Curriculum at Lahti University of Applied Sciences
2018-2019

Master of Engineering, Digital Solutions

At the Faculty of Technology we concentrate on the latest trends in IT and digitalisation. The objective is to make use of opportunities created by ICT for improving the business, industrial and public sectors. The degree broadens understanding of the sector as well as improves cooperation amongst different ICT operators as well as software based services, such as from a usability and infrastructure perspective without forgetting the principles of sustainable development. On completion of the degree the student will be able to operate in demanding professional, development, planning and management tasks or as an entrepreneur.

Code	Name	1 y	ECTS total
TEYDIG18-1000	**CORE COMPETENCE**		**0**
TEYDIG18-1008	**Joint core competence**		**10**
LA00BO55	Big Data	5	5
LA00BO58	Learning through games	5	5
TEYDIG18-1009	**Vaihtoehtoinen ydinosaaminen**		**0**
LA00BO21	Future thinking in digitalisation	5	5
LA00BO22	Develpoment activities as a form of change in digitalisation	5	5
LA00BO47	Systemic product and service solutions		0
LA00BO61	Innovating digital solutions		0
TEYDIG18-1004	**Thesis**		**30**
LA00BF06	Thesis	30	30
TEYDIG18-1005	**COMPLEMENTARY COMPETENCE**		**0**

TEYDIG18-1000 CORE COMPETENCE: 50 ECTS

TEYDIG18-1008 Joint core competence: 10 ECTS

LA00BO55 Big Data: 5 ECTS

Learning outcomes
The student is able to
-describe and recognise big data’s key components, technologies and opportunities
-plan big data’s use from the perspective of competitive advantage and flexibility
-discuss the impact of big data and be able to justify their view

LA00BO58 Learning through games: 5 ECTS

Learning outcomes
The student is able to
-recognise similar activities in games as well as the opportunities through games in digitally operating environments
-plan strategies and tactics which can be integrated into the game mechanics of digital services
-use games' core concepts, planning models as well as applicable code examples

TEYDIG18-1009 Vaihtoehtoinen ydinosaaminen: 10 ECTS

LA00BO21 Future thinking in digitalisation: 5 ECTS

Learning outcomes
The student is able to
- follow and predict development trends in their own sector
- critically analyse a professional's, orgainsation's or business' digital maturity
- plan and reform efficiently and effectively services, operations or products digitally

LA00BO22 Develpoment activities as a form of change in digitalisation: 5 ECTS

Learning outcomes
The student is able to
- demonstrate knowhow in the different forms of development and research procedures in solving challenging problems based on the newest information and networks in the field
-manage strategically and evaluate development activities in changes

LA00BO47 Systemic product and service solutions: 5 ECTS

Learning outcomes
The student is able to
- recognise the benefits of the Internet of Things (IoT) for businesses, making current operations more efficient, new businesses as well as increasing the value of products and services
- recognise and evaluate IoT's influence on the community
- evaluate the consumer's perspective in digitalisation through increasing the popularity of IoT terms and systemic service solutions

LA00BO61 Innovating digital solutions: 5 ECTS

Learning outcomes
The student is able to
- innovate a digital solution by applying user-driven methods
- model and evaluate a digital omnichannel solution as a service process
- evaluate the added value a digital solution creates for business and stakeholders

TEYDIG18-1004 Thesis: 30 ECTS

LA00BF06 Thesis: 30 ECTS

Learning outcomes
The student is able to
- generate new knowledge and renew ways of working combining competencies from various sectors
- manage research, development and innovation projects and apply research and development methods
- utilise the research data in operational management and development
- critically analyse, reflect on and combine different approaches to operational development

TEYDIG18-1005 COMPLEMENTARY COMPETENCE: 10 ECTS

Courses included in the study module
You can find Complementary competence courses from separate "Complementary competence courses taught in English, Master's Degree, 18S-" Curriculum.