

# TALLINN UNIVERSITY

Academic Unit: *Institute of Informatics*  
Name of the programme in English:  
**Management of Information Technology**

1704

(programme code)

22.08.2002

Name of the programme in Estonian:

(registered at the Ministry of  
Education and Science)

Infotehnoloogia juhtimine

11.02.2002

(approved by the TLU Senate)

01.11.2001

20.04.2007

(approved by the academic unit)

Level: **Master**

## General objectives:

- to allow wide-profiled professional training in IT management;
- to support the development of research based and innovative approaches in working on relevant positions as well as readiness for personal professional development;
- to support development of competences necessary for working on IT management related professions (CIO, IT manager, IT project manager etc);
- to create a sound basis for IT-related PhD studies in a university.

## General learning outcomes:

- readiness to follow established professional, ethical and intellectual property protection principles;
- knowing and understanding the basics of management of information technology;
- ability to find adequate solutions in changing and unexpected situations;
- independence and responsibility in analysing, diagnosing, making decisions and implementations;
- teamworking skills and ability to involve different partners; necessary communication skills;
- ability to use scientific methods in planning and implementing IT strategies;
- ability to manage maintenance and development of IT services in a company;
- readiness to analyse its own professional activities and plan professional growth.

## Basic principles:

- the program corresponds to the general requirements for second cycle higher education developed Euro-Inf consortium;
- the program corresponds to ICT Management profile developed by Career Space consortium ([www.career-space.com](http://www.career-space.com)) as well as to Manager of Information Technology V professional standard (<http://www.kutsekoda.ee/default.aspx/1/menu/181/content/64>);
- the program is open to graduates of the first cycle of higher education (not necessarily in IT) having necessary knowledge and skills in IT;
- the program offers to the students possibility to follow individual learning plan and therefore allows to take into account previous education and work experience of every single student;
- Leading professionals from industry are involved in running the program.

Accreditation data: **accredited until 14.05.2011**

Load in credit points: **80 CP**

Load in ECTS: **120 ECTS**

Nominal period of study: <b>2 years</b> Language of instruction: <b>Estonian as the core language, electives may be in English</b> ISCED-97 level: <b>5A2</b> Study field: <b>Natural Sciences</b>
Degree: <b>Master of Arts in Engineering (Management of Information Technology)</b> Documents issued at graduation: <b>Diploma and Academic Report</b>
Curriculum Coordinator / Contact: <b>Peeter Normak, Ph.D, peeter.normak@tlu.ee</b>

Admission criteria: bachelor degree (or an equal qualification).
Admission test: 1) motivation letter (up to 2 pages); 2) an oral test of English; 3) conversation (weight 2). The aim of the conversation is to verify the competence of the applicant in IT, find out his/her expectations towards the studies, possible topic of the thesis and plans for professional career.

Brief description of the programme structure: 1. General subjects 10 CP / 15 ECTS, including at least 6 CP / 9 ECTS from electives. 2. Major subjects 40 CP / 60 ECTS, including at least 15 CP / 22 ECTS from electives that can be freely chosen from both modules. The Major subjects are divided into two modules: 1) Management (8 CP/12 ECTS of compulsory subjects) and 2) Information Technology (17 CP/ 26 ECTS of compulsory subjects). The electives are also placed into the modules in order to simplify the choice for students. There is no obligation to choose within the limits of a single module, although it may help to gain deeper insight to a field. If a wide specialisation is sought, it is advised to pick electives from different modules. 3. Free electives 10 CP / 15 ECTS 4. Master Thesis 20 CP / 30 ECTS The programme also demands the following language skills: one foreign language at the CEFR B2 level, Estonian at the C1 level for students having graduated from a Russian-language school.
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### General subjects 10 CP / 15 ECTS

<b>Objective:</b> To create the foundation for development of generic skills as well as analytical instruments necessary for the profession.				
Subject Code	Subject Title	CP	ECTS	Assessment
	<b>Compulsory subjects 4CP / 6 ECTS</b>			
MII7007	Project Management	4	6	GA
	<b>Elective subjects 6CP/9 ECTS</b>			
MIA7007	Research Methods	3	4,5	E
MIA7002	Data Analysis	3	4,5	GA
MMG7001	Mathematical Modelling and Simulation	4	6	E
Learning Outcomes: <ul style="list-style-type: none"> <li>Student is able to plan and run projects in IT as well as to analyse the data, draw evidence based conclusions and generalizations and judge about the quality of solutions.</li> </ul>				

### Major subjects 40 CP / 60 ECTS, including 15 CP / 22 ECTS in electives

Students are free to choose electives from both modules

<b>1. Management</b> Objective: <ul style="list-style-type: none"> <li>to build foundation for developing managerial competences necessary in relevant professions as well as readiness for individual professional development.</li> </ul>				
Subject Code	Subject	CP	ECTS	Assessment
	<b>Compulsory subjects 8 CP / 12 ECTS</b>			
SPK7002	Strategic Management	3	4,5	E
SPK7015	Personality and Social Psychology in Organisations	3	4,5	E
SPK7017	Group Processes in Organisations	2	3	GA
	<b>Electives</b>			

MII7048	Financial Management	3	4,5	GA
SPK7019	Personnel Management	3	4,5	E
SPK7001	Theories of Organisation	4	6	E

Learning outcomes:

- knows the basic principles of strategic management, factors influencing group processes as well as basic notions and principles of personality and social psychology;
- is able to analyse effectivity of group processes. assess the risks and use tools and methods for diagnosis and strategic management;
- is able to use different methods for analysing and development of social networks,
- complete the tasks related the development of business strategies (elaboration of development plans, finding out IT implementation possibilities for increasing competitiveness of the business etc);
- is able to manage personnel (build up IT staff, ensure motivation and necessary devotion, compose the tasks, work division and schedules, assess the results, arrange cooperation with other units etc).

## 2. Information technology

Objective:

- to build foundation for developing IT competences necessary in relevant professions as well as readiness for individual professional development in IT.

Subject Code	Subject	CP	ECTS	Assessment
<b>Compulsory subjects 17 CP / 26 ECTS</b>				
MII7030	ICT Strategic Management	3	5	E
MII7031	Development of Infrastructure of Information Technology	3	4	GA
MII7032	IT Operations and Management	3	5	E
MII7038	Practical Training	4	6	A
MII7009	Master Seminar	4	6	A
<b>Electives</b>				
MII6015	Information Systems I	3	4	E
MII7033	Information Management	3	4	E
MII7063	Information Systems: Defining Vision and Requirements	3	4,5	E
MII7040	Legal Issues Related to IT-Development	3	4	GA
MII7046	21-th Century Concepts in Information and Meaning	3	4	GA
MII7037	Applied Activities in the Area of Specialisation	4	6	GA
MIA7008	Advanced Used of Application Software	3	4	GA
MII7108	Server Side Interactive Technologies	3	4	A
MII7055	Maintenance of Windows Workstations	3	4	GA
MII7115	Security and Privacy Matters	2	3	GA
MII7136	Open Source Management	3	4	GA

Learning outcomes:

- knows different methods of treatment of IT management profession in historic perspective, basic problems under discussion, knowledge sources (incl scientific literature) and regulations (standards and specifications);
- is able to compose an IT strategy of an organisation, implementation plans, determine suitable business solutions as well as able to document and present them in an adequate manner;
- is able to complete tasks necessary for IT strategic management (analysing market trends, managing recourses etc);
- is able to complete tasks necessary for IT development (planning of development activities, preparation of projects, planning and coordination of professional development of staff etc);
- is able to complete tasks necessary for IT maintenance (ensuring functioning of IT infrastructure, necessary support services, data security etc).

## Free electives 10 CP / 15 ECTS

Objective:

to create opportunities for students for individual development and realization of student's intellectual interest. Free electives can also be used to raise the levels of language (first of all English) skills.

learning outcomes:

- Professional knowledge and skill set developed by specific interests and allowing personalised development in the chosen field;
- CEFR B2 level skills in a foreign language;
- CEFR C1 level skills in Estonian language for graduates of the schools with Russian as study language.

## Master Thesis 20 CP / 30 ECTS

The thesis is a personal research project that studies a relevant IT management related theoretical and/or implementation problem.

Objective:

To support development of research and academic writing skills in an actual topic of IT management.

<b>Subject Code</b>	<b>Subject</b>	<b>CP</b>	<b>ECTS</b>
MII7041	Master Thesis	20	30
Learning outcomes:			
<ul style="list-style-type: none"><li>• knows the requirements for composition of academic texts;</li><li>• is able to formulate a research problem, to chose appropriate research methods and conduct problem analysis based on scientific literature;</li><li>• is able to find correct solutions to the problems.</li></ul>			