# Opasraportti

# Master's Degree Programme in Learning, Education and Technology (2015 - 2016)

The Master's Degree Programme in Learning, Education and Technology (LET) 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 LET program 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, Education and Technology (LET) is a full-time two-year international Master's Program (120 ECTS credits). After completing the program, students are awarded a Master of Arts (Education) degree, which enables them to continue their academic studies at the doctoral level. This degree does not constitute a formal teaching qualification.

See Course Structure Diagram 2015-2016 here

# Tutkintorakenteet

# LET - Master's Degree Programme in Learning, Education and Technology

Tutkintorakenteen tila: archived

Lukuvuosi: 2015-16

Lukuvuoden alkamispäivämäärä: 01.08.2015

# General Studies: Language, Communication, and Orientation Studies (5 op)

In the LET programme, students must complete 5 credits of general studies. The general studies form an orientation to the university studies in Finland and particularly to the LET program. The general studies are divided to language studies (2 credits) and communication and orientation studies (3 credits).

#### Language Studies

#### **Communication and Orientation Studies**

405517Y: Communication and orientation studies, 3 op

# Minor Subject Studies: Introductory Studies in Educational Technology (25 op)

In the LET programme, all students must complete minor subject studies in Introductory Studies of Educational Technology (total 25 ECTS credits).

418021P: Designing Technology-Enhanced Learning, 7 op418022P: Educational Projects, 6 op418019P: Introduction to Learning and Educational Technology, 5 op418020P: Learning Theory and Pedagogical use of ICT, 7 op

# Major Subject Studies: Advanced Studies in Educational Sciences (80 op)

In the LET programme, all students must complete 80 credits of major subject studies.

408045S: Abstract / Maturity Test, 0 op 413312S: Collaborative Learning, 5 op 413314S: Designing Technology-Enhanced Learning, 5 op 413313S: Learning of Expertise, 10 op 413317S: Literature, 4 op 408043S: Master's Thesis, 30 op 408517S: Research methodology, 10 op 413311S: Self-Regulated Learning, 8 op 408044S: Thesis Seminar, 5 op

# **Optional Studies (enintään 10 op)**

In the LET programme, students can select a total of 10 credits of optional studies. Students can select their optional studies, e.g., on the basis of their previous studies, thesis topic, or personal interest.

Kindly note that in order to complete courses by other departments or Languages and Communications Center, etc. students might need to apply for a study right or they might be required to register by certain annual deadline. Students are advised to familiarise themselves with the policies and procedures of the department in question.

# Opintojaksojen kuvaukset

# Tutkintorakenteisiin kuuluvien opintokohteiden kuvaukset

# 405517Y: Communication and orientation studies, 3 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: General Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

# 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:

5/7 ECTS

Language of instruction:

English/Finnish

#### Timing:

Spring term, 1 <sup>st</sup> year studies in the LET Master's Degree Programme; 1 st year studies in the EdGlo Master's Degree Programme

# Learning outcomes:

After completion of this course, the student knows how to

- describe the theoretical background and main stages of designing technology-enhanced learning (TEL)
- design a TEL course
- justify and evaluate instructional and technological design

#### **Contents:**

- Technology-Enhanced Learning (TEL) as a concept
- Designing TEL: instructional and technological design
- Structuring individual and collaborative learning activities
- Implementing and evaluating TEL

#### Mode of delivery:

Face-to-face and online

#### Learning activities and teaching methods:

Face-to-face / online 32h

Collaborative and individual learning 150h

Students become familiar with the key concepts, theories and approaches of technology-enhanced learning (TEL) and implement this knowledge by designing their own course in small groups. Students reflect and report on the different stages of the design process in a digital portfolio.

#### Target group:

1st year students on the LET Master's Programme 1 st year studies in the EdGlo Master's Degree Programme Educational Technology minor students Other students

#### Prerequisites and co-requisites:

No

Recommended optional programme components:

#### No

#### Recommended or required reading:

Contemporary readings in the field of technology-enhanced learning, to be announced at the beginning of the course Assessment methods and criteria:

Active participation in face-to-face teaching and collaborative and independent work. Successful completion of all the learning assignments and exercises.

Read more about assessment criteria at the University of Oulu webpage.

Grading: 0-5 Person responsible:

Essi Vuopala

Working life cooperation:

#### No

# Other information:

The students in the Master's Degree Programme in Education and Globalization (EdGlo) join the same face-to-face sessions in their own 5-credit course "Designing Technology-Enhanced Learning".

EdGlo students will be informed about their specific tasks in the beginning of the course.

# 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 ECTS

Language of instruction: English/Finnish Timing: Spring term, 1 <sup>st</sup> year studies in the LET Master's Programme Learning outcomes:

After completion of this course, the student knows how to

- plan and implement an educational project
- work responsibly as a member of a project team in collaboration with a client
- apply theoretical knowledge of learning to solve practical challenges in educational working contexts
- report and inform different target groups on the project

#### Contents:

- Basics of project work
- Planning, implementation and administration of projects
- Educational projects
- Technology in support of project work

#### Mode of delivery:

Face-to-face and online

#### Learning activities and teaching methods:

#### Face-to-face 40h

Collaborative and individual learning 120h

In this course the students implement an educational project for a local company, school or other organization. The students design, implement and report on the project in a project group under the teacher's guidance. In this course the students learn about project work in theory and practice. Students reflect and report on different phases of their project work in their digital portfolio.

#### Target group:

1st year students on the LET Master's Programme Educational Technology minor students Other students (see the prerequisites below)

#### Prerequisites and co-requisites:

Before joining this course, the student should have completed the following courses: 418019P *Introduction to Learning and Educational Technology* 

418020P Learning Theory and Pedagogical Use of Technology

Recommended optional programme components:

no

#### Recommended or required reading:

Contemporary readings in the field of learning, educational technology and educational projects, to be announced at the beginning of the course

#### Assessment methods and criteria:

Active participation in face-to-face and collaborative and individual learning. Successful completion of all the learning assignments and exercises.

Read more about assessment criteria at the University of Oulu webpage.

#### Grading:

0-5

#### Person responsible:

Essi Vuopala Working life cooperation:

# 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:

5 ECTS Language of instruction: English/Finnish Timing: autumn 2013 Learning outcomes:

After completion of this course, the student knows how to

- describe the basic concepts of learning sciences and educational technology
- name some of the major research topics in the field of learning sciences and technology enhanced learning
- identify and discuss contemporary issues in educational technology in global and local educational contexts
- use contemporary educational software and hardware, and also evaluate those pedagogical usability
- create a digital portfolio in the form of a personal journal in a weblog

#### Contents:

- · Basic concepts of instruction, learning and technology enhanced learning
- Introduction to the field of learning sciences and technology enhanced learning: objectives, research subjects and theoretical framework
- Reflection on one's own learning and expertise
- Pedagogical use of contemporary educational software and hardware

#### Mode of delivery:

Face-to-face and online

#### Learning activities and teaching methods:

Face-to Face 50h

#### Collaborative and individual learning 80 h

In this course the students familiarise themselves with the theoretical background, core concepts, and contemporary tools of educational technology. The course introduces the students to the field of learning sciences and examines the role of learning and educational technology in a globalised world. One central goal of this course is to learn to use and evaluate technologies in a pedagogically meaningful way. In this course students start to reflect on their own learning and expertise in a digital portfolio.

#### Target group:

1st year students on the LET Master's Programme

Educational Technology minor students

Other students (as a part of their optional studies)

#### Prerequisites and co-requisites:

no

#### Recommended or required reading:

- How People Learn: Brain, Mind, Experience, and School: Expanded Edition. (2000). Washington, DC: The National Academies Press.
- and/or other contemporary readings in the field of learning and educational technology, to be announced at the beginning of the course.

#### Assessment methods and criteria:

Active participation in face-to-face teaching and collaborative and independent work. Successful completion of all the learning assignments and exercises.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

#### 0-5

# Person responsible:

Essi Vuopala

# 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 ECTS Language of instruction:

#### English/Finnish

#### Timing:

Autumn term, 1st year studies in the LET Master's Programme

#### Learning outcomes:

After completion of this course, the student knows how to

- identify the theoretical principles underlying technology-enhanced learning
- define the concepts of self-regulated learning, collaborative learning and learning of expertise
- describe the use of technology to support such learning
- justify pedagogical use of technology by using current theoretical knowledge of learning

#### Contents:

- Self-Regulated Learning
- Collaborative Learning and Computer-Supported Collaborative Learning (CSCL)
- Learning of Expertise
- Supporting learning with technology

#### Mode of delivery:

face-to-face and online

#### Learning activities and teaching methods:

Face-to-face 30 h

Collaborative and individual learning 157 h

The course includes three theoretical viewpoints on learning: self-regulated learning, collaborative learning, and learning of expertise. The goal of the course is to understand these theoretical principles of learning and comprehend the possibilities to support such learning with technology. Students reflect on their theoretical knowledge and their own learning process in their digital portfolio

#### Target group:

1st year students on the LET Master's Programme

Educational Technology minor students

Other students (as a part of their optional studies)

#### Prerequisites and co-requisites:

no

#### Recommended optional programme components:

no

#### Recommended or required reading:

- How People Learn: Brain, Mind, Experience, and School: Expanded Edition. (2000). Washington, DC: The National Academies Press.
- Boekaerts, M. Pintrich, P.R. & M. Zeidner, M. (Eds.), (2000). Handbook of Self-Regulation. San Diego, CA: Academic Press.
- Spada E. & Reiman, P. (Eds) (1996). Learning in Humans and Machine: Towards an interdisciplinary learning science. Oxford: Elsevier.
- Bereiter, C. & Scardamalia, M. (1993). Surpassing ourselves: An Inquiry Into the Nature and Implications of Expertise. Open Court Publishing Company.
- and/or other contemporary readings in the field of learning and educational technology, to be announced at the beginning of the course.

#### Assessment methods and criteria:

Active participation and collaborative and independent work. Successful completion of all the learning assignments and exercises.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** 

0-5 **Person responsible:** Essi Vuopala **Working life cooperation:** No

408045S: Abstract / Maturity Test, 0 op

Voimassaolo: 01.08.2015 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

# 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

Ei opintojaksokuvauksia.

# 413314S: Designing Technology-Enhanced 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: Edutool: spring 2013, LET: spring 2014 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 and LET master's degree programs

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. Read more about assessment criteria at the University of Oulu webpage. Grading: 0-5 Person responsible: Pirkko Hyvönen 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 ECTS

#### Language of instruction:

Edutool: Finnish, LET: English

Timing:

Edutool: autumn 2011-spring 2013, LET: autumn 2012-spring 2014

#### 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:

Lectures 40 h, individual and collaborative studying in virtual learning environment 160 h

# Target group:

Students in LET and EDUTOOL Master's degree programs

Prerequisites and co-requisites:

None

#### Recommended optional programme components:

None

#### 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.

Read more about assessment criteria at the University of Oulu webpage.

#### Grading:

0-5

#### Person responsible:

Pirkko Hyvönen and Niina Impiö Working life cooperation: None

# 413317S: Literature, 4 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: English

Ei opintojaksokuvauksia.

#### 408043S: Master's Thesis, 30 op

Voimassaolo: 01.08.2015 -Opiskelumuoto: Advanced Studies Laji: Diploma thesis Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

# 408517S: Research methodology, 10 op

Voimassaolo: 01.08.2006 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: English

ECTS Credits: 10 credits Language of instruction: English Timing: EDGLO: 1st year, autumn and spring, 1st - 4th teaching period DD: 2nd year, autumn and spring (in Oulu), 1st - 4th teaching period LET: 1st year, autumn and spring, 1st - 4th teaching period Learning outcomes: After completion of the course, students are able to: • Identify the characteristics and main traditions of both qualitative, quantitative and mixed methods research, particularly in the humanities and social sciences • Analyse the main approaches and research methods from the perspective of various traditions • Produce a research plan and a coherent, logical and justified research report • Cellect data and apply various methods of analysis and interpretation

- Collect data and apply various methods of analysis and interpretation
- Determine the credibility and ethics of research projects

#### Contents:

- Research methodologies
- · Construction of a methodological framework in research
- Data collection

- Analysis of data and its interpretation
- Validity and reliability in research
- Reporting research
- Ethical questions in research

#### Mode of delivery:

Face-to-face teaching

#### Learning activities and teaching methods:

80 h lectures/ seminars, 190 h independent study

#### Target group:

1st year students in the Master's Degree Programme in Education and Globalisation (EDGLO) DD students

1st year students in the Master's Degree Programme in Learning, Education and Technology (LET) **Prerequisites and co-requisites:** 

No

#### Recommended optional programme components:

EdGlo: 1st and 2nd year courses: 408512S, 408513S, 408514S, 405287S, 408515S, 408516S, and 408510S **Recommended or required reading:** 

Creswell, J. W. (1998). *Qualitative inquiry and research design.* London: Sage. Kerlinger, F. (2000). *Foundations of behavioural research.* Fort Worth: Harcourt College Publishers. Silverman, D. (2000). *Doing qualitative research. a practical handbook.* London: Sage. Other study material will be confirmed at the beginning of the course.

The availability of the literature can be checked from this link.

#### Assessment methods and criteria:

Active participation in lectures/seminars, an essay, an exam

Read more about assessment criteria at the University of Oulu webpage.

Grading:

# Pass/fail

### Person responsible:

Quantitative Methodology: Jouni Peltonen (Master's Degree Programme in Education and Globalisation, Double Degree Programme, and Master's Degree Programme in Learning, Education and Technology) Qualitative Methodology: Mervi Kaukko (Master's Degree Programme in Education and Globalisation, Double Degree Programme), Pirkko Hyvönen (Master's Degree Programme in Learning, Education and Technology) Working life cooperation:

No Other information: No

# 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

Ei opintojaksokuvauksia.

# 408044S: Thesis Seminar, 5 op

Voimassaolo: 01.08.2015 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Ei opintojaksokuvauksia.