Why Choose the Doctoral Programme in Science

The goal of the programme is to train doctors in physics, mathematics, biomedical engineering, computer science and industrial engineering and management to serve in the academic world, public sector and industry and commerce.

<table>
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<th>Target degree</th>
<th>Doctor of Science (Technology) (equivalent of a PhD)</th>
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<td>Study time</td>
<td>Four years (when studying full-time)</td>
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<tr>
<td>Application period</td>
<td>Once a month for full-time students (except for July)</td>
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What can you study?

Aalto Doctoral Programme in Science offers the degree of Doctor of Science (Technology) in one of the following research fields:

- Biomedical Engineering
- Systems Neuroscience
- Mathematics
- Theoretical and Applied Mechanics
- Systems and Operations Research
- Engineering Physics
- Computer Science
- Industrial Engineering and Management

The departments, which are in charge of the doctoral programme’s education and research at the School of Science, offer research fields that are based on strong research traditions and research at the highest international level. At the moment there are four Centres of Excellence in Research at the departments of the School of Science designated by the Academy of Finland. The School of Science is also very active in the national Doctoral Education Networks.

Graduate as doctor in four years

Doctoral education at the School of Science is based on vigorous basic research that forms a strong basis for teaching and both development and innovation activities. The most important part of the education is the research work conducted in a strong research milieu. The theoretical studies that support the research work are tailored individually to suit the different needs of each doctoral student. The dissertations of the School of Science are of very high quality and often contain articles published in publications of the highest international level.

Full-time students can complete the doctoral degree in four years. The most talented students may receive funding from their department or they may fund their studies through projects or grants. The students should discuss funding primarily with their supervising professor.

Developing new business based on your research as part of your doctoral studies

The Finnish Node of EIT Digital (www.eitdigital.eu) co-operates closely with the School of Science. It offers a unique opportunity to combine doctoral research work in the field of ICT with the possibility of starting a new business. Interested candidates should first apply for a position at EIT Digital and then for the doctoral study right at Aalto University or the University of Helsinki. The research subjects of the positions at EIT Digital are defined by the EIT Digital partner companies. The positions will include funding for the doctoral studies and there will be public calls for the positions. More information can be found at: https://www.eitdigital.eu/eit-digital-academy/doctoral-school/

International studying environment

Internationality is an integral part of the School’s doctoral education in both recruiting and educating doctoral students. The School of Science is well connected with several top-level universities and research institutes in its field.

Aalto University encourages its doctoral students to spend at least six months of their study time abroad. International mobility enhances doctoral students’ career possibilities. Visiting a foreign university or research institute often means sharing knowledge and know-how, creating new ideas, expanding international networks, and developing one’s professional skills.

Working life and doctoral degree
Doctors graduating from the doctoral programme have gained the skills required for serving in demanding academic research and teaching positions and to act in expert, development and management positions of the information society. Teaching is often a part of doctoral students’ employment contract at the department. Doctoral students can learn a lot by teaching, e.g. social skills, time management, management skills, and a more deep understanding of the subject matter. Our graduates have positions mostly in the academic world, the public sector or in the industry and commerce. More information about the working areas of the graduated doctors from the Doctoral Programme in Science can be found here.

**Apply now!**

Those who want to apply to Aalto Doctoral Programme in Science must hold a master’s degree in a relevant field completed with a very good academic success. Applicants should have a good command of spoken and written English, and they should have capacity for scientific research work. In addition, applicants must have motivation to complete the doctoral degree within the target time (4 years for full-time students), and conduct research at the highest international level.

Before submitting the application, each applicant must contact a professor in charge of their intended research field to discuss the possible supervision of doctoral 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.

Full-time studies at the Doctoral Programme can be applied to throughout the year; part-time applicants can apply twice a year. More information on applying and eligibility can be found here.

**Before applying for doctoral studies, you should deliberate at least these questions:**

- What are your motives for applying for doctoral studies?
- To get a doctoral degree takes at least 3-4 years. Are you persevering enough?
- What are your career plans and do they demand a doctoral degree?
- What kind of knowledge, skills and advantageous contacts do you already possess to help you with your future studies? What do you still need to acquire?
- Are you willing to continually challenge yourself and your knowledge in order to learn more?
- Do you want to learn and develop new scientific knowledge also in those fields that you at first did not even think about?

**Warning:** active scientific research work can cause positive addiction. It is a proven fact that professional researchers work longer hours and retire later than professionals in many other fields.