

The procedure of completing a Final project at the School of Science follows [the general School of Science policy on Master's thesis](#). Please make sure to follow all the required steps below:

1. the Final project topic, supervisor, (possible) advisor(s) and language are confirmed in the corresponding Programme Committee of your department (meetings are generally held once a month except for July)
2. the student must hold a Final project presentation
3. the Final project is evaluated and graded similarly to a Master's thesis
4. the Final project is accepted in the corresponding Programme Committee
5. the ECTS credits awarded for the Final project will be taken to the Oodi study register after the Programme Committee decision

Please note that unlike degree students at Aalto, you will not need to take a maturity test, nor do you need to submit a bound copy of the work (thesis book).

If you have questions related to the practical arrangements of the Final project, please contact the study affairs secretary of your degree programme / department.

Contact information for

- [Master's Programme in Computer, Communication and Information Sciences](#)
- [Master's Programme in Industrial Engineering and Management](#)
- [Master's Programme in Life Science Technologies](#)
- [Master's Programme in Engineering Physics](#)
- [Master's Programme in Mathematics and Operations Research](#)

Final project as a guest student

In some cases, the professors may welcome trainees to work on their Master's (or in rare cases even Bachelor's thesis) at Aalto University. This means that the thesis/final project is not evaluated by Aalto University, and Aalto University doesn't award credits (30 ECTS, corresponding to Master's thesis) for it. The trainees may come from other than partner universities, and are usually self-funded or receive an Erasmus internship support or similar. These students are not required to follow the practical procedure mentioned above.