

MASTER'S DEGREE PROGRAMME IN LEARNING, EDUCATION AND TECHNOLOGY (LET)



CURRICULUM 2015-2017

Learning and Educational Technology Research Unit
Faculty of Education



OULUN YLIOPISTO
UNIVERSITY of OULU



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

Learning, Education and Technology (LET) is a full-time two-year international Master's Degree Programme (120 ECTS credits). After completing the programme, students are awarded a Master of Arts (Education) degree, which enables them to continue their academic studies at the doctoral level. 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 provides individual and collaborative learning skills, and understanding and developing these abilities are essential in this programme. Expertise includes abilities to use technologies in pedagogically grounded manners in different learning contexts.

LET Graduate Profile

Collaboration and teamwork are essential factors in today's working life. LET Master's Degree Programme students can implement the skills they gather during their studies in their own careers. A combination of strong theoretical knowledge of learning and collaboration, and modern use of information technology and social media that promotes learning is now a necessity, and priceless in the future.

Graduates from the LET 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. This degree does not constitute a formal teaching qualification.

LET graduates are able to:

- make use of the essential learning theories in the contexts of individual and collaborative learning, human resources, and lifelong learning
- pedagogically use and evaluate different technologies in interaction, learning, and content production
- design and implement technology-enhanced learning in local and global context
- explain the process of self-regulated learning and develop their self-regulated and co-regulated learning skills
- explicate practical and theoretical means for learning of expertise and monitor and reflect their individual progress of becoming experts in learning
- 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
- recognise the role of educational technology in the structures of higher education institutions, working life and society, and are able to take it into consideration in their own working life

Contents

The contents of the programme are based on central and recent research in the learning sciences and technology-enhanced learning. The core of the education consists of three theoretical viewpoints: self-regulated learning, collaborative learning, and the learning of expertise. In addition, the programme explores the significance of learning and educational technologies in working life and society both now and in the future.

Implementation

Technology-enhanced individual and collaborative learning methods are used in the practical implementation of the LET programme. The studies are implemented in collaboration with domestic and international research and teaching partners. In addition, collaboration with working life is central to the implementation of the programme. The language of teaching is English. The studies will be completed in two academic years and there will be both contact and online teaching. Teaching will be organised as full-time study.

Personal Study Plan and Reflection on Learning

At the beginning of the first autumn term each student will produce a personal study plan (PSP). The PSP is a written document which includes information on the student's study and career goals, structure and implementation of the studies, and completion of the various elements of the study programme. The attainment of the goals stated in the PSP will be assessed in individual discussions about the PSP with the programme coordinator in the first autumn. During the two years of studies each student will have regular (3 times) individual discussions on his/her PSP with the programme coordinator.

In addition, the student will reflect on his/her learning throughout the studies by writing a personal expert profile in the course called Learning of Expertise (413313S).

LET Degree Structure and Preliminary Timing of Studies

The LET Master's Degree Programme studies consist of general studies such as language, communication and orientation studies, minor subject studies, major subject studies and optional studies. *Minor changes are possible.*

Code	Title	ECTS	Timing – credits per term			
			Year 1 Autumn	Year 1 Spring	Year 2 Autumn	Year 2 Spring
General Studies: Language, Communication, and Orientation Studies						
	Language Studies (LANGUAGE) (see programme outline)	2	2			
405517Y	Communication and Orientation Studies (ORIENT)	3	3			
	total	5	5			
Minor Subject Studies: Introductory Studies in Educational Technology						
418019P	Introduction to Learning and Educational Technology (INTRO)	5	5			
418020P	Learning Theory and Pedagogical Use of Technology (THEORY)	7	7			
418021P	Designing Technology-Enhanced Learning (TEL1)	7		7		
418022P	Educational Projects (PROJECT)	6		6		
	total	25	12	13		
Major Subject Studies: Advanced Studies in Educational Sciences						
413311S	Self-Regulated Learning (SRL)	8	8			
413312S	Collaborative Learning (COLLAB)	8		8		
413313S	Learning of Expertise (EXPERT)	10	0,5	4	4	1.5
413314S	Designing Technology-Enhanced Learning 2 (TEL2)	5				5
413317S	Literature (LIT)	4				4
408517S-01	Quantitative methodology (QUANT)	5	2.5	2.5		
408517S-02	Qualitative methodology (QUALI)	5		3	2	
408043S	Thesis studies (RESEARCH)	35	2	7.5	11	14.5
	total	80	13	17	25	25
Optional Studies						
	Other studies freely selected by student	10			5	5
	total	10			5	5
	total for the degree	120	30	30	30	30

For more information about the programme, contact educational coordinator Niina Impiö (substitute: Karoliina Hautala) at let.coordinator@oulu.fi. The academics responsible for the studies are Professor Sanna Järvelä and PhD & post-doctoral researcher Essi Vuopala.

LET Programme Outline

1st year autumn

- 405517Y Communication and Orientation Studies (ORIENT)
- Language Studies (LANGUAGE)
 - Survival Finnish (for foreign students)
 - Swedish (for Finnish students)
 - Other Language Studies
- 413313S Learning of Expertise (EXPERT)
- 418019P Introduction to Learning and Educational Technology (INTRO)
- 418020P Learning Theory and Pedagogical Use of Technology (THEORY)
- 413311S Self-Regulated Learning (SRL)
- 408517S-01 Quantitative Methodology (QUANT), Lectures
- 408044S Thesis Studies (RESEARCH)

1st year spring

- 413313S Learning of Expertise (EXPERT)
- 418021P Designing Technology-Enhanced Learning (TEL1)
- 418022P Educational Projects (PROJECT)
- 408517S-01 Quantitative Methodology (QUANT), exercises
- 408517S-02 Qualitative Methodology (QUALI)
- 408044S Thesis Studies (RESEARCH)

2nd year autumn

- 413313S Learning of Expertise (EXPERT)
- 413312S Collaborative Learning (COLLAB)
- 408517S-02 Qualitative Methodology (QUALI)
- 408044S Thesis Studies (RESEARCH)
- Optional Studies

2nd year spring

- 413313S Learning of Expertise (EXPERT)
- 413314S Designing Technology-Enhanced Learning 2 (TEL2)
- 413317S Literature (LIT)
- 408044S Thesis Studies (RESEARCH)
- Optional Studies

General Studies: Language, Communication and Orientation Studies, 5 credits

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 programme. The general studies are divided into language studies (2 credits) and communication and orientation studies (3 credits).

Students must complete 2 credits of language studies:

- Foreign students must complete the Survival Finnish Course (code 405033Y). If they have already completed the Survival Finnish course or an equivalent Finnish course, or already have basic skills in Finnish, they can choose a more advanced level Finnish course (min. 2 credits) or a course in another language (min. 2 credits) from among the courses offered by the Languages and Communication Unit at the University.
- Finnish citizens must complete the Swedish language course (offered by the Language Centre at the university, code 901001Y). If they have already completed an equivalent course as a part of their Bachelor's degree, they must choose a min. 2 credits of other language studies from among the courses offered by the Languages and Communication Unit at the University. (If the student's previous studies have not included studies in Swedish, s/he can be exempted from these studies by application to the faculty.)

405033Y SURVIVAL FINNISH COURSE	
code	405033Y
ECTS credits	2
language of instruction	English
timing	Autumn term, 1 st year studies in the LET Master's Programme
learning outcomes	By the end of the course the student <ul style="list-style-type: none"> • understands and uses some common everyday expressions and phrases. • can locate informational content in simple texts and messages. • is able to identify the basic characteristics of Finnish language and Finnish communication styles.
contents	This is an introductory course which aims to help students to cope with the most common everyday situations in Finnish. During the course, the students <ul style="list-style-type: none"> • learn some useful everyday phrases, some general features of

	<p>vocabulary and grammar, and the main principles of pronunciation.</p> <p>The topics and communicative situations covered in the course are:</p> <ul style="list-style-type: none"> • general information about the Finnish language, some politeness phrases (how to greet people, thank and apologise), introducing oneself, giving and asking for basic personal information, numbers, some time expressions (how to tell and ask the time, days of the week, time of day), food, drink, and asking prices. <p>The structures studied are:</p> <ul style="list-style-type: none"> • personal pronouns and their possessive forms, forming affirmative, negative and interrogative sentences, the conjugation of some verbs, the basics of the partitive singular and some local cases to answer 'where' questions.
mode of delivery	Face- to-face
learning activities and teaching methods	Lessons twice a week (24 h) and individual learning (26 h).
target group	1 st year students in the Master's Programme in Learning, Education and Technology (foreign students)
prerequisites and co-requisites	
recommended or required reading	Study materials will be confirmed at the beginning of the course.
assessment methods and criteria	Regular and active participation in the weekly lessons (twice a week), homework assignments and written exam at the end of the course will be observed in assessment.
grading	0-5
person responsible	Jaana Isohätälä
other information	The lessons will be held twice a week during a 6-week period.

901001Y SWEDISH LANGUAGE	
code	901001Y
ECTS credits	2
language of instruction	Swedish
timing	Autumn term, 1 st year studies in the LET Master's Programme
learning outcomes	After completion of the course the student is able to <ul style="list-style-type: none"> • communicate in Swedish in the field of education
contents	The course introduces <ul style="list-style-type: none"> • professional vocabulary and

	<ul style="list-style-type: none"> communicative practice situations where Swedish is needed in the field of education..
mode of delivery	Face- to -face
learning activities and teaching methods	Face-to-face and individual learning
target group	1 st year students in the Master's Programme in Learning, Education and Technology (Finnish students who have not completed an equivalent course in Swedish as part of their Bachelor's thesis.)
prerequisites and co-requisites	The Languages and Communication Unit of the University has defined a prior knowledge requirement for this course, please check: http://www oulu fi/kielikoulutus/ruotsin_lahtotaso
recommended or required reading	Study materials will be confirmed at the beginning of the course.
assessment methods and criteria	Please check: http://www oulu fi/kielikoulutus/ruotsi/arviointikriteerit
grading	Please check: http://www oulu fi/kielikoulutus/ruotsi/arviointikriteerit
person responsible	Birgit Åberg-Karvonen
other information	For more information please check: http://www oulu fi/kielikoulutus/ruotsin_kurssit

405517Y COMMUNICATION AND ORIENTATION STUDIES (ORIENT)	
code	405517Y
ECTS credits	3
language of instruction	English
timing	Autumn term, 1 st year studies in the LET Master's Programme
learning outcomes	<p>After completion of this course, the student is able to</p> <ul style="list-style-type: none"> produce a Personal Study Plan search for scientific publications in databases and evaluate them identify a scientific text and distinguish it from other publications use most important referencing practices and basic functions of bibliographic management software
contents	<ul style="list-style-type: none"> Orientation to studies in the University of Oulu and especially in LET Master's Degree Programme Individual discussions about the Personal Study Plan with Personal Study Advisor and other students Academic communication and writing

	<ul style="list-style-type: none"> • Characteristics and assessment of scientific texts • Use of databases
mode of delivery	Face-to-face and online
learning activities and teaching methods	Face-to-face 16 h; practice sessions 8 h, collaborative and individual learning face-to-face and online 56 h, some of which with Personal Study Advisor and student tutors.
target group	1 st year students in the LET Master's Programme
recommended or required reading	Study materials will be confirmed at the beginning of the course.
assessment methods and criteria	Active participation, practice sessions and collaborative and independent work. Successful completion of all the learning assignments and exercises.
grading	Pass/Fail
person responsible	Niina Impiö, substitute Karoliina Hautala

Minor Subject Studies: Introductory Studies in Educational Technology, 25 credits

Minor Studies in Educational Technology are an essential part of LET Master's Degree Programme. It is also a valuable minor subject for any other students who aim to work with learning, education and technology. The minor studies produce knowledge and skills that are essential in working life today. In these studies the students learn to know the basics of Learning sciences and the field of educational technology. The goal of the studies is to learn to understand the processes of learning, supporting it with various instructional and technological tools. The studies are based on recent learning research and theoretical knowledge of learning. In these studies the students apply this knowledge to design technology-enhanced learning and implement an educational project. The studies are implemented with various methods, and working and studying in different groups has a major role in the studies. Learning is reflected throughout the studies in each student's personal digital portfolio.

After completion of the Introductory Studies in Educational Technology, the student knows how to

- identify the core concepts and theoretical frameworks in learning and educational technology
- use technology to support learning and evaluate its pedagogical usability
- design technology-enhanced learning
- plan, implement and evaluate educational projects
- work and study efficiently in teams
- reflect on and present his/her own expertise in a digital portfolio

All students must complete minor subject studies in Introductory Studies of Educational Technology. These studies consist of the following compulsory courses.

418019P INTRODUCTION TO LEARNING AND EDUCATIONAL TECHNOLOGY	
code	418019P
ECTS credits	5
language of instruction	English/Finnish
timing	Autumn term, 1 st year studies in the LET Master's Programme

learning outcomes	<p>After completion of this course, the student knows how to</p> <ul style="list-style-type: none"> • 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 their pedagogical usability • create a digital portfolio in the form of a personal journal in a weblog
contents	<ul style="list-style-type: none"> • Basic concepts of instruction, learning and technology enhanced learning • Introduction to the field of learning sciences and technology enhanced learning: objectives, research subjects and the 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	<p>Face-to Face 50h Collaborative and individual learning 80 h</p> <p>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.</p>
target group	<p>1st year students on the LET Master's Programme Educational Technology minor students Other students (as a part of their optional studies)</p>
recommended or required reading	<ul style="list-style-type: none"> • 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.
grading	0-5
person responsible	Essi Vuopala

418020P LEARNING THEORY AND PEDAGOGICAL USE OF TECHNOLOGY	
code	418020P
ECTS credits	7
language of instruction	English/Finnish
timing	Autumn term, 1st year studies in the LET Master's Programme
learning outcomes	<p>After completion of this course, the student knows how to</p> <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<p>Face-to-face 30 h Collaborative and individual learning 157 h</p> <p>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.</p>
target group	<p>1st year students on the LET Master's Programme Educational Technology minor students Other students (as a part of their optional studies)</p>
recommended or required reading	<ul style="list-style-type: none"> • 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.
grading	0-5
person responsible	Essi Vuopala

418021P DESIGNING TECHNOLOGY-ENHANCED LEARNING	
code	418021P
ECTS credits	7
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 <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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
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.
grading	0-5

person responsible	Essi Vuopala
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	
code	418022P
ECTS credits	6
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 <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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: <i>418019P Introduction to Learning and Educational Technology</i> <i>418020P Learning Theory and Pedagogical Use of Technology</i>
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.
grading	0-5
person responsible	Essi Vuopala

Major Subject Studies: Advanced Studies in Education 80 cr

All the students in the LET Master's Degree Programme must complete 80 credits of major subject studies.

After completion of the Major Subject Studies, the students will be able to:

- explain the process of self-regulated learning
- develop their self-regulated and co-regulated learning skills
- understand the theoretical basis of CSCL and possess an ability to implement it in practice by designing and evaluating it
- examine the concept of technology-enhanced learning theoretically
- implement the practices of using technology-enhanced learning
- examine the concept of learning of expertise
- use their own expertise in a life-long process of learning
- use research literature and research methods from the field of the learning sciences and educational technologies
- conduct scientific research combining learning and technology

The Advanced Studies in Education consist of the following compulsory courses.

413311S SELF-REGULATED LEARNING	
code	413311S
ECTS credits	8
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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • introduced theoretical principles of self-regulated learning

	<p>aligned with practical examples. Furthermore, this course will provide guided opportunities for the students to</p> <ul style="list-style-type: none"> • 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	<p>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.</p> <p>Face-to-face 30 h Individual learning 80 h Collaborative learning 70 h</p>
target group	1st year students in the LET Master's Programme
recommended or required reading	<ul style="list-style-type: none"> • 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.
grading	0-5
person responsible	Sanna Järvelä

413312S COLLABORATIVE LEARNING	
code	413312S
ECTS credits	8
language of instruction	English
timing	Autumn term, 2 nd year studies in the LET Master's Programme
learning outcomes	<p>After completion of this course the students are able to</p> <ul style="list-style-type: none"> • 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

	<ul style="list-style-type: none"> • Improve collaborative academic writing and argumentation skills
contents	<ul style="list-style-type: none"> • 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
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.
grading	0-5
person responsible	Essi Vuopala

413313S LEARNING OF EXPERTISE

code	413313S
ECTS credits	10
language of instruction	English
timing	1 st and 2 nd year studies in the LET Master's Programme
learning outcomes	<p>After the completion of this course, the student</p> <ul style="list-style-type: none"> • is able to examine the learning of expertise as a lifelong process that one can pursue oneself • understands the theoretical framework for the learning of expertise and is able to apply it in practice • is able to interpret and explain the factors affecting the learning of expertise • is able to monitor and reflect on learning and awareness of one's competence to excel in authentic situations in working life

contents	<ul style="list-style-type: none"> • Education, working life and expertise • Theoretical background of the learning of expertise • Working strategies characteristic of an expert • Collaborative problem solving methods
mode of delivery	face-to-face and online
learning activities and teaching methods	<p>Students will work on three cases using collaborative problem solving methods.</p> <p>Case 1 (3 credits) Students will reflect on their own expertise as a process by writing an expert profile (five times during 2-year programme)</p> <p>Case 2 (3 credits) Students will participate in the process of mentoring as they will be working as mentees in their 1st year of studies and as mentors in their 2nd year of studies.</p> <p>Case 3 (4 credits) In this course there will also be casework implemented together with working life partners.</p>
target group	1 st and 2nd year students in the LET Master's Programme
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 learning. Successful completion of all the learning assignments and exercises.
grading	0-5
person responsible	Essi Vuopala and Niina Impiö, substitute Karoliina Hautala

413314S DESIGNING TECHNOLOGY-ENHANCED LEARNING 2	
code	413314S
ECTS credits	5
language of instruction	English
timing	Spring term, 2 nd year studies in the LET Master's Degree Programme
learning outcomes	<p>After completion of the course, the students will be able to</p> <ul style="list-style-type: none"> • recognise the needs, problems, situations and practices of pedagogical use of technologies in school systems worldwide and find research-based solutions for the shortcomings • examine future trends of technology enhanced learning

	<ul style="list-style-type: none"> determine current problems, situations and practices of technology enhanced learning in a global context analyse the concept of technology-enhanced learning
contents	<ul style="list-style-type: none"> Future trends in collaborative technologies Evaluating and facilitating TEL Digital divide and other global challenges
mode of delivery	face-to-face and online learning activities, which include individual and collaborative learning
learning activities and teaching methods	face-to-face 30 h and collaborative and individual learning tasks 100 h
target group	2nd year students in the LET Master's Programme
prerequisites and co-requisites	Before joining this course, the student should have completed Minor Studies of Educational Technology (25 credits) or other equivalent studies.
recommended or required reading	<ul style="list-style-type: none"> Luckin, R., Goodyear, P., Grabowski B. L., Winters, N., Underwood, J. and Puntambekar, S. (Eds.) (2013). Handbook of design in educational technology. Routledge.
assessment methods and criteria	Active participation in face-to-face, collaborative and individual work. Successful completion of all the learning assignments and exercises.
grading	0-5
person responsible	Jari Laru

413317S LITERATURE	
code	413317S
ECTS credits	4
language of instruction	English
timing	Spring term, 2 nd year studies in the LET Master's Programme
learning outcomes	After completion of this course the students will be able to expand their knowledge on one area of the learning sciences by <ul style="list-style-type: none"> defining key literacy and applying it to their Master's thesis work
contents	<ul style="list-style-type: none"> Selected literature from the field of learning sciences
mode of delivery	Individual learning
target group	2nd year students in the LET Master's Programme

recommended optional programme components	Related to Thesis Studies (Research)
recommended or required reading	Recommended reading (Selected articles): <ul style="list-style-type: none"> • Zimmerman, B.J. & Schunk, D.H. (Eds.) Handbook of self-regulation of learning and performance. • Boekaerts, M., Pitrich, P-R., & Zeidner, M. (Eds.) Handbook of self-regulation. • Khine, M.S. & Saleh, I.M. (Eds.) New science of learning. Cognition, computers and collaboration in learning. • And/or other contemporary readings in the field
assessment methods and criteria	Students select a combination of six articles in one area of the learning sciences and apply them to promote their Master's theses.
grading	0-5
person responsible	Essi Vuopala

408517S-01 QUANTITATIVE METHODOLOGY

code	408517S-01
ECTS credits	5
language of instruction	English
timing	Autumn term, 1st year studies in the LET Master's Programme (Lectures) Spring term, 1st year studies in the LET Master's Programme (Exercises)
learning outcomes	After completion of this course, the students are able to <ul style="list-style-type: none"> • process and analyse quantitative data • report on results based on quantitative research data • assess the reliability and validity of a quantitative study • apply the knowledge thus gained to his or her Master's thesis
contents	<ul style="list-style-type: none"> • 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 data to theory • Questions of reliability and validity in quantitative research
mode of delivery	face-to-face

learning activities and teaching methods	Lectures in the autumn term and practical sessions in the spring term. Face-to-face 40 h, practical sessions and familiarizing oneself with the preliminary materials 70 h, collaborative and independent study 49 h.
target group	1 st year students in the LET Master's Programme
recommended optional programme components	Related to Thesis Studies (RESEARCH)
recommended or required reading	To be announced at the beginning of the course
assessment methods and criteria	Active participation in face-to-face, collaborative and independent work. Successful completion of all the learning assignments and exercises.
grading	0-5
person responsible	Jouni Peltonen

408517S-02 QUALITATIVE METHODOLOGY

code	408517S-02
ECTS credits	5
language of instruction	English
timing	Spring term, 1 st year studies in the LET Master's Programme (Lectures) Autumn term, 2nd year studies in the LET Master's Programme (Exercises)
learning outcomes	After completion of this course the students will be able to <ul style="list-style-type: none"> • compile a research plan and report • process and analyse qualitative data • describe and report on results based on qualitative research data • evaluate the ethicality and reliability of qualitative research • apply the knowledge thus gained to his or her Master's thesis
contents	<ul style="list-style-type: none"> • Basic and central concepts of qualitative research • Qualitative research approaches • Research plan • Theoretical framework • Research data and its analysis • Ethicality and reliability

	<ul style="list-style-type: none"> • Writing a research publication
mode of delivery	face-to-face and online
learning activities and teaching methods	Students explore the tradition of qualitative research, particularly the methods used in learning research. The main focus of the course will be in perceiving the research process as a whole and working on the students' own Master's theses. Face-to-face and online learning.
target group	1 st and 2 nd year students in the LET Programme
recommended optional programme components	Related to Thesis Studies (RESEARCH)
recommended or required reading	<ul style="list-style-type: none"> • American Psychological Association: Publication Manual of the American Psychological Association. (2009). 6th edition.
assessment methods and criteria	Active participation and collaborative and individual work. Successful completion of all the learning assignments and exercises.
grading	0-5
person responsible	Essi Vuopala

408043S THESIS STUDIES	
code	408043S Master's Thesis 30 credits 408044S Thesis Seminar 5 credits 408045S Abstract / Maturity Test 0 credits
ECTS credits	35
language of instruction	English
timing	Autumn and spring terms, 1 st and 2 nd year studies in the LET Master's Programme
learning outcomes	<p>After completion of this course, the students are able to</p> <ul style="list-style-type: none"> • reflect on their previous experience and skills when doing research • take active part in research collaboration • deepen their understanding of the learning sciences (self-regulated learning and collaborative learning as a theoretical basis for research) • review relevant research literature, evaluating it scientifically and ethically • plan and implement data collection • analyse research data

	<ul style="list-style-type: none"> design the research process and produce a research publication
contents	<ul style="list-style-type: none"> LET research themes (SRL and collaborative learning) Literature review Research process; research design and research plan Methodologies Collaboration in a research team
mode of delivery	face-to-face and online
learning activities and teaching methods	Active participation in face-to-face seminars and collaborative and individual work. Successful completion of all the learning assignments and exercises.
target group	1 st and 2 nd year students in the LET Master's Programme
prerequisites and co-requisites	To be completed together with two other LET Master's Programme research-related courses (see below)
recommended optional programme components	Qualitative Methodology (QUALI) Quantitative Methodology (QUANT)
recommended or required reading	The recommended or required study materials depend on the topic of the student's Master's thesis
assessment methods and criteria	Master's thesis
grading	0-5
person responsible	Essi Vuopala and Sanna Järvelä

Optional Studies, 10 credits

The student can select a total of 10 credits of optional studies from a selection of courses announced separately. The courses are implemented in collaboration with the other Master's Degree Programmes at the University of Oulu and international partners. The available study module selection varies by academic year. Students can select their optional studies, e.g. on the basis of their previous studies, thesis topic, or personal interests.