



Digital competences

What is Estonia doing, to make sure that citizens know how to use a variety of e-solutions?

- Introducing and using e-services is easy, since one might need just a few clicks to use many everyday services in Estonia. Therefore, using e-services has been made very convenient for the citizens.
- The unavoidable prerequisite to use any e-solution, is a good internet connection. More than 90% of Estonians use the internet on a regular basis.
- For the development of the digital infrastructure of schools, the state has provided funds for a high speed Internet access, modern equipment and digital learning tools to reach the educational establishments.
- Programming, robotics and modern technologies are introduced to the children already from early childhood, as future generations fluent in ICT disciplines are of critical importance to us.
- Also the national curriculum pays emphasis to the development of digital competences. It is one of the eight key competences that the schools in Estonia focus on.
- In Estonia twice as many student enroll in ICT specialties than on average in developed countries.

Are all Estonian children taught programming in kindergarten?

- In order to continue Estonia's e-success story, we are aiming to generate interest in technology already at an early age. More and more kindergartens are involved and the number increases year by year.
- In 2014 Estonia launched the ProgeTiger program, which aims to improve the technological literacy of teachers and students alike. A variety of courses and training have been undertaken to this end, including programming, robotics and computer hobby groups, which have proved to be very popular.

How does the Estonian ICT sector guarantee a sufficient and high level succession of young professionals?

- Succession is ensured only by top-notch education. In 2015 Estonian students excelled with the absolute best results in Europe in the PISA test, focusing on natural sciences.
- In 2018 Estonian students excelled with the absolute best results in Europe in the PISA test, focusing on reading in a digital environment.
- In 2022 Estonian students excelled with absolute best results in Europe in the PISA test, focusing on reading, mathematics and science.
- In 2018 a movement called HK Unicorn Squad was established with the aim of providing knowledge and skills in technology as a hobby education only for girls. The goal is to reduce girls' fear of technology and achieve a more equal distribution of boys and girls in technology-related hobby groups. HK Unicorn Squad has shown that given the correct environment for learning girls are as interested in technology as boys.
- In Estonia, even preschoolers learn programming, robotics and modern technologies.
- Estonia is contributing to the next generations of ICT specialists. Twice as many students enroll in ICT specialties than on average in developed countries.
- Kood/Jõhvi is a two year full-time coding school, which will help to reduce the lack of software engineers in Estonia, offer an innovative addition to regular schools and strengthen our educational system. The school operates on a cloud-based learning platform, where each student moves at their own pace, solving the tasks set by system, linking theory to practice. There's no tuition fee for the students. Partners of Kood/Johvi include several Estonian unicorns like Bolt, Glia and Wise.