Opasraportti

LTK - Radiography (2010 - 2011)

DEGREE PROGRAMME IN RADIOGRAPHY 2010-2011

Information on degree programmes

1. General descriptions

Qualification awarded: Bachelor of Health Sciences, Master of Health Sciences
Admission requirements: Radiographer's degree (post-secondary/polytechnic level)
Educational and professional goals: Degree programme in radiography aims to provide the students with competencies for working as experts in planning, development, and managerial posts within radiography. With individual minor selection, the student can direct his/her studies towards qualification e.g. as a department head, a teacher, or a clinical expert in radiography.
Access to further studies: After completing the Master's degree, the student is eligible for applying for postgraduate education (licentiate degree, doctoral degree).
Course structure diagram with ECTS credits (60 per year): The Bachelor's degree consists of general studies (orientate and language studies, 52 credits), basic studies (25 cr) and intermediate studies (38 cr) in radiography, studies in minor subject(s) and optional studies (55 cr), and a Bachelor's thesis (10 cr). General studies are same in each programme/major subject. The Master's degree consists of advanced studies in radiography (30 cr), studies in minor subject(s) and optional studies (60 cr), and a Master's thesis (30 cr). Some studies on Bachelor's level (parts of general studies, basic studies, and optional studies) are compensated for by previous studies, so that the Bachelor's degree can be completed in 1,5-2 years (full-time study).
Course structure in the basic, intermediate and advanced studies in radiography are as follows:

Basic studies in radiography (Bachelor's degree), 25 credits:
351008P Elementary course in research, 2 cr
or
351141P Dissertation analysis in radiography, 2 cr
351190P Introduction to radiography science, 5 cr
351191P Clinical radiography, 12 cr
351140P Co-operation in health care: Projects, teams, and networks, 6 cr
or
351199P Studies in selected modality in clinical radiography, 6 cr

Intermediate studies and bachelor's thesis in radiography (Bachelor's degree), 48 credits:

352107A Research methods I, 4 cr
or

352316A Radiography research today, 4 cr
352312A Philosophy and ethics in radiography, 5 cr
352313A Scientific basis of radiography, 8 cr
352196A Optimization of radiation exposure, 12 cr
352314A Theory development and evaluation in radiography science, 5 cr
352195A Evaluation of total quality in radiography, 4 cr

352114A Bachelor's thesis , 10 cr
353205S Written maturity test

Advanced studies and pro gradu thesis in radiography (Master's degree), 60 credits:

353450S Advanced studies in radiography science, 10 cr
353203S Research methods II, 10 cr
353204S Seminar group, 10 cr
353206S Pro gradu thesis, 30 cr

Courses per academic years:

1. year (ca. 60 credits in total):
General studies

Basic and intermediate studies in radiography:
351008P Elementary course in research; or
351141P Dissertation analysis in radiography
351190P Introduction to radiography science
351140P Co-operation in health care: Projects, teams, and networks; or
351199P Studies in selected modality in clinical radiography
352107A Research methods I; or
352316A Radiography research today
352312A Philosophy and ethics in radiography
352313A Scientific basis of radiography (begins)
352114A Bachelor's thesis (begins)
Studies in minor subject
Optional studies

2. year (ca. 60 credits in total):
General studies
Intermediate and advanced studies in radiography:
352313A Scientific basis of radiography (continues)
352195A Evaluation of total quality in radiography
352196A Optimization of radiation exposure
352314A Theory development and evaluation in radiography science
352114A Bachelor's thesis (continues)
353205S Written maturity test
353203S Research methods II
353450S Advanced studies in radiography science (begins)
Studies in minor subject
Optional studies

3. year (ca. 60 credits in total):
Advanced studies in radiography:
353450S Advanced studies in radiography science (continues)
353204S Seminar group (begins)
353206S Pro gradu thesis (begins)
Studies in minor subject
Optional studies

4. year:
Advanced studies in radiography:
353204S Seminar group (continues)

353206S Pro gradu thesis (continues)
Studies in minor subject
Optional studies

5. year:
Advanced studies in radiography:
353206S Pro gradu thesis (continues)
Studies in minor subject
Optional studies

Final examination:
Bachelor's thesis , 10 credits (Bachelor's degree);
Pro gradu thesis, 30 credits (Master's degree); a written maturity test.

Examination and assessment regulations: University of Oulu Rules of procedure; assessment is based on course objectives and detailed assessment criteria.
ECTS-departmental co-ordinator: amanuensis of the Institute of Health Sciences

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

353450S: Advanced studies in radiography, 10 op
351198P: Basics of digital imaging, 4 op
350038Y: Basics of physics, 6 op
351191P: Clinical radiography, 12 op
352403A: Clinical studies in sonography, 19 op
351141P: Dissertation analysis in radiography, 2 op
352228A: Elective special research course, 3 - 10 op
352312A: Ethics and philosophy of radiography, 5 op
351190P: Introduction to radiography, 5 op
352196A: Optimation of radiation dose, 12 op
352195A: Quality assessment of work and service in radiography, 4 op
350039Y: Radiation biology and radiation safety, 6 op
350036Y: Radiation physics and isotope technique, 6 op
352316A: Radiography research today, 4 op
A543803: Radiography, advanced studies, 66 op
A543801: Radiography, basic studies, 28,5 op
A543802: Radiography, intermediate studies, 47 op
352198A: Radioisotope examinations, 1 op
352313A: Scientific foundation of clinical radiography, 8 op
352192A: Scientific foundations of diagnostical radiography, 7 op
351199P: Special area studies in clinical radiography, 6 op
352197A: Specialising studies in radiographic work, 7,5 op
352314A: Theory development and evaluation in radiography science, 5 op
350037Y: Topographic anatmy, 2 op

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

353450S: Advanced studies in radiography, 10 op

Opiskelumuoto: Advanced Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Learning activities and teaching methods:
Will be specified later.
Assessment methods and criteria:
Will be specified later.
Other information:
Part 2 will not be offered autumn 2010.

351198P: Basics of digital imaging, 4 op

Voimassaolo: 01.08.2003 -
Opiskelumuoto: Basic Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

350038Y: Basics of physics, 6 op

Opiskelumuoto: General Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

351191P: Clinical radiography, 12 op

Opiskelumuoto: Basic Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
12 ECTS

Language of instruction:
Finnish
Person responsible:
Senior assistant in radiography
Other information:
Will be compensated for by radiographer's degree

352403A: Clinical studies in sonography, 19 op

Voimassaolo: 01.08.2003 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opettajat: Antti Niemi
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

351141P: Dissertation analysis in radiography, 2 op

Voimassaolo: 01.08.2008 -
Opiskelumuoto: Basic Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS
Language of instruction:
Finnish
Timing:
1 st year spring term
Learning outcomes:
The student trains himself/herself to evaluate a research report

Contents:
The student analyses one doctoral dissertation in radiography by evaluating it according to assigned criteria
Learning activities and teaching methods:
independent study
Target group:
Students who take course 351008P Elementary course in research, as a part of other studies than radiography
Recommended or required reading:
Paunonen & Vehviläinen-Julkunen (eds.) 1997. Hoitotieteen tutkimusmetodiikka. WSOY, Juva (parts)
Assessment methods and criteria:
Essay
Grading:
Pass/ Fail
Person responsible:
Senior assistant in radiography
Other information:
Course stands for 351008P Elementary course in research, for those students who take 351008P as part of other studies than radiography

352228A: Elective special research course, 3 - 10 op

Voimassaolo: 01.08.2010 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1-5 credits
Language of instruction:
Finnish or English
Timing:
According to a personal study plan.
Learning outcomes:
Student has got acquainted with phases of research process and doing research according to a personal study plan.
Contents:
According to a personal study plan.
Learning activities and teaching methods:
Student plans an individual learning task with the responsible teacher.
Assessment methods and criteria:
According to a personal study plan.
Grading:
pass-fail
Person responsible:
Responsible person of the research project.
Other information:
The course suits for bachelor's and master's degree studies as elective studies.

352312A: Ethics and philosophy of radiography, 5 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen oppimateriaali:
Koskinen, L. , , 2003
Opintokohteen kielet: Finnish

ECTS Credits:
5 ECTS
Language of instruction:
Finnish
Timing:
1st year spring term
Learning outcomes:
After completing the course, the student is able to recognize ethical concepts and theories, and is able to apply them in radiography together with ethical principles. The student is able to participate in philosophical/ethical discussion and problem solving in a critical, challenging and constructive manner.
Contents:
Basic philosophical and ethical concepts and theories in health care. Philosophical and ethical basis, central ethical principles, and current philosophical and ethical issues in radiography. Recognition and management of philosophical and ethical matters.
Learning activities and teaching methods:
Will be specified later.
Recommended or required reading:
Will be specified later.
Assessment methods and criteria:
Active participation, written exercise presented in seminars

Grading:
5-1/fail
Person responsible:
Senior assistant in radiography
Other information:
Will not be offered 2010-11.

351190P: Introduction to radiography, 5 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Institute of Health Sciences

Arvostelu: 1 - 5, pass, fail

Opintokohteen oppimateriaali:
Kiikeri, Mika , , 2004
Niiniluoto, I,
Haaparanta, Leila , , 1986
Opintokohteen kielet: Finnish

ECTS Credits:
5 ECTS
Language of instruction:
Finnish
Timing:
1st year autumn term
Learning outcomes:
After completing the course, the student is aware of bases and history of radiography science, as well as focal contentual and structural issues. The student is able to evaluate radiography science in terms of academic community and society.

Contents:
History, present and future of radiography science. Connections to related sciences. Focus, perspective and concepts of radiography science. Radiography science as a developing field of science, and as an academic subject.
Learning activities and teaching methods:
Will be specified later.
Recommended or required reading:
Part 1, literature package: Kiikeri & Ylikoski 2004. Tiede tutkimuskohteena. Filosofinen johdatus tieteentutkimukseen. Gaudeamus, Tampere. (parts); Niiniluoto 1997. Johdatus tieteenfilosofiaan: käsitteen- ja teorianmuodostus. Otava. Helsinki. (parts); Haaparanta & Niiniluoto (1993) Johdatus tieteelliseen ajatteluun. (parts). Liikanen & Ahonen 2008. Uuden tieteen haasteet: Kliininen laboratoriotiede ja radiografia. Niin & Näin - Filosofinen aikakauslehti, 1/2008: 52-55. Part 2: Current articles and other literature, will be specified at the beginning of the course
You can check the literature at this link
Assessment methods and criteria:
Will be specified later.
Grading:
5-1/fail
Person responsible:
Senior assistant in radiography
Other information:
Will be not offered 2010-11.

352196A: Optimation of radiation dose, 12 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Institute of Health Sciences

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Learning activities and teaching methods:
Will be specified later.
Assessment methods and criteria:
Will be specified later.

352195A: Quality assessment of work and service in radiography, 4 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
4 ECTS
Language of instruction:
Finnish
Timing:
2nd year spring term
Learning outcomes:
After completing the course, the student is able to recognize and critically evaluate different approaches for total quality in radiography, and in terms of health care in general. The student is familiar with common methods of quality evaluation, and is able to present proposals for quality development in terms of clinical practice, education, and management.

Contents:
Basis, concepts and process of quality evaluation in health care. Different approaches for total quality in radiography, evaluation methods, and current challenges in terms of clinical practice, education, and management.
Learning activities and teaching methods:
Will be specified later.
Recommended or required reading:
Current articles and other literature, will be specified at the beginning of the course
Assessment methods and criteria:
Active participation, written exercise
Grading:
5-1/fail
Person responsible:
Seniorn assistant in radiography
Other information:
Cannot be compensated for by previous studies.

350039Y: Radiation biology and radiation safety, 6 op

Opiskelumuoto: General Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

350036Y: Radiation physics and isotope technique, 6 op

Opiskelumuoto: General Studies

Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

352316A: Radiography research today, 4 op

Voimassaolo: 01.01.2008 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
4 ECTS
Language of instruction:
Finnish
Timing:
1st year spring term
Learning outcomes:
After completing the course, the student is able to describe and evaluate methodological and contentual focuses on radiography research in general
Contents:
Topics and methodology in radiography research in general. Current issues related to research interests and methodologies in radiography research.
Learning activities and teaching methods:
Independent study
Target group:
Students who take 352107A Research methods I, as part of other studies than radiography
Recommended optional programme components:
351008P Elementary course in research
Recommended or required reading:
Current articles and other literature, will be specified at the beginning of the course
Assessment methods and criteria:
Essay
Grading:
5-1/fail
Person responsible:
Senior assistant in radiography
Other information:
Course stands for 352107A Research methods I, for students who take 352107A as part of other studies than radiography

A543803: Radiography, advanced studies, 66 op

Opiskelumuoto: Advanced Studies
Laji: Study module
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

A543801: Radiography, basic studies, 28,5 op

Opiskelumuoto: Basic Studies
Laji: Study module
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

A543802: Radiography, intermediate studies, 47 op

Opiskelumuoto: Intermediate Studies
Laji: Study module
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

352198A: Radioisotope examinations, 1 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

352313A: Scientific foundation of clinical radiography, 8 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
8 ECTS
Language of instruction:
Finnish
Timing:
1st year spring (part 1, 5 credits) and 2nd year autumn (part 2, 3 credits)
Learning outcomes:
After completing the course, the student is able to evaluate the role of radiography science in the knowledge base for clinical practice. The student is able to distinguish the radiography perspective for common current issues in health care. The student is able to evaluate and challenge professional culture in radiography. The student is able to recognize the process and different kinds of evidence for evidence-based radiography, and is able to compare and apply them in terms of clinical practice, radiography education, and management. The student is able to critically evaluate a scientific paper.
Contents:

Part 1: Radiography as a part of multidisciplinary environment of health care. Part 2: Professional culture in radiography. Radiography science as a producer of knowledge base for radiography. Evidence-based radiography, and usage of research in clinical practice, education, and management. Evaluation of evidence.
Learning activities and teaching methods:
Part 1: see 352315A Health care today. Part 2: Will be specified later.
Recommended optional programme components:
351008P Elementary course in research
Recommended or required reading:
Part 1: see 352315A in nursing science programme. Part 2: Current articles and other literature, will be specified at the beginning of the course
Assessment methods and criteria:
Part 1: see 352315A in nursing science programme. Part 2: Will be specified later.
Grading:
5-1/fail
Person responsible:
Senior assistant in radiography
Other information:
Cannot be compensated for by previous studies.
Part 1 will not offered spring 2011.

352192A: Scientific foundations of diagnostical radiography, 7 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Institute of Health Sciences

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

351199P: Special area studies in clinical radiography, 6 op

Voimassaolo: 01.08.2008 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Institute of Health Sciences

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:
6 ECTS
Language of instruction:
Finnish
Timing:
1st year spring term
Learning outcomes:
After completing the course, the student is able to recognize and describe current issues within the selected modality in clinical radiography. The student is capable of posing reasonable developmental proposals for these issues in practice, especially from the perspective of multiprofessional collaboration or teamwork.
Contents:
Current issues and developmental challenges in the selected modality in clinical radiography examined on the grounds of literature and clinical practice. Application of the perspective of multiprofessional collaboration or teamwork.
Learning activities and teaching methods:
Independent study
Target group:

Students who take course 351140P Co-operation in health care: Projects, teams and networks **,** as a part of studies in health administration science
Recommended or required reading:
Current articles and other literature, will be specified at the beginning of the course
Assessment methods and criteria:
Essay
Grading:
5-1/fail
Person responsible:
Senior assistant in radiography
Other information:
Course stands for 351140P Co-operation in health care: Projects, teams and networks **,** for students who take 351140P as part of studies in health administration science

352197A: Specialising studies in radiographic work, 7,5 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

352314A: Theory development and evaluation in radiography science, 5 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen oppimateriaali:
Lauri, Sirkka , , 2005
Rodgers, B.L. & Knafl, K.A., , 1993
McEwen, M. & Wills, E.M, , 2002
Opintokohteen kielet: Finnish

Learning activities and teaching methods:
Will be specified later.
Assessment methods and criteria:
Will be specified later.

350037Y: Topographic anatmy, 2 op

Opiskelumuoto: General Studies
Laji: Course
Vastuuyksikkö: Institute of Health Sciences
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.