Opasraportti

Learning, Education and Technology (2014 - 2015)

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 2014-2015 here

Tutkintorakenteet

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

Tutkintorakenteen tila: archived

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

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 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

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

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

413312S: Collaborative Learning, 5 op
413314S: Designing Technology-Enhanced Learning, 5 op
413313S: Learning of Expertise, 10 op
413317S: Literature, 4 op
408013S: Master's Thesis, 35 - 40 op
408013S-01: Thesis, 30 op
408013S-02: Seminar, 5 op
408013S-03: Abstract / Maturity Test, 0 op
408517S: Research methodology, 10 op
413311S: Self-Regulated Learning, 8 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

ECTS Credits: 3 ECTS Language of instruction: English Timing: Autumn 2014

Learning outcomes:

After this course, the student is able to

- search for scientific publications in databases and evaluate them
- · identify a scientific text and what separates it from other publications
- use central referencing practices and the basic functions of bibliographic management software

Contents:

- Academic communication and writing
- · Characteristics and assessment of scientific texts
- Use of databases

Learning activities and teaching methods:

Contact teaching 8 h, practice sessions 16 h, collaborative and independent study in contact teaching sessions and online 56 h.

Target group:

Students in LET Master's degree program **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 and practice works. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Aino-Maaria Palosaari **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:

7 ECTS

Language of instruction:

English/Finnish

Timing:

Spring term, 1 st year studies in the LET 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 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"

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 st 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: no

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 <u>assessment criteria</u> 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

Opiskelumuoto: basic

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

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:

8 ECTS

Language of instruction:

English

Timing:

Autumn term, 2 nd year studies in the LET Master's Programme

Learning outcomes:

After completion of this course the students are able to

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

Contents:

- Computer-Supported Collaborative Learning (CSCL)
- Emotions and motivation in collaborative learning
- Structuring collaborative learning
- Metacognition and problem-solving in CSCL
- Collaborative academic writing

Mode of delivery:

Face-to-face and online

Learning activities and teaching methods:

Face-to-face 20 h

Individual online learning 58 h

Collaborative online learning 130 h

Target group:

2nd year students in the LET Master's Programme **Prerequisites and co-requisites:** No

Recommended optional programme components: Communication and Orientation Studies (405517Y) Introduction to Learning and Educational Technology (418019P) Learning Theory and Pedagogical Use of Technology (418020P)

Recommended or required reading: To be announced at the beginning of the course Assessment methods and criteria: Active participation in face-to-face and collaborative and individual 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

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

Ei opintojaksokuvauksia.

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

Ei opintojaksokuvauksia.

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.

408013S: Master's Thesis, 35 - 40 op

Voimassaolo: 01.08.2005 - 31.07.2016

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

35 cr

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, presentation of research plan and report, acting as a peer opponent, writing the thesis selfdirectedly

Target group:

Students in the Faculty of Education

Prerequisites and co-requisites:

Bachelor's Thesis

Recommended optional programme components:

Advanced course in quantitative/qualitative research

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 (the thesis abstract)

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

Grading:

0 - 5

Person responsible:

Hannu Heikkinen and the leaders of seminar groups

Working life cooperation:

None

Other information:

For details on current Bachelor's and Master's thesis groups, see <u>www.oulu.fi/ktk/opinnaytetyot</u>. The webpages are updated annually in the beginning of the autumn term.

Use code 408013S-02 Seminar for registering to the groups.

Compulsory

408013S-01: Thesis, 30 op

Voimassaolo: 01.08.2005 - 31.07.2016 Opiskelumuoto: Advanced Studies Laji: Diploma thesis Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Assessment methods and criteria:

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

408013S-02: Seminar, 5 op

Voimassaolo: 01.08.2005 - 31.07.2016 Opiskelumuoto: Advanced Studies Laji: Partial credit Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

408013S-03: Abstract / Maturity Test, 0 op

Voimassaolo: 01.08.2013 - 31.07.2016 Opiskelumuoto: Advanced Studies Laji: Partial credit Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Assessment methods and criteria:

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

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

DD: 2nd year, autumn and spring (in Oulu) LET: 1st year, autumn and spring **Learning outcomes:** After completion of the course, students are able to: • Identify the characteristics and main traditions of be

• 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

- 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:

0 - 5

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

ECTS Credits: 8 ECTS Language of instruction: English Timing: Autumn term, 1 st year studies in the LET Master's programme Learning outcomes: After completion of this course, the student

- understands the main principles and key concepts of self-regulated learning
- develops understanding of the practical implications of SRL in different real life contexts
- has experience of self-regulated learning and shared regulation of learning
- is capable of applying the basic principles of self-regulated learning to his/her own thinking

Contents:

Self-regulated learning is a process by which students regulate their cognition, motivation and emotions. During this course students are

- introduced theoretical principles of self-regulated learning aligned with practical examples. Furthermore, this course will provide guided opportunities for the students to
- apply principles of self-regulated learning in their own learning

Mode of delivery:

Face-to-face, individual and collaborative learning

Learning activities and teaching methods:

The course will be delivered in the autumn term. The course consists of four different learning phases each focusing on different aspects of self-regulated learning. Each phase has a similar structure: One day face-to-face following by one week individual and one week collaborative learning. During the independent and collaborative phases students will be working online.

Face-to-face 30 h

Individual learning 80 h

Collaborative learning 70 h

Target group:

1st year students in the LET Master's Programme

Prerequisites and co-requisites:

no

Recommended optional programme components:

no

Recommended or required reading:

• Hadwin, A. F., Järvelä, S., & Miller, M. (2011). Self-regulated, co-regulated and socially shared regulation of learning. In B. Zimmerman & D. Schunk (Eds.), Handbook of self-regulation of learning and performance (pp. 65-84). New York: Routledge .

Assessment methods and criteria:

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

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

Grading:

0-5

Person responsible: Sanna Järvelä Working life cooperation:

no