Eligibility and admission criteria

The Finnish University law outlines eligibility (The Finnish University law 24.7.2009/558: 37 §)

School of Engineering policy on doctoral student admission in 2022 (Academic Committee for Engineering)

Eligibility of applicants of the Aalto Doctoral Programme in Engineering

To be eligible for doctoral studies at the School of Engineering, students must:

- hold a master's degree in technology granted by a Finnish university
- hold a master's degree granted by a Finnish university providing them with the knowledge base required for the postgraduate research field applied for
- hold a degree granted by a university abroad corresponding to the Finnish Master of Science in technology, architecture or landscape architecture and providing them with the knowledge base required for the postgraduate research field applied for or
- hold an applicable degree earned abroad providing them with eligibility for corresponding university studies in the country where the degree was earned, and with the knowledge base required by the research field applied for in the School of Engineering

The knowledge and skills required for the doctorate degree are demonstrated by completing a master's degree (university) or by a degree earned abroad that qualifies the applicant for equivalent doctoral studies in the country where the degree was earned. If the degree or education differs from the description above, but makes the applicant eligible for doctoral studies in the country that awarded the degree or gave the education, the applicant must provide a document confirming his/her eligibility for doctoral studies in the country where the degree/education was given.

In principle, an acceptable master’s degree has been carried out in accordance with the principles of the Bologna Process (3+2 years). A degree earned abroad in a country that does not follow the Bologna Process must include a minimum of 4 years of studies and a master’s thesis, and be deemed by the School as providing the student with an adequate knowledge base for doctoral studies in the School of Engineering.

Applying with a degree from a polytechnic university

The potential of applicants with an applicable Finnish polytechnic master’s degree for successful doctoral studies is assessed by the School case by case. Granting the right to study requires the School to determine the applicant’s need for supplementary studies. If the School deems the applicant with a polytechnic master's degree in an applicable technical field as having potential for completing the doctoral degree, the applicant will be assigned a sufficient amount of supplementary studies to allow him or her to start the doctoral studies. The extent of supplementary studies may not, however, exceed 60 ECTS. If the extent of necessary supplementary studies exceeds this maximum, the applicant will be advised to first pursue the master's degree before applying for a right to pursue a doctoral degree. When assessing the applicants' potential for doctoral studies, the School shall acknowledge that the extent of the polytechnic master’s degree in the field of technology is 60 ECTS, which corresponds to studies of one year’s duration, whereas the extent of a university master’s degree is 120 ECTS, which corresponds to studies of two years’ duration. The extent of polytechnic master's degrees in fields other than technology is 60 ECTS or 90 ECTS.

International applicants with a previous technical degree corresponding to a Finnish polytechnic degree are subject to the same rules as those with a Finnish polytechnic degree.

It is also possible to complete doctoral studies in a field or school other than the one in which the master’s degree was obtained. Persons wishing to pursue doctoral studies in another field on account of job experience gained in that field, or interest in it, can discuss the necessary prerequisites for entry as a doctoral student with a professor in that field of research.

Knowledge Prerequisites
To be approved for doctoral studies, an applicant must have adequate knowledge in his or her confirmed research field, gained through, for example, courses in the advanced module within the Master’s studies, or the equivalent. The completion of courses that support thesis work requires adequate prerequisite knowledge also. When necessary, the School will set prerequisites for admission into the doctoral programme. Students may gain the prerequisite knowledge, for instance, by earning the credits for them by taking exams related to master-level courses.

Admission criteria
The general eligibility criteria for higher education are defined in the Universities Act (558/2009, section 37) and in the Aalto University Student Admissions Criteria for 2022.

The professor (i.e. supervising professor) who is responsible for the research field to which the applicant is applying to, is responsible for the academic evaluation of the applicant. The Doctoral Programme Committee will also evaluate the applicant.

The following is required for an applicant:

- Adequate knowledge in the research field applied for, gained through, for example, courses in the major or courses in the advanced module within the Master’s studies.
- Sufficient basic knowledge that supports the dissertation work and the writing of the dissertation.
- An excellent command of Finnish, Swedish or English
- When necessary, the School will set prerequisites for admission into the doctoral programme that may be gained, for instance, by taking master-level courses.

Grades
(on the scale of 1 to 5)

- The master’s thesis has been completed with the minimum grade of 3/5.
- The master’s degree that is the basis of doctoral studies has been completed with an average grade of 3.0/5 or higher.
- Those with a master’s degree earned in accordance with the degree regulations of 1995 or at an earlier time must have earned the master’s degree that is the basis of doctoral studies with an average grade of 3.0/5 or higher.

The same criteria are applied to students with a foreign degree or degree from another Finnish university. Students who fail to meet these minimum grade criteria but are otherwise suitable for doctoral studies may improve their grades by taking courses, or the School may set prerequisites for doctoral studies.

Other admission criteria (academic evaluation):

- prior academic success
- content of prior university studies
- potential for a researcher career, prior research experience: research-related work experience, conference presentations, journal articles etc.
- suitability of the research topic: relevance of the topic for the research focus area of the department
- research proposal: the original contribution of the research to the theory and practice of the field; the feasibility of the research proposal (its quality, workability, organization)
- time management and resources: the feasibility of the study plan and the time available for the doctoral studies in the next four years
- the university’s resources for dissertation supervision in the applicant’s field of research
- other grounds presented by the applicant.

Application periods
Application periods to the Doctoral Programme in Engineering is twice a year: in March and in September.

- March 1 - 21, 2022 3 pm (GMT +2)
  - (decisions in April)
- September 1 - 20, 2022 3 pm (GMT +2)
  - (decisions in October)

Funding
Doctoral candidates can avail of various alternatives to finance their studies and research work. Funding can be discussed with the supervising professor. More information on funding is here.

Applications for funded doctoral student positions and applications for a study right leading to doctoral degree are submitted using Opintopolku or Studyinfo form. Please see the application instructions for funded doctoral student positions. Note! If you are applying for both a doctoral study right and a funded position, you should fill out BOTH forms in Studyinfo (application period September 2022).

More information: reetta.mannola@aalto.fi or ritva.viero@aalto.fi

Research fields and professors for doctoral studies

Before submitting the application, each applicant must contact a professor in charge of their intended research field to doctoral studies and the supervision of the studies. Applicants are urged to ensure that their expertise and research interests are commensurate with the research group (and those of the supervising professor of their studies) that they apply to.
In order to prepare for the discussion with the professor, it is beneficiary to prepare a CV (along with a list of possible publications) and a preliminary research plan. At this point the applicant’s eligibility and prerequisites for doctoral studies will be checked by the professor. Also the possible prerequisites for entry will be discussed.

In addition to the research plan, a study plan, a funding plan and a supervision plan will be discussed with the professor. See more about these documents below. When the applicant signs the application he/she commits to study according to it and when the supervising professor signs the application he/she commits to be the supervising professor of the student. More information about the rights and responsibilities of the student and the supervising professor here.

Process of applying for doctoral studies (pdf) here.

Supervising professors for the research fields of the doctoral programme are listed here.

Contact information of the Departments here.

Application instructions

Please submit your application for doctoral studies by filling in the electronic application form. All the application materials must be submitted in electronic format (pdf). The required signatures of the applicant and the professor should exist in electronic attachments (please see application materials needed). Also see the instructions for mailing the degree certificates and transcripts*.

Incomplete applications will not be accepted. Therefore, start to prepare your application early enough.

The study plan, research plan and supervision plan need to be approved by the applicant and the supervising professor. By signing these documents, the professor responsible for the research field confirms his or her commitment to be the supervising professor of the applicant.

The mailing address for degree certificates and transcripts of records is:

Reetta Mannola
Aalto University
School of Engineering
P. O. Box 15200
00076 Aalto
Finland

If you deliver your documents (degree certificates and transcripts of records) by using courier services, please use the following address:

Reetta Mannola or Ritva Viero
Aalto University
School of Engineering
Room 233
Tietotie 1E
02150 Espoo
Finland
REETTA.MANNOLA@aalto.fi or ritva.viero@aalto.fi

Application Materials

Students who have earned a master’s degree at Aalto University are required to provide the following application materials:

1. Application form / Hakemuslomake (available from 1 September 2022)
2. Curriculum vitae (CV) including list of publications and other scientific activity
3. Preliminary study plan (pdf), (signature of supervising professor needed). Please see degree structure and course work. Note the abbreviation D for doctoral level courses provided by Aalto University. Note, a compulsory course: Research Ethics for Doctoral Students D, LC-L1010
4. Preliminary research plan (pdf) and schedule for its completion. The plan must include the signatures of the applicant and of the supervising professor of the research field applied for.
   Full-time doctoral candidates should prepare their research and publishing plan with a goal for midterm review (after 1½-2 years of doctoral studies). This means, for example, completing all courses (40 cr) and that the research and publishing plan has progressed according to the plan.
5. Funding plan. (Can be included in the research proposal). State the start and ending of secured funding time and also suggest from where the missing funding will be acquired (scholarships, projects etc.).
6. Supervision plan (Guidelines for supervising doctoral candidates). The supervision plan must include the signatures of the applicant, the supervising professor and the thesis advisor
7. Motivation letter in English, one page
8. Copy of the passport/ ID-card
9. Any other supporting documents e.g. letter of recommendations

Applicants with a master’s degree or education earned at an institution other than Aalto University (or the forerunners of Aalto University) shall also provide the following documents:

1. Master’s degree certificate or a certified copy, and official transcript*
   • master’s degree certificate, including all the appendices and the Diploma Supplement in European countries
   • Official transcripts of records of all the courses included in the master’s degree
   • Official translations of these, if the originals are not in Finnish, Swedish, or English.
   • Please upload these as scanned copies to the electronic application form on Studyinfo and mail them to the address above, too.
2. Abstract of master’s thesis in English
3. Proof of proficiency in Finnish, Swedish or English
   • A successful applicant must have an excellent command of Finnish, Swedish, or English.
   • Please see Required language proficiency
   • If the applicant is working at the department or if the applicant applies for full-time doctoral studies, the supervising professor may write a statement of recommendation that the applicant has sufficient language skills. If the professor writes a statement of recommendation, no language test is required.
4. A document confirming eligibility for doctoral studies, if needed (please see Eligibility for doctoral studies) with an official translation, if the original document is not in Finnish, Swedish or English
5. Please also see the country-specific requirements if the degree is awarded in:

   Australia, Bangladesh, Cameroor, Canada, China, Eritrea, Ethiopia, Finland, Ghana, India, Indonesia, Iran, Ireland, Kenya, Malaysia, Nepal, New Zealand, Nigeria, Pakistan, South Africa, Sudan, the United Kingdom or the United States.

*Degrees awarded by a higher education institution in Finland:

If you have completed a degree in Finland after 1 January 2003 and you have a Finnish personal identification code, Aalto University will verify your degree electronically using a national database.

If your degree was completed before 1 January 2003, or you do not have a Finnish personal identification code, you are asked to present your original degree certificate (including all the appendices and the Diploma Supplement in European countries) and official transcript of records or certified copies of all these* before a right to study can be granted.

*Degrees awarded by a higher education institution outside Finland:

You are asked to present your original degree certificate (including all the appendices and the Diploma Supplement in European countries) and official transcript of records, or certified copies of all these* before a right to study can be granted. You are asked also to present official translations* of these, if the originals are not in Finnish, Swedish or English.

The degree certificate and the transcript of record copies must be certified as authentic by a university official, a notary or a solicitor. The copies must be made of the original, official documents. Copies of copies will not be accepted. If the certificate has several pages, each page must be certified from the right side of the page. Each page must be certified separately and indicate clearly the date and the original signature, printed name and stamp of the certifying officer.

If the original study certificates are not issued in Finnish, Swedish or English, the applicant must provide official translations of them. A translation is regarded official if it is made by an authorised translator or by the university that has granted the degree. Translations must be either originals or certified copies of the original translations. All translations must be accompanied with a certified copy of the original document.

Guidelines for filling in the application form

• After reading the instructions and getting all the documents ready, register on the online Studyinfo.fi application system. Fill in the application, attach all the required documents and send it.
• Definition for full-time and part-time doctoral candidate. Please note! Full-time doctoral students must be able to spend 80 % of their working hours to doctoral studies. Those working outside Aalto University who apply for the full-time doctoral studies must provide a document of the employees' approval for full-time doctoral studies.
• The language of the degree - you can choose here Finnish, Swedish or English
• Last name and all first names - The spelling of names must match your valid passport.
• Contact Information - all information regarding the application and the decision process will be sent to the email address given.
• If you haven't completed your Master's degree by the application deadline, check from your home university the graduation schedule and the date for acquiring your official degree certificate.
• Conditions for giving out student information - The conditions will take effect if and when you receive a study right. You will be able to change the conditions in SISU (sisu.aalto.fi) system later on.
• Remember to save and submit your application.

Language requirements

Accepted language tests

All international students applying for doctoral studies must demonstrate their proficiency in English. Applicants are required to attach an official language test report to their application. The recognized language tests and their minimum score requirements are listed below.

• IELTS
  • Academic: 6.5 and for writing 5
  • Indicator (Academic): 6.5 and for writing 5
• TOEFL:
  • IBT (Internet-based Test): 92 and for the writing section 22 or
  • IBT® Special Home Edition: 92 and for the writing section 22
  • PDT (Paper-delivered Test): 60 and for writing 24
• C1 Advanced (prev. Cambridge Certificate in Advanced English (CAE)): A,B or C
• C2 Proficiency (prev. Cambridge Certificate of Proficiency in English (CPE)): A,B,C or Level C1
• Pearson Test of English Academic (PTE A): 62 and for writing 54

The minimum requirements are very strict. If your score does not fulfill the minimum requirements, you are not eligible to apply and your application cannot be processed. Only the above-mentioned language tests are accepted.

IELTS, TOEFL and PTE results are valid for two years starting from the test date. The CAE and CPE results do not have an expiration date.
For IELTS test, upload a copy of the official test report (as a PDF) to the application system. The test results are verified through the test administrator’s electronic verification service.

TOEFL test results must be sent to Aalto University by the test administrator directly. Request your official score report to be sent from the test administrator to Aalto University reporting code 7364. Unofficial score reports sent by applicants will not be accepted. Test scores submitted with the Aalto University reporting code are checked for authenticity in the test administrator’s verification database. The scores are available within 1 to 2 weeks of sending the score report request.

PTE test scores are sent via the test administrator’s electronic service. Applicants who took the PTE test must log in to their PTE account and send their results in the system to Aalto University. The test administrator notifies by email when the results have been sent to the university.

For the C1 Advanced or C2 Proficiency language test, upload a PDF copy of the results report to the application system. The test-taker’s ID number (e.g. ABC1234567) and reference number (e.g. 173YU0034522) must be entered in the system. Test takers must be logged in to the language test system to submit their results to Aalto University. The results are verified electronically.

The following groups are exempted from the above mentioned language test requirement:

1. Applicants who have

- earned a degree taught in Finnish, Swedish or English in a higher education institution in Finland,
- earned a degree in an English-medium programme at a higher education institution in an EU/EEA country. The language of the degree must be stated unambiguously in the degree certificate or its appendix, or in the transcript of records or other official document issued by the awarding higher education institution.
- earned an English-medium higher education degree requiring a physical on-site presence at a higher education institution in the United States, Canada, United Kingdom, Switzerland, South Africa, Australia or New Zealand.
- earned his/her education in English in an EU/EEA country, Australia, South Africa, Canada, Switzerland, New Zealand, the United Kingdom or the United States.
- earned a degree Aalto Executive Education MBA, EMBA or DBA
- Applicants to doctoral studies who have academic duties in the field of science and technology at Aalto University (statement needed from the professor of the research field on the adequacy of the student’s language proficiency).

A minimum of one half of the degree must be completed in a country and higher education institution that meets the requirements for exempting the student from taking an English test.

Only the above-mentioned groups are exempted from the language test requirement. For all other applicants the official language test result is a compulsory application document and applications without the test result will not be processed. There are no exceptions to the above-mentioned requirements.

Granting the right to pursue doctoral studies

The Dean of the School of Engineering approves/rejects doctoral students from the recommendation of the Doctoral Programme Committee. All applicants are informed of the decision in writing. A successful applicant will be granted with right to pursue the degree of Doctor of Science in Technology. All doctoral students are defined as either full-time or part-time students.

Full-time and part-time doctoral studies

All doctoral students are defined as either full-time or part-time students. Full-time doctoral students’ personal study plans are drawn up so as to complete the doctorate within four years from granting the right to pursue doctoral studies. Full-time doctoral students must be able to spend 80 % of their working hours to doctoral studies.

Students may not change their study mode by themselves, but it can be changed by application if necessary.

Full-time doctoral student

Students are entered into the register either as full-time or part-time doctoral students. Students may change their status only by application.

Typical full-time students are those who receive funding from a graduate school and the majority of those receiving research project funding. If the student works for a research institute or an enterprise and is carrying out full-time research for a doctoral dissertation and his or her study plan has been drawn up for four years, he or she will be classified as a full-time doctoral student.

Full-time doctoral students’ personal study plans are drawn up so as to complete the doctorate within four years from granting the right to pursue doctoral studies. Full-time doctoral students must be able to spend 80 % of their working hours to doctoral studies. Those working outside Aalto University who wish to be full-time students must provide a document of the employees’ approval for full-time doctoral studies.

The studies may comprise the Licentiate degree, the recommended completion time of which is two years and which will be included in the recommended completion time of the doctoral degree, four years.

Students granted the right to study towards a doctoral degree are required to prepare a personal study plan listing the theoretical courses to be taken and a plan on the implementation of the research. The study plan is to be signed by the student as well as the professors in charge of the research field and the studies in supplementary field.

Part-time doctoral student
If the above criteria are not met, the student’s mode of study is part-time. The study plan of a part-time doctoral student is drawn up to serve doctoral studies that will last longer than four years but no more than eight years.

A part-time doctoral student typically has a main occupation outside the School of Engineering which does not include scientific research for doctoral dissertation.

Applicants of part-time doctoral studies should discuss

- whether the research is closely connected with the applicant’s own work.
- what opportunities the employer has for supporting intensive postgraduate studying e.g. by side of work.

Changing the mode of study

You can change your mode of study any time your situation changes.

If you want to change your mode of study from full-time to part-time, please notify the Coordinator Reetta Mannola by an informal email, reetta.mannola@aalto.fi.

If you want to change your mode of study from part-time to full-time, you need to fill in a new research plan. The Doctoral Programme Committee Chair approves applications for a full-time study mode twice a month. The new research plan is submitted to the Coordinator Reetta Mannola.

Follow-up for full-time doctoral students

Full- and part-time study modes of doctoral studies have been approved by the Aalto University Academic Affairs Committee on 20 December 2012. Defining the two study modes more clearly emphasizes the four-year-goal for finishing a doctoral degree and the importance of instruction and planning.

Follow-up for full-time doctoral students every five years

If a full-time doctoral student has not completed his/her doctoral degree within five years from beginning his/her doctoral studies, the doctoral programme will require the student to submit a written account concerning the progress of studies along with a statement from the supervising professor. The student may also have to fill in new study and research plans. The Doctoral Programme Committee will make the decision on the student’s study mode in accordance with the university’s definition of policy. If the student’s dissertation is already in the pre-examination process, a separate account is not needed. If the required documents are not submitted within the school’s deadlines, the school will register that student as a part-time student.

In its decision-making, the Committee will take into account the time spent on maternity and parental leave as well as conscription or non-military service completed.

Yearly follow-ups after the fifth study year

After the fifth year of doctoral studies, the doctoral programme will require the student to submit a written account concerning the progress of studies along with a statement from the supervising professor every year. The student may also have to fill in new study and research plans. The Doctoral Programme Committee will make the decision on the student’s study mode in accordance with the university’s definition of policy. If the required documents are not submitted within the school’s deadlines, the school will register that student as a part-time student.

If necessary, the doctoral programme may check students’ study mode before the five year deadline and/or give further instructions on full-/part-time studies.

Language of degree of a doctoral student

 Applies to doctoral programmes at Aalto University.

The doctoral student will define in his/her application for doctoral studies in which language he/she will pursue his/her degree (language of degree). The possible languages are Finnish, Swedish (not in the School of Business) or English. If the doctoral student wants to write his/her doctoral dissertation (the compiling part of a compilation dissertation or a monograph) or his/her licentiate thesis in Finnish or Swedish, the language of degree of the doctoral student will be Finnish or Swedish.

The language of degree can on reasonable grounds be changed later on, if e.g. the language of the doctoral dissertation or licentiate thesis changes. A freely formulated, signed application with reasons for why the language of degree should be changed, shall be submitted to the doctoral programme of the student’s own school together with the degree certificate application.

A doctoral student whose language of degree is Finnish or Swedish will get the degree certificate in Finnish or Swedish along with a translation in English. If the doctoral student writes his/her thesis in Finnish or Swedish, the language of the degree will always be Finnish or Swedish despite the earlier choice of language.

If the doctoral student’s language of degree is English, he/she will get the degree certificate in English and in Finnish or Swedish. The language of degree will be mentioned in the diploma supplement, and also that two degree certificates have been given.

This guideline will take effect starting from 1.1.2016. Doctoral students who have been chosen to the doctoral programme before 1.1.2016 may submit a freely formulated application to get the language of degree assigned with the same principles as new students.