



## Itä-Suomen ICT-polku

### COURSE DATA

#### BASIC INFO

<b>Name</b>	Introduction to Data Security		
<b>Code</b>	Savonia: ETX7200 Karelia: LTD6043 UEF: 3621418		
<b>Name in Finnish</b>	Johdatus tietoturvaan		
<b>Credits (ECTS)</b>	5	<b>Grading</b>	0 - 5
<b>Teaching period</b>	2K		
<b>Language</b>	Finnish		
<b>Type</b>	Savonia: mandatory course Karelia: mandatory course UEF/TKT: mandatory course		



## Itä-Suomen ICT-polku

### DESCRIPTION

<b>Objectives</b>	After completing the course, the student understands the basics of data security, knows the used terminology in data security, can analyze security threats, understands how they can be prevented, and is able to assess the reliability and feasibility of different data security methods in various use cases.
<b>Content</b>	The course covers the following topics: Introduction to data security, terminology in data security, cryptography, authentication, access control, database security, cloud security, malicious software, denial-of-service attacks, firewalls, intrusion detection/prevention systems, network security, wireless security, IoT devices' security, physical security, organization's security policy, GDPR protection of personal data.
<b>Modes of study</b>	Written exam and e-learning exercises during the course.
<b>Study materials</b>	Lecture handouts and recordings. The course is based on the book Stallings & Brown: Computer Security: Principles and Practice, Pearson 2015
<b>Teaching methods</b>	E-learning
<b>Prerequisites</b>	Students are expected to have basic knowledge about computer science, information technology, and programming. There are no mandatory prerequisites.
<b>Other issues</b>	