

Opasraportti

KTK - Edutool Master's Degree Programme 2011-2012 (2011 - 2012)

EDUTOOL Master's Degree Programme

The Master's Degree Programme EDUTOOL educates experts in learning. The core of the education consists of three theoretical viewpoints: self-regulated learning, collaborative learning, and the learning of expertise. Each aspect requires strong individual learning skills, and understanding and developing these abilities are essential in this program. Expertise includes abilities to use technologies in pedagogically grounded manners in different learning contexts. The objectives, contents, and study methods of the program are based on the latest research in the field of learning, as well as expectations set by the individual's working life and the society. Graduates from the EDUTOOL programme are competent to work for example in professions such as teachers, educators, educational consultants, human resources developers, project leaders, coordinators, researchers, and administrators in both the private and public sectors.

Learning objectives:

- make use of the essential learning theories in the contexts of individual and collaborative learning, human resources, and life-long learning
- pedagogically evaluate different technologies in interaction, learning, and content production
- explain the process of self-regulated learning and develop their self-regulated and co-regulated learning skills
- explicate practical and theoretical means for learning expertise, and can monitor and reflect their progress to be an expert
- work collaboratively in different learning communities
- use research literature and research methods from the field of the learning sciences and educational technologies, as well as conduct scientific research combining learning and technology
- recognize the role of educational technology in the structures of the higher education institution, the working life and the society, and are able to take it into consideration in their own working life

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

- 413315S-01: Advanced course in qualitative research, 5 op
- 413315S-02: Advanced course in quantitative research, 5 op
- 413312S: Collaborative Learning, 5 op
- 418021P: Designing Technology-Enhanced Learning, 7 op
- 413314S: Designing Technology-Enhanced Learning in Global School Systems, 5 op
- 418022P: Educational Projects, 6 op
- 418019P: Introduction to Learning and Educational Technology, 5 op
- 418020P: Learning Theory and Pedagogical use of ICT, 7 op
- 413313S: Learning of Expertise, 10 op

413315S: Research course II (Edutool), 10 op

413311S: Self-Regulated Learning, 8 op

413008S: Thesis studies, 35 op

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

413315S-01: Advanced course in qualitative research, 5 op

Opiskelumuoto: Advanced Studies

Laji: Partial credit

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

5 cr

Language of instruction:

Finnish/English

Timing:

spring 2012

Learning outcomes:

After this course, the student is able to

- compile a research plan and report
- process and analyze qualitative data
- describe and report results from qualitative research data
- evaluate the ethicality and reliability of qualitative research
- apply the knowledge thus gained to his or her Master's Thesis

Contents:

- Basics and central concepts of qualitative research
- Qualitative research approaches
- Research plan
- Theoretical framework
- Research material and the analysis thereof
- Ethicality and reliability
- Writing a research publication

Mode of delivery:

Face-to-face and web-based teaching

Learning activities and teaching methods:

Contact teaching 50 h, seminar work 30 h and independent and collaborative study 54 h.

Target group:

Education master's level students

Prerequisites and co-requisites:

Research methods 1

Recommended optional programme components:

Research methods 1

Recommended or required reading:

To be announced at the beginning of the module.

Assessment methods and criteria:

Active participation in contact teaching and seminar work. Successful completion of the learning assignments.

Grading:

0-5

Working life cooperation:

no

413315S-02: Advanced course in quantitative research, 5 op**Opiskelumuoto:** Advanced Studies**Laji:** Partial credit**Vastuuyksikkö:** Faculty of Education**Arvostelu:** 1 - 5, pass, fail**Opintokohteen kielet:** Finnish**ECTS Credits:**

5 cr

Language of instruction:

Finnish

Timing:

spring 2012

Learning outcomes:

After this course, the student can

- process and analyze quantitative data
- report the results from quantitative research material
- assess the reliability of a quantitative study
- apply the knowledge thus gained to his or her Master's Thesis

Contents:

- Basics of quantitative research
- Significance of theory in quantitative research
- Operationalization and related problems
- Statistical deduction and statistical description, as well as making deductions from material to theory
- Questions of reliability in quantitative research

Mode of delivery:

Face-to-face and web-based teaching

Learning activities and teaching methods:

Contact teaching 15 h, practice works and familiarizing oneself with the preliminary material 70 h, and collaborative and independent study in contact teaching sessions and online 49 h.

Target group:

Education Master's level students

Prerequisites and co-requisites:

Research Methods 1

Recommended optional programme components:

Research Methods 1

Recommended or required reading:

To be announced at the beginning of the module.

Assessment methods and criteria:

Active participation in contact teaching and practice sessions. Successful completion of the learning assignments.

Grading:

0-5

Working life cooperation:

no

413312S: Collaborative Learning, 5 op**Voimassaolo:** 01.08.2011 -**Opiskelumuoto:** Advanced Studies**Laji:** Course**Vastuuyksikkö:** Faculty of Education**Arvostelu:** 1 - 5, pass, fail**Opintokohteen kielet:** English

ECTS Credits:

7,5 ECTS

Language of instruction:

English

Timing:

autumn 2012

Learning outcomes:

Students will

- understand state-of-the-art theoretical basis for CSCL and learning communities in various educational and work life contexts
- be capable to design, evaluate and assess collaborative learning in technology-enhanced environments
- improve their collaborative academic writing and argumentation skills

Contents:

- Learning communities
- Computer-Supported Collaborative Learning (CSCL)
- Distributed intelligences
- Technological tools for distributing intelligences
- Collaborative academic writing

Mode of delivery:

Face-to-face and web-based teaching

Learning activities and teaching methods:

Lectures 40 h, individual and collaborative studying in virtual learning environment 160 h. The course will be implemented in international collaboration.

Target group:

Students in EDUTOOL Master's degree programme

Prerequisites and co-requisites:

No

Recommended optional programme components:

No

Recommended or required reading:

To be announced at the beginning of the module.

Assessment methods and criteria:

Active participation to lectures, individual and collaborative studying in virtual learning environment.

Grading:

0-5

Person responsible:

Pirkko Hyvönen

Working life cooperation:

No

418021P: Designing Technology-Enhanced Learning, 7 op**Voimassaolo:** 01.08.2011 -**Opiskelumuoto:** Basic Studies**Laji:** Course**Vastuuyksikkö:** Faculty of Education**Arvostelu:** 1 - 5, pass, fail**Opintokohteen kielet:** Finnish**ECTS Credits:**

6 cr

Language of instruction:

English

Timing:

spring

Learning outcomes:

- Students will be capable to describe characteristics of TEL
- Students will be capable to define main stages of designing TEL
- Students will be proficient to design and implement pedagogically well-grounded web-course
- Students will be competent to assess pedagogical use of Information and Communication Technology (ICT)

Contents:

- Technology-Enhanced Learning (TEL) concept
- Designing TEL: design process, selection of technology, constructing TEL environment
- Implementing TEL
- Evaluating TEL

Mode of delivery:

Face-to-face and web-based teaching

Learning activities and teaching methods:

Lectures 15 h, individual and collaborative studying in virtual learning environment 145 h.

Target group:

Students minoring Ed. tech; Students in EDUTOOL master's degree programme

Prerequisites and co-requisites:

No

Recommended optional programme components:

No

Recommended or required reading:

TBC

Assessment methods and criteria:

Active participation to the lectures and individual and collaborative studying in virtual learning environment.

Grading:

0-5

Person responsible:

Essi Vuopala

Working life cooperation:

No

413314S: Designing Technology-Enhanced Learning in Global School Systems, 5 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

ECTS Credits:

7.5 cr

Language of instruction:

English

Timing:

spring 2013

Learning outcomes:

After completing the module students will be able to

- recognize needs, problems, situations and practices of pedagogical use of technologies in global school systems and find research-based solutions for the shortcomings
- analyze and compare education in different school systems and identify factors affecting education in global contexts
- design technology-enhanced learning processes, in order to develop and analyze structures for the best practices

Contents:

- Concept of comparative education, school system and technology-enhanced learning
- Introduction of school systems of participating countries
- Pedagogical use of technologies in learning and in different school systems
- Designing, supporting and assessing TEL

Mode of delivery:

Face-to-face and web-based teaching

Learning activities and teaching methods:

Lectures 50 h, individual and collaborative studying in virtual learning environment 150 h.

Target group:

Students in EDUTOOL master's degree programme

Prerequisites and co-requisites:

No

Recommended optional programme components:

No

Recommended or required reading:

Will be confirmed at the beginning of the module.

Assessment methods and criteria:

Active participation to the lectures, individual and collaborative studying in virtual learning environment.

Grading:

0-5

Person responsible:

Pirkko Hyvönen

Working life cooperation:

No

418022P: Educational Projects, 6 op**Voimassaolo:** 01.08.2011 -**Opiskelumuoto:** Basic Studies**Laji:** Course**Vastuuyksikkö:** Faculty of Education**Arvostelu:** 1 - 5, pass, fail**Opintokohteen kielet:** Finnish**ECTS Credits:**

6 cr

Language of instruction:

Finnish

Timing:

Implementation 1: autumn 2011-spring 2012, Implementation 2: autumn 2012, Implementation 3: spring 2012

Learning outcomes:

After this course the student can

- plan and implement an educational project
- work responsibly as a part of the project team
- plan and evaluate educational projects utilizing current learning research information
- apply the special competence of his or her own field to the contents, planning, and implementation of projects
- work as an expert in his or her field in a multidisciplinary project team

Contents:

- Basics of project work
- Planning, practical realisation, and administration of project work
- Special characteristics of educational projects
- The utilization of technology in project work and educational projects
- Development challenges in the field of learning and educational technology

Mode of delivery:

Face-to-face and web-based teaching

Learning activities and teaching methods:

Contact teaching 40 h, independent and collaborative work in a project team, as well as practical project and reporting 120 h.

Recommended or required reading:

To be announced at the beginning of the module.

Assessment methods and criteria:

Active participation in contact teaching and the work of the project team. Implementation of the project and reporting.

Grading:

0-5

Person responsible:

Niina Impiö

418019P: Introduction to Learning and Educational Technology, 5 op**Voimassaolo:** 01.08.2011 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

6 cr

Language of instruction:

Finnish

Timing:

autumn 2011

Learning outcomes:

After this module the student can

- describe the basic concepts of educational technology
- name some of the central research topics in the field of learning and educational technology
- identify societal trends and strategic policies affecting the research field of educational technology
- describe the central characteristics of collaborative expertise
- use core utility software and information networks and evaluate their pedagogical usability, as well as
- plan and implement a digital portfolio in a blog environment

Contents:

- Significance of educational technology in a learning society
- Basic concepts related to educational technology
- Introduction to the study of learning and educational technology: objectives, research subjects and the theoretical framework
- Expertise and reflecting upon one's own expertise
- Central ICT applications

Mode of delivery:

Face-to-face and web-based teaching

Learning activities and teaching methods:

Contact teaching 50 h, practice sessions 25 h, collaborative and independent study 86 h.

Target group:

Ed.tech minor subject students; EDUTOOL- Master's degree students

Prerequisites and co-requisites:

no

Recommended optional programme components:

no

Recommended or required reading:

To be announced at the beginning of the module.

Assessment methods and criteria:

Active participation in contact teaching, practice sessions, and the collaborative and independent work. Successful completion of the learning assignments.

Grading:

0-5

Person responsible:

contact person Niina Impiö, persons responsible will be divided according to the themes

Working life cooperation:

No

418020P: Learning Theory and Pedagogical use of ICT, 7 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

7 cr

Language of instruction:

Finnish

Timing:

autumn 2011

Learning outcomes:

After this course, the student can

- identify the theoretical learning-related principles that form the basis of technology-supported studying and teaching
- define self-regulated learning, collaborative learning, and the acquisition of expertise on a conceptual level, as well as describe the relationships of those concepts
- justify the utilization of technology as support for learning from the point of view of learning research
- evaluate various collaborative learning models as supports for the learning sciences
- describe the basics of planning, supporting, and evaluating a learning process in a technology-based learning environment

Contents:

- Self-regulated learning: Motivation and learning strategies in technology-supported environments
- Collaborative learning, Computer-supported collaborative learning (CSCL) and collaborative learning models
- Learning of expertise
- Possibilities of supporting learning offered by technology
- Planning technology-supported learning, guiding, and evaluating learning

Mode of delivery:

Face-to-face and web-based teaching

Learning activities and teaching methods:

Contact teaching 45 h, small group sessions 50 h, collaborative and independent study 92 h.

Target group:

Ed tech minor subject students; EDUTOOL master's degree students

Prerequisites and co-requisites:

no

Recommended optional programme components:

no

Recommended or required reading:

To be announced at the beginning of the module.

Assessment methods and criteria:

Active participation in contact teaching, small group sessions, and the collaborative and independent work. Successful completion of learning assignments and examination.

Grading:

0-5

Person responsible:

Venla Vallivaara

Working life cooperation:

No

413313S: Learning of Expertise, 10 op

Voimassaolo: 01.02.2011 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

ECTS Credits:

7,5 cr

Language of instruction:

Finnish

Timing:

autumn 2011-spring 2013

Learning outcomes:

After this course, the student

- is able to examine the learning of expertise as a life-long process that one can pursue oneself
- understands the theoretical framework of the learning of expertise and is able to apply it in practice
- is able to explain and interpret the factors affecting the learning of expertise
- is able to monitor and reflect upon his/her own activity and the activity of the society in the framework of the acquisition of expertise
- understands the effect of education and the working life in supporting the learning of expertise

Contents:

- Education, working life and expertise
- Theoretical background of the learning of expertise
- Working strategies characteristic of an expert
- Social innovations as a part of expertise

Mode of delivery:

Face-to-face and web-based teaching

Learning activities and teaching methods:

Contact teaching 40 h, collaborative and independent study 160 h.

Target group:

Students in EDUTOOL- master's degree

Prerequisites and co-requisites:

No

Recommended optional programme components:

No

Recommended or required reading:

To be announced at the beginning of the module.

Assessment methods and criteria:

Active participation in contact teaching and collaborative and independent work in an expert group. Completing learning assignments.

Grading:

0-5

Person responsible:

Pirkko Hyvönen and Niina Impiö

Working life cooperation:

No

413315S: Research course II (Edutool), 10 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

10 cr

Timing:

spring 2012

Other information:

Research studies consists of following study modules:

- Quantitative research, 5 cr (413315S-02)

- Qualitative research, 5 cr (413315S-01)

See descriptions at abovementioned study units.

413311S: Self-Regulated Learning, 8 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

7,5 cr

Language of instruction:

Finnish/English

Timing:

autumn 2011

Learning outcomes:

After this course, the student is able to

- analyze the mutual interaction of cognitive, emotional, and motivational factors and their effect on learning
- compare and explain the significance of individual and group activity in learning
- predict, develop, and evaluate the connection of different technological applications to the process of self-regulating learning

Contents:

- Cognitive learning strategies and motivational and emotional factors
- Self-regulation of learning
- Learning as a social phenomenon
- Learning as a situational activity

Mode of delivery:

Face-to-face and web-based teaching

Learning activities and teaching methods:

Contact teaching 20 h, collaborative and independent study 180 h.

Target group:

Students in EDUTOOL-master's degree programme

Prerequisites and co-requisites:

no

Recommended optional programme components:

no

Recommended or required reading:

To be announced at the beginning of the module.

Assessment methods and criteria:

Active participation in contact teaching and collaborative and independent work. Completing learning assignments.

Grading:

0-5

Person responsible:

Sanna Järvelä and Jonna Malmberg

Working life cooperation:

no

413008S: Thesis studies, 35 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

40 credits

Language of instruction:

Finnish or English

Timing:

Master's studies

Learning outcomes:

The student

- is able to write either alone or in pairs an educational thesis that proves familiarity with the thematic area of the thesis and shows an ability for scientific thinking,

- masters the research methods chosen by her/him and shows a readiness for scientific communication
- knows how to assess theses made by others, take part in scientific discussion and defend her/his own thesis

Contents:

The course includes the following:

- presentation of research plan and report
- acquisition and reading of research literature
- familiarisation with research methods
- writing a thesis on an educational topic
- active participation in seminar sessions

Mode of delivery:

Face-to-face teaching

Learning activities and teaching methods:

Seminar sessions 40 h, independent work about 1000 h

Target group:

Students in the Faculty of Education

Prerequisites and co-requisites:

Bachelor's thesis

Recommended optional programme components:

Research Methods II

The course is part of the Advanced Studies in the major subject.

Recommended or required reading:

Research and methodological literature: refereed publications

Assessment methods and criteria:

Participation in seminar sessions, writing a thesis and its presentation in a seminar session, acting as peer opponent and writing of the maturity test

Grading:

0 - 5

Person responsible:

Hannu Heikkinen and the leaders of seminar groups

Pauli Siljander (Kako), Sanna Järvelä ja Pirkko Hyvönen (EDUTOOL)

Working life cooperation:

None

Other information:

For details on current Bachelor's and Master's thesis groups, see www.oulu.fi/ktk/opinnaytetyot