

Information Processing Science (BSc) 2021-2022 - BA2021TOL

Code

BA2021TOL

Validity

1.8.2021 -

Educational level

Bachelor's Programmes

ECTS credits

180

Duration (years)

3

Language

Specifications

Degree

Degree title

-

Programme

-

Major subject

-

Classification code

-

Type

-

Group

-

Tags

-

Person in charge

Henrik Hedberg

Organization unit

Faculty of Information Technology and Electrical Engineering

Description

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University level studies in Information Processing Science provide an excellent foundation to work in anywhere where information and communications technology is developed and applied. The field is becoming more international and continues to develop rapidly, and there is considerable demand for experts. Education focuses on software and information systems, as well as the areas of expertise and applications that deepen them. The skills relevant to working life, such as project work, written and oral communication, critical thinking and problem solving, are advanced at the same time. Minor subjects, such as statistics, mathematics, engineering, management, economics or psychology, are used to complement studies to desired application area.

After completing the Bachelor of Science (BSc) degree, a student is able to:

- evaluate, select and apply a variety methods, techniques, and tools used in the design, implementation, and deployment of software and information systems and related services,
- design and implement software, information systems and services based on them as a project,
- carry out a literature study with scientific approach, as well as
- communicate orally and literary taking into account the target audience.

Further information

Curriculum development and working life cooperation

Objectives

Structure

Code	Name	Credits
BA2021TOL	Information Processing Science (BSc) 2021-2022	180-182
BA2021TOL-1001		15-17
810020Y	<i>Orientation Studies</i>	2
030005P	<i>Information Skills</i>	1
	Ruotsin kieli	2-4
	Ruotsin kieli, lähtötaso puutteellinen	4
901018Y	Brush-up Course in Swedish	2
901048Y	Second Official Language (Swedish), Written Skills	1
901049Y	Second Official Language (Swedish), Oral Skills	1
	Ruotsin kieli, lähtötaso riittävä tai hyvä	2
901048Y	Second Official Language (Swedish), Written Skills	1
901049Y	Second Official Language (Swedish), Oral Skills	1
	Ruotsin kieli, lähtötaso hyvä	2

901060Y	Second Official Language (Swedish), Written Skills	1
901061Y	Second Official Language (Swedish), Oral Skills	1
Suomen kieli, aiempi koulutusivists ruotsin kielellä		2
900081Y	Second Official Language (Finnish), Written Skills	1
900082Y	Second Official Language (Finnish), Oral Skills	1
902164Y	<i>English Communication for Information Processing, Reading</i>	2
902165Y	<i>English Communication for Information Processing, Oral Skills</i>	3
900105Y	<i>Launch your career through communication</i>	5
BA2021TOL-1002		20
810136P	<i>Introduction to Information Processing Sciences</i>	5
811102P	<i>Devices and Data Networks</i>	5
811168P	<i>Information Security</i>	5
811174P	<i>Introduction to Software Business</i>	5
BA2021TOL-1003		30
811103P	<i>Introduction to Software Engineering</i>	5
811391A	<i>Requirements Engineering</i>	5
811301A	<i>Software Modeling and Design</i>	5
811306A	<i>Software Quality and Testing</i>	5
811319A	<i>Data Modeling and Design</i>	5
815345A	<i>Software Architectures</i>	5
BA2021TOL-1004		30
811104P	<i>Programming 1</i>	5
811322A	<i>Programming 2</i>	5
811325A	<i>Databases</i>	5
811312A	<i>Data Structures and Algorithms</i>	5
811367A	<i>Programming 3</i>	5
811368A	<i>Programming 4</i>	5
BA2021TOL-1005		30
811166P	<i>Fundamentals to Information Systems</i>	5
812360A	<i>Information Systems Modelling, Desing and Development</i>	5
812363A	<i>Human-Centered Desing</i>	5
812361A	<i>Information Systems Acquisition, Deployment and Management</i>	5
812362A	<i>Business Process Management and Modelling</i>	5
812364A	<i>Data Analytics and Business Inetelligence</i>	5
BA2021TOL-1006		25
811397A	<i>Basics of Project Work</i>	5
811398A	<i>Bachelor's project</i>	8
811393A	<i>Introduction to research work</i>	5
811383A	<i>Bachelor Thesis</i>	7
813307A	<i>IPS (TOL), Maturity Test for Bachelor 's Degree</i>	0

BA2021TOL-1007		30
<i>Valinnaiset opintojaksot, joista ei järjestetä varsinaista opetusta 0-30</i>		
814336A	Small-Group Tutoring	1
814339A	Education training	2-5,5
814341A	Research experience	2-5,5
814311A	Internship in ICT-duties	3-5
814312A	Exchange in abroad	1-3
<i>Aiemmin hankitun osaamisen tunnustaminen (AHOT) 0-30</i>		
817381A	Studies in other Finnish Universities	0
817382A	Studies in Finnish Polytechnics	0
817390A	Other studies of information processing science	0
817380A	Foreign studies	60
814344A	Information Processing Science Activities and Competitions	1-10
030010Y	Activities in University and Student Organizations	1
030009M	Studies in Other Universities/Institutes	0-60