Opasraportti

UNIOGS - University of Oulu Graduate School (2019 - 2020)

Coordinators of the Graduate School

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- PhD Teemu Pennanen, Information Technology and Electrical Engineering
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Tutkintorakenteet

Doctor of Philosophy (Technology), Doctoral Degree Programme in Electrical Engineering

Tutkintorakenteen tila: published
General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in electronical engineering may be required to take up to 15 credits of bridging studies. The bridging studies will reduce the required field specific studies.

General- and Transferable Skills Studies

920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Other Field Specific Studies 28-32 credits.

Field Specific Studies

920020J: Acceptance and Grading of the Thesis, 0 op
920012J: Doctoral Training Plan, 3 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op
920021J: Research Group, 0 op
520023J: Research Plan and Seminar, Seminar, 1 op

Doctoral Thesis

520001J: Electrical Engineering, thesis, 0 op

Doctor of Science (Technology), Doctoral Degree Programme in Electrical Engineering

Tutkintorakenteen tila: published
Lukuvuosi: 2019-20
Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in electronical engineering may be required to take up to 15 credits of bridging studies. The bridging studies will reduce the required field specific studies.
General- and Transferable Skills Studies

920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Other Field Specific Studies 28-32 credits.

Field Specific Studies

920020J: Acceptance and Grading of the Thesis, 0 op
920012J: Doctoral Training Plan, 3 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op
920021J: Research Group, 0 op
520023J: Research Plan and Seminar, Seminar, 1 op

Doctoral Thesis

520001J: Electrical Engineering, thesis, 0 op

Doctor of Philosophy (Technology), Doctoral Degree Programme in Computer Science and Engineering

Tutkintorakenteen tila: published
Lukuvuosi: 2019-20
Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.
Other Field Specific Studies 28-32 credits.

Field Specific Studies

920020J: Acceptance and Grading of the Thesis, 0 op
920012J: Doctoral Training Plan, 3 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op
920021J: Research Group, 0 op
521023J: Research Plan and Seminar, Seminar, 1 op

Doctoral Thesis

521001J: Information Engineering, thesis, 0 op

Doctor of Science (Technology), Doctoral Degree Programme in Computer Science and Engineering

Tutkintorakenteen tila: published
Lukuvuosi: 2019-20
Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Other Field Specific Studies 28-32 credits.

Field Specific Studies

920020J: Acceptance and Grading of the Thesis, 0 op
920012J: Doctoral Training Plan, 3 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op
920021J: Research Group, 0 op
521023J: Research Plan and Seminar, Seminar, 1 op

Doctoral Thesis
General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Field Specific Studies (28 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Doctoral Thesis

Doctor of Science (Technology), Doctoral Degree Programme in Communications Engineering

Tutkintorakenteen tila: published
Lukuvuosi: 2019-20
Lukuvuoden alkamispäivämäärä: 01.08.2019
General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (28 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920020J: Acceptance and Grading of the Thesis, 0 op
920012J: Doctoral Training Plan, 3 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op
920021J: Research Group, 0 op
522023J: Research Plan and Seminar, Seminar, 1 op

Doctoral Thesis

522001J: Telecommunication Engineering, thesis, 0 op

Doctor of Philosophy, Doctoral Degree Programme in Information Processing Science

Tutkintorakenteen tila: published

Lukuvuosi: 2019-20

Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op
Field Specific Studies (32 - 36 op)
The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies
920020J: Acceptance and Grading of the Thesis, 0 op
920012J: Doctoral Training Plan, 3 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op
920021J: Research Group, 0 op
816624J: Research Plan and Seminar, seminar, 1 op

Doctoral Thesis (vähintään 0 op)
816669J: Doctoral Thesis in Information Processing Science, 0 op

Doctor of Philosophy, Architecture
Tutkintorakenteen tila: published
Lukuvuosi: 2019-20
Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (4 - 14 op)
The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies
920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (26 - 36 op)
The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies
920020J: Acceptance and Grading of the Thesis, 0 op
920012J: Doctoral Training Plan, 3 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op
920021J: Research Group, 0 op
450023J: Research Plan and Seminar, Seminar, 1 op

Doctoral Thesis (vähintään 180 op)
Doctor of Philosophy, Physics

Tutkintorakenteen tila: published
Lukuvuosi: 2019-20
Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (4 - 8 op)
The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies
920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)
The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies
920020J: Acceptance and Grading of the Thesis, 0 op
920012J: Doctoral Training Plan, 3 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op
920021J: Research Group, 0 op
766692J: Research Plan and Seminar, Seminar, 1 op

Doctoral Thesis
766602J: Ph.D. Thesis in Physics, 0 op

Doctor of Philosophy, Astronomy

Tutkintorakenteen tila: published
Lukuvuosi: 2019-20
Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (4 - 8 op)
The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.
General- and Transferable Skills Studies

920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920020J: Acceptance and Grading of the Thesis, 0 op
920012J: Doctoral Training Plan, 3 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op
920021J: Research Group, 0 op
766692J: Research Plan and Seminar, Seminar, 1 op

Doctoral Thesis

766602J: Ph.D. Thesis in Physics, 0 op

Doctor of Science, Architecture

Tutkintorakenteen tila: published
Lukuvuosi: 2019-20
Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (4 - 14 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (26 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies


Doctoral Thesis

450001J: Architecture, thesis, 0 op

Doctor of Philosophy, Medicine

Tutkintorakenteen tila: published

Lukuvuosi: 2019-20

Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Optional General- and Transferable Skills Studies

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies (4 credits)

920012J: Doctoral Training Plan, 3 op
920021J: Research Group, 0 op
046034J: Research plan and seminar, seminar, 1 op

Optional Field Specific Studies

Thesis examination process

920020J: Acceptance and Grading of the Thesis, 0 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op
Doctor of Philosophy, Medical Physics and Technology

Tutkintorakenteen tila: published

Lukuvuosi: 2019-20

Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Optional General- and Transferable Skills Studies

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies (4 credits)

920012J: Doctoral Training Plan, 3 op
920021J: Research Group, 0 op
046034J: Research plan and seminar, seminar, 1 op

Optional Field Specific Studies

Thesis examination process

920020J: Acceptance and Grading of the Thesis, 0 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op

Thesis book

046001J: Medicine, thesis, 0 op

Doctor of Dental Science, Medicine
General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies (4 credits)

920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Optional General- and Transferable Skills Studies

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies (4 credits)

920012J: Doctoral Training Plan, 3 op
920021J: Research Group, 0 op
046034J: Research plan and seminar, seminar, 1 op

Optional Field Specific Studies

Thesis examination process

920020J: Acceptance and Grading of the Thesis, 0 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op

Thesis book

046001J: Medicine, thesis, 0 op

Doctor of Dental Science, Medical Physics and Technology

Tutkintorakenteen tila: published
Lukuvuosi: 2019-20
Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (vähintään 4 op)
The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies (4 credits)

- 920017J: First Follow-up Group Meeting, 0 op
- 920007J: Follow-up Group Reporting and meetings, 1 op
- 920001J: Introduction to Doctoral Training, 1 op
- 920014J: Midterm Report of Doctoral Training, 0 op
- 920022J: Nomination of follow-up group, 0 op
- 920002J: Scientific Research and Ethics, 2 op

Optional General- and Transferable Skills Studies

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies (4 credits)

- 920012J: Doctoral Training Plan, 3 op
- 920021J: Research Group, 0 op
- 046034J: Research plan and seminar, seminar, 1 op

Optional Field Specific Studies

Thesis examination process

- 920020J: Acceptance and Grading of the Thesis, 0 op
- 920019J: Permission to defend the thesis, 0 op
- 920018J: Pre-examination, 0 op

Thesis book

- 046001J: Medicine, thesis, 0 op

Doctor of Dental Science, Oral Health Sciences

Tutkintorakenteen tila: published

Lukuvuosi: 2019-20

Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies (4 credits)

- 920017J: First Follow-up Group Meeting, 0 op
- 920007J: Follow-up Group Reporting and meetings, 1 op
- 920001J: Introduction to Doctoral Training, 1 op
- 920014J: Midterm Report of Doctoral Training, 0 op
Optional General- and Transferable Skills Studies

Field Specific Studies (vähintään 16 op)
The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies (4 credits)
920012J: Doctoral Training Plan, 3 op
920021J: Research Group, 0 op
046034J: Research plan and seminar, seminar, 1 op

Optional Field Specific Studies

Thesis examination process
920020J: Acceptance and Grading of the Thesis, 0 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op

Thesis book
046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Medicine

Tutkintorakenteen tila: published
Lukuvuosi: 2019-20
Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (vähintään 4 op)
The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies (4 credits)
920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Optional General- and Transferable Skills Studies

Field Specific Studies (vähintään 16 op)
The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

**Field Specific Studies (4 credits)**

920012J: Doctoral Training Plan, 3 op  
920021J: Research Group, 0 op  
046034J: Research plan and seminar, seminar, 1 op

**Optional Field Specific Studies**

**Thesis examination process**

920020J: Acceptance and Grading of the Thesis, 0 op  
920019J: Permission to defend the thesis, 0 op  
920018J: Pre-examination, 0 op

**Thesis book**

046001J: Medicine, thesis, 0 op

**Doctor of Medical Science, Medical Physics and Technology**

Tutkintorakenteen tila: published  
Lukuvuosi: 2019-20  
Lukuvuoden alkamispäivämäärä: 01.08.2019

**General- and Transferable Skills Studies (vähintään 4 op)**

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

**General- and Transferable Skills Studies (4 credits)**

920017J: First Follow-up Group Meeting, 0 op  
920007J: Follow-up Group Reporting and meetings, 1 op  
920001J: Introduction to Doctoral Training, 1 op  
920014J: Midterm Report of Doctoral Training, 0 op  
920022J: Nomination of follow-up group, 0 op  
920002J: Scientific Research and Ethics, 2 op

**Optional General- and Transferable Skills Studies**

**Field Specific Studies (vähintään 16 op)**

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

**Field Specific Studies (4 credits)**

920012J: Doctoral Training Plan, 3 op  
920021J: Research Group, 0 op  
046034J: Research plan and seminar, seminar, 1 op
Optional Field Specific Studies

Thesis examination process

920020J: Acceptance and Grading of the Thesis, 0 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op

Thesis book

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Oral Health Sciences

Tutkintorakenteen tila: published

Lukuvuosi: 2019-20

Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies (4 credits)

920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Optional General- and Transferable Skills Studies

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies (4 credits)

920012J: Doctoral Training Plan, 3 op
920021J: Research Group, 0 op
046034J: Research plan and seminar, seminar, 1 op

Optional Field Specific Studies

Thesis examination process

920020J: Acceptance and Grading of the Thesis, 0 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op
Thesis book
046002J: Dentistry, thesis, 0 op

Doctor of Philosophy, Oral Health Sciences

Tutkintorakenteen tila: published
Lukuvuosi: 2019-20
Lukuvuoden alkamispäivämäärä: 01.08.2019

General- and Transferable Skills Studies (vähintään 4 op)
The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to
develop research ethics and to support career management.

General- and Transferable Skills Studies
920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Optional General- and Transferable Skills Studies

Field Specific Studies (vähintään 16 op)
The objectives of field specific studies is to introduce students to the field, to support research and to promote
employment after the degree.

Field Specific Studies (4 credits)
920012J: Doctoral Training Plan, 3 op
920021J: Research Group, 0 op
046034J: Research plan and seminar, seminar, 1 op

Optional Field Specific Studies

Thesis examination process
920020J: Acceptance and Grading of the Thesis, 0 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op

Thesis book
046002J: Dentistry, thesis, 0 op

Doctor of Philosophy, Chemistry
General- and Transferable Skills Studies (4 op)
The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies
920017J: First Follow-up Group Meeting, 0 op
920007J: Follow-up Group Reporting and meetings, 1 op
920001J: Introduction to Doctoral Training, 1 op
920014J: Midterm Report of Doctoral Training, 0 op
920022J: Nomination of follow-up group, 0 op
920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 36 op)
The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies
920020J: Acceptance and Grading of the Thesis, 0 op
920012J: Doctoral Training Plan, 3 op
920019J: Permission to defend the thesis, 0 op
920018J: Pre-examination, 0 op
920021J: Research Group, 0 op
780614J: Research Plan and Seminar, seminar, 1 op

Doctoral Thesis
789610J: Chemistry, thesis, 0 op

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuuluvien opintokohteiden kuvaukset

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS
Language of instruction:
Language of meeting as appropriate, progress reports in English or Finnish.
Timing:
Once per year
Learning outcomes:
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.
Course objectives:
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.
Contents:
Written and oral presentation reports and plans.
Learning activities and teaching methods:
Annual meetings.
Assessment methods and criteria:
Evaluation of progress reports and plans.
Read more about assessment criteria at the University of Oulu webpage.
Grading:
pass / fail
Person responsible:
Chair of the Follow-up Group and Coordinators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit
Language of instruction:
English
Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.
Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.
Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

**The obligatory component** addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

**The optional component** covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

**Mode of delivery:**
lectures, discussions and networking.

**Learning activities and teaching methods:**
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

**Prerequisites and co-requisites:**
The student must have been admitted to the University of Oulu Graduate School.

**Recommended optional programme components:**
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

**Assessment methods and criteria:**
Participation in lectures and discussions .
Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
pass/fail

**Person responsible:**
Coordinators of the University of Oulu Graduate School

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920014J: Midterm Report of Doctoral Training, 0 op

**Voimassaolo:** 01.08.2013 -
**Opiskelumuoto:** Post-graduate Studies
**Laji:** Course
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS
**Arvostelu:** 1 - 5, pass, fail
**Opintokohteen kiele:** Finnish

Ei opintojaksokuvauksia.

920002J: Scientific Research and Ethics, 2 op

**Voimassaolo:** 01.08.2011 -
**Opiskelumuoto:** Post-graduate Studies
**Laji:** Course
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS
**Arvostelu:** 1 - 5, pass, fail
**Opettajat:** Jarmo Pulkkinen
**Opintokohteen kiele:** Finnish

**ECTS Credits:**
2 ECTS credits / 53 hours of work

**Language of instruction:**
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

**Timing:**
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

**Learning outcomes:**
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

**Contents:**
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course:
https://www.oulu.fi/uniogs/node/42690

**Mode of delivery:**
Lectures and online course

**Learning activities and teaching methods:**
Lectures (6 h) and online course (47 h)

**Target group:**
The course unit is aimed at doctoral students.

**Prerequisites and co-requisites:**
The course unit does not have prerequisites or recommended prior courses.

**Recommended optional programme components:**
The course is an independent entity and does not require additional studies carried out at the same time.

**Recommended or required reading:**
None

**Assessment methods and criteria:**
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

**Grading:**
The course utilizes verbal grading scale "pass/fail".

**Person responsible:**
Jarmo Pulkkinen

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**920020J: Acceptance and Grading of the Thesis, 0 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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**920012J: Doctoral Training Plan, 3 op**

**Voimassaolo:** 01.08.2012 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**Leikkaavuudet:**

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

**Status:**
Obligatory "field-specific" studies

**ECTS Credits:**
3 credits

**Language of instruction:**
English (or other, when appropriate)
Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:
Background literature of own research field.

Assessment methods and criteria:
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Grading:
pass / fail

Person responsible:
Supervisor, follow-up group and doctoral training committee

920019J: Permission to defend the thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920018J: Pre-examination, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.
920021J: Research Group, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojakosukuvauksia.

520023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Electrical Engineering DP
Arvostelu: 1 - 5, pass, fail
Opettajat: Matti Isohookana
Opintokohteen kielet: Finnish
Leikkaavuudet:
920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits:
1 ects
Language of instruction:
English
Timing:
Fall&Spring, periods 1-4
Learning outcomes:
The learning outcomes and content are determined by the current research topics.
Contents:
The learning outcomes and content are determined by the current research topics.

Mode of delivery:
Seminar presentations
Learning activities and teaching methods:
Seminar sessions when necessary during the academic year.
Target group:
Doctoral students
Prerequisites and co-requisites:
-
Recommended optional programme components:
-
Recommended or required reading:
-
Assessment methods and criteria:
Course is mandatory for all doctoral students. Students participate actively in research plan seminars during their studies. In the seminars, each doctoral student will present their research plan and part of their research (60 minutes with questions and discussion). Presentations are given in English. Seminars are given during the whole year when necessary. Read more about assessment criteria at the University of Oulu webpage.
Grading:
The course unit utilizes grading passed.
Person responsible:
Matti Isohookana
Working life cooperation:
**520001J: Electrical Engineering, thesis, 0 op**

Opiskelumuoto: Post-graduate Studies  
Laji: Defence of the Ph. D. thesis  
Vastuuyksikkö: Electrical Engineering DP  
Arvostelu: suor (pass), oiv (excellent), khy (excellent)  
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

**920017J: First Follow-up Group Meeting, 0 op**

Voimassaolo: 01.01.2012 -  
Opiskelumuoto: Post-graduate Studies  
Laji: Course  
Vastuuyksikkö: University of Oulu Graduate School, UniOGS  
Arvostelu: 1 - 5, pass, fail  
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

**920007J: Follow-up Group Reporting and meetings, 1 op**

Voimassaolo: 01.08.2012 -  
Opiskelumuoto: Post-graduate Studies  
Laji: Course  
Vastuuyksikkö: University of Oulu Graduate School, UniOGS  
Arvostelu: 1 - 5, pass, fail  
Opintokohteen kielet: Finnish

ECTS Credits:  
1 ECTS  
Language of instruction:  
Language of meeting as appropriate, progress reports in English or Finnish.  
Timing:  
Once per year  
Learning outcomes:  
The student is able to report effectively on the plans and accomplishments of his/her training.  
The student is able to reflect on his/her training.  
Course objectives:  
Aiming to reflect own progress and plans of the doctoral training.  
Aiming to provide supplementary support for the doctoral training.  
Contents:  
Written and oral presentation reports and plans.  
Learning activities and teaching methods:  
Annual meetings.  
Assessment methods and criteria:  
Evaluation of progress reports and plans.  
Read more about assessment criteria at the University of Oulu webpage.  
Grading:  
pass / fail  
Person responsible:
Chair of the Follow-up Group and Coordinators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit
Language of instruction:
English
Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E.U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:
lectures, discussions and networking.

Learning activities and teaching methods:
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:
Participation in lectures and discussions.

Grading:
pass/fail

Person responsible:
Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits / 53 hours of work

Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

Timing:
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course:
https://www.oulu.fi/uniogs/node/42690

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

920020J: Acceptance and Grading of the Thesis, 0 op

Voimassaolo: 01.08.2014 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:
Obligatory "field-specific" studies

ECTS Credits:
3 credits

Language of instruction:
English (or other, when appropriate)

Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:
Background literature of own research field.

Assessment methods and criteria:
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student’s Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

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

Grading:
pass / fail

Person responsible:
Supervisor, follow-up group and doctoral training committee
920019J: Permission to defend the thesis, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

Ei opintojaksokuvauksia.

920018J: Pre-examination, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

920021J: Research Group, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

Ei opintojaksokuvauksia.

520023J: Research Plan and Seminar, Seminar, 1 op
Voimassaolo: 01.01.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: Electrical Engineering DP
Arvostelu: 1 - 5, pass, fail
Opettajat: Matti Isohookana
Opintokohteen kiele: Finnish
Leikkaavuudet:
920004J-02 Research Plan and Seminar, seminar 1.0 op
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
1 ects
Language of instruction:
English
Timing:
Fall&Spring, periods 1-4
Learning outcomes:
The learning outcomes and content are determined by the current research topics.
Contents:
The learning outcomes and content are determined by the current research topics.

Mode of delivery:
Seminar presentations

Learning activities and teaching methods:
Seminar sessions when necessary during the academic year.

Target group:
Doctoral students

Prerequisites and co-requisites:
-

Recommended optional programme components:
-

Recommended or required reading:
-

Assessment methods and criteria:
Course is mandatory for all doctoral students. Students participate actively in research plan seminars during their studies. In the seminars, each doctoral student will present their research plan and part of their research (60 minutes with questions and discussion). Presentations are given in English. Seminars are given during the whole year when necessary. Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes grading passed.

Person responsible:
Matti Isohookana

Working life cooperation:
-

Other information:
-

520001J: Electrical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Electrical Engineering DP
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS

Language of instruction:
Language of meeting as appropriate, progress reports in English or Finnish.

Timing:
Once per year

Learning outcomes:
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.

Course objectives:
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.

Contents:
Written and oral presentation reports and plans.

Learning activities and teaching methods:
Annual meetings.

Assessment methods and criteria:
Evaluation of progress reports and plans.

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

Grading:
pass / fail

Person responsible:
Chair of the Follow-up Group and Coordinators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit

Language of instruction:
English

Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.
The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).
The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.
Mode of delivery:
lectures, discussions and networking.

Learning activities and teaching methods:
obligatory lectures and discussion, 7.5 h; optional lectures and discussion, 8 h; networking and personal study, 11 h.

Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:
Participation in lectures and discussions.

Grading:
pass/fail

Person responsible:
Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

Ei opintojaksokuvauksia.

920022J: Nomination of follow-up group, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kiele: Finnish

ECTS Credits:
2 ECTS credits / 53 hours of work

Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

Timing:
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.
Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course:
https://www.oulu.fi/uniogs/node/42690

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

920020J: Acceptance and Grading of the Thesis, 0 op

Voimassaolo: 01.08.2014 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

Ei opintojaksonkuvausia.

920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

Leikkaavuudet:
920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:
Obligatory "field-specific" studies

ECTS Credits:
3 credits
Language of instruction:
English (or other, when appropriate)

Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student’s Doctoral Training Follow-up Group. The plan is formally accepted by the student’s Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:
Background literature of own research field.

Assessment methods and criteria:
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Grading:
pass / fail

Person responsible:
Supervisor, follow-up group and doctoral training committee

920019J: Permission to defend the thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

Ei opintojaksokuvauksia.

920018J: Pre-examination, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish
Voidaan suorittaa useasti: Kyllä
Ei opintojaksokuvauksia.

920021J: Research Group, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

521023J: Research Plan and Seminar, Seminar, 1 op
Voimassaolo: 01.01.2010 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Computer Science and Engineering DP
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

521001J: Information Engineering, thesis, 0 op
Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Computer Science and Engineering DP
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op
Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op
Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies  
Laji: Course  
Vastuuysikkö: University of Oulu Graduate School, UniOGS  
Arvostelu: 1 - 5, pass, fail  
Opintokohteen kielet: Finnish

**ECTS Credits:**  
1 ECTS  

**Language of instruction:**  
Language of meeting as appropriate, progress reports in English or Finnish.

**Timing:**  
Once per year

**Learning outcomes:**  
The student is able to report effectively on the plans and accomplishments of his/her training.  
The student is able to reflect on his/her training.

**Course objectives:**  
Aiming to reflect own progress and plans of the doctoral training.  
Aiming to provide supplementary support for the doctoral training.

**Contents:**  
Written and oral presentation reports and plans.

**Learning activities and teaching methods:**  
Annual meetings.

**Assessment methods and criteria:**  
Evaluation of progress reports and plans.

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**  
pass / fail

**Person responsible:**  
Chair of the Follow-up Group and Coordinators of UniOGS.

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**920001J: Introduction to Doctoral Training, 1 op**

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies  
Laji: Course  
Vastuuysikkö: University of Oulu Graduate School, UniOGS  
Arvostelu: 1 - 5, pass, fail  
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen  
Opintokohteen kielet: English

**ECTS Credits:**  
1 ECTS credit  

**Language of instruction:**  
English  

**Timing:**  
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

**Learning outcomes:**  
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

**Contents:**  
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.  

**The obligatory component** addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).
The optional component covers the following topics: Formalities for foreign students from within and outside the EU; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:
- lectures, discussions and networking.

Learning activities and teaching methods:
- obligatory lectures and discussion, 7.5 h;
- optional lectures and discussion, 8h;
- networking and personal study, 11 h.

Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:
- Participation in lectures and discussions.
- Read more about assessment criteria at the University of Oulu webpage.

Grading:
- pass/fail

Person responsible:
- Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920022J: Nomination of follow-up group, 0 op

Voimassaolo: 01.01.2012
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits:
- 2 ECTS credits / 53 hours of work

Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

**Timing:**
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

**Learning outcomes:**
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

**Contents:**
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course:
[https://www.oulu.fi/uniogs/node/42690](https://www.oulu.fi/uniogs/node/42690)

**Mode of delivery:**
Lectures and online course

**Learning activities and teaching methods:**
Lectures (6 h) and online course (47 h)

**Target group:**
The course unit is aimed at doctoral students.

**Prerequisites and co-requisites:**
The course unit does not have prerequisites or recommended prior courses.

**Recommended optional programme components:**
The course is an independent entity and does not require additional studies carried out at the same time.

**Recommended or required reading:**
None

**Assessment methods and criteria:**
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

**Grading:**
The course utilizes verbal grading scale "pass/fail".

**Person responsible:**
Jarmo Pulkkinen

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**920020J: Acceptance and Grading of the Thesis, 0 op**

**Voimassaolo:** 01.08.2014 -
**Opiskelumuoto:** Post-graduate Studies
**Laji:** Course
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS
**Arvostelu:** 1 - 5, pass, fail
**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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**920012J: Doctoral Training Plan, 3 op**

**Voimassaolo:** 01.08.2012 -
**Opiskelumuoto:** Post-graduate Studies
**Laji:** Course
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS
**Arvostelu:** 1 - 5, pass, fail
**Opintokohteen kielet:** Finnish

Leikkaavuudet:
920004J-01 Research Plan and Seminar, Research Plan 3.0 op
Status:
Obligatory "field-specific" studies

ECTS Credits:
3 credits

Language of instruction:
English (or other, when appropriate)

Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:
Background literature of own research field.

Assessment methods and criteria:
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Grading:

Person responsible:
Supervisor, follow-up group and doctoral training committee

920019J: Permission to defend the thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920018J: Pre-examination, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
920021J: Research Group, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

920023J: Research Plan and Seminar, Seminar, 1 op
Voimassaolo: 01.01.2010 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Computer Science and Engineering DP
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

521001J: Information Engineering, thesis, 0 op
Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Computer Science and Engineering DP
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: Finnish

521023J: Research Plan and Seminar, Seminar, 1 op

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op
Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.
920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS
Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish.
Timing: Once per year
Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training.
Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training.
Contents: Written and oral presentation reports and plans.
Learning activities and teaching methods: Annual meetings.
Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage.
Grading: pass / fail
Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit
Language of instruction: English
Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.
Learning outcomes: After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.
Contents: The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.
The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the
The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery: lectures, discussions and networking.

Learning activities and teaching methods: obligatory lectures and discussion, 7.5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites: The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components: Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions.

Grading:

Person responsible: Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits / 53 hours of work

Language of instruction: The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

Timing: The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes: After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course: [https://www.oulu.fi/uniogs/node/42690](https://www.oulu.fi/uniogs/node/42690)

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

### 920020J: Acceptance and Grading of the Thesis, 0 op

Voimassaolo: 01.08.2014 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuysikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksojakuvausia.

### 920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuysikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:
Obligatory "field-specific" studies

ECTS Credits:
3 credits

Language of instruction:
English (or other, when appropriate)

Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year. All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

**Learning outcomes:**
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

**Contents:**
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

**Mode of delivery:**
Personal work, written presentation.

**Learning activities and teaching methods:**
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

**Prerequisites and co-requisites:**
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

**Recommended or required reading:**
Background literature of own research field.

**Assessment methods and criteria:**
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
pass / fail

**Person responsible:**
Supervisor, follow-up group and doctoral training committee

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920019J: *Permission to defend the thesis, 0 op*

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920018J: *Pre-examination, 0 op*

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.
920021J: Research Group, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

522023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Electrical Engineering DP
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

522001J: Telecommunication Engineering, thesis, 0 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Electrical Engineering DP
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course

Vastuuksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit

Language of instruction:
English

Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;
transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

**Mode of delivery:**
lectures, discussions and networking.

**Learning activities and teaching methods:**
obligatory lectures and discussion, 7.5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

**Prerequisites and co-requisites:**
The student must have been admitted to the University of Oulu Graduate School.

**Recommended optional programme components:**
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

**Assessment methods and criteria:**
Participation in lectures and discussions.
Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
pass/fail

**Person responsible:**
Coordinators of the University of Oulu Graduate School

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**920014J: Midterm Report of Doctoral Training, 0 op**

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

**920002J: Scientific Research and Ethics, 2 op**

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

**ECTS Credits:**
2 ECTS credits / 53 hours of work

**Language of instruction:**
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

**Timing:**
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

**Learning outcomes:**
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

**Contents:**
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course:
https://www.oulu.fi/uniogs/node/42690

**Mode of delivery:**
Lectures and online course
Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)
Target group:
The course unit is aimed at doctoral students.
Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.
Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.
Recommended or required reading:
None
Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.
Grading:
The course utilizes verbal grading scale "pass/fail".
Person responsible:
Jarmo Pulkkinen

920020J: Acceptance and Grading of the Thesis, 0 op

Voimassaolo: 01.08.2014 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:
Obligatory "field-specific" studies
ECTS Credits:
3 credits
Language of instruction:
English (or other, when appropriate)
Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.
Contents:
The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:
Background literature of own research field.

Assessment methods and criteria:
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

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

Grading:
pass / fail

Person responsible:
Supervisor, follow-up group and doctoral training committee

920019J: Permission to defend the thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920018J: Pre-examination, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

920021J: Research Group, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
522023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Electrical Engineering DP
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Leikkaavuudet:
920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

522001J: Telecommunication Engineering, thesis, 0 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Electrical Engineering DP
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS

Language of instruction:
Language of meeting as appropriate, progress reports in English or Finnish.

Timing:
Once per year

**Learning outcomes:**
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.

**Course objectives:**
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.

**Contents:**
Written and oral presentation reports and plans.

**Learning activities and teaching methods:**
Annual meetings.

**Assessment methods and criteria:**
Evaluation of progress reports and plans.
Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
pass / fail

**Person responsible:**
Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

**Voimassaolo:** 01.08.2011 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuyksikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Niina Timosaari-Hyry, Heli Ruotsalainen

**Opintokohteen kielet:** English

**ECTS Credits:**
1 ECTS credit

**Language of instruction:**
English

**Timing:**
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

**Learning outcomes:**
*After the course the student knows about* the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

**Contents:**
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

**The obligatory component** addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

**The optional component** covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

**Mode of delivery:**
lectures, discussions and networking.

**Learning activities and teaching methods:**
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

**Prerequisites and co-requisites:**
The student must have been admitted to the University of Oulu Graduate School.

**Recommended optional programme components:**
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.
Assessment methods and criteria:
Participation in lectures and discussions. Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass/fail

Person responsible:
Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksojaksuvauksia.

920022J: Nomination of follow-up group, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksojaksuvauksia.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits / 53 hours of work

Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

Timing:
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.
Link for the course: https://www.oulu.fi/uniogs/node/42690

**Mode of delivery:**
Lectures and online course

**Learning activities and teaching methods:**
Lectures (6 h) and online course (47 h)

**Target group:**
The course unit is aimed at doctoral students.

**Prerequisites and co-requisites:**
The course unit does not have prerequisites or recommended prior courses.

**Recommended optional programme components:**
The course is an independent entity and does not require additional studies carried out at the same time.

**Recommended or required reading:**
None

**Assessment methods and criteria:**
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

**Grading:**
The course utilizes verbal grading scale "pass/fail".

**Person responsible:**
Jarmo Pulkkinen

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**920020J: Acceptance and Grading of the Thesis, 0 op**

**Voimassaolo:** 01.08.2014 -
**Opiskelumuoto:** Post-graduate Studies
**Laji:** Course
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS
**Arvostelu:** 1 - 5, pass, fail
**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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**920012J: Doctoral Training Plan, 3 op**

**Voimassaolo:** 01.08.2012 -
**Opiskelumuoto:** Post-graduate Studies
**Laji:** Course
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS
**Arvostelu:** 1 - 5, pass, fail
**Opintokohteen kielet:** Finnish

Leikkaavuudet:
- 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

**Status:**
Obligatory "field-specific" studies

**ECTS Credits:**
3 credits

**Language of instruction:**
English (or other, when appropriate)

**Timing:**
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.
All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

**Learning outcomes:**
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

**Contents:**
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

**Mode of delivery:**
Personal work, written presentation.

**Learning activities and teaching methods:**
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

**Prerequisites and co-requisites:**
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

**Recommended or required reading:**
Backgroud literature of own research field.

**Assessment methods and criteria:**
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

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

**Grading:**
pass / fail

**Person responsible:**
Supervisor, follow-up group and doctoral training committee

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**920019J: Permission to defend the thesis, 0 op**

Opiskelumuoto: Post-graduate Studies  
Laji: Course  
Vastuuysikkö: University of Oulu Graduate School, UniOGS  
Arvostelu: 1 - 5, pass, fail  
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

**920018J: Pre-examination, 0 op**

Opiskelumuoto: Post-graduate Studies  
Laji: Course  
Vastuuysikkö: University of Oulu Graduate School, UniOGS  
Arvostelu: 1 - 5, pass, fail  
Opintokohteen kielet: Finnish  
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

**920021J: Research Group, 0 op**
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

Ei opintojaksokuvauksia.

816624J: Research Plan and Seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Information Processing Science DP
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

Leikkavuudet:
920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

816669J: Doctoral Thesis in Information Processing Science, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Information Processing Science DP
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kiele: Finnish

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

ECTS Credits:
1 ECTS

Language of instruction:
Language of meeting as appropriate, progress reports in English or Finnish.

Timing:
Once per year

Learning outcomes:
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.

Course objectives:
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.

Contents:
Written and oral presentation reports and plans.

Learning activities and teaching methods:
Annual meetings.

Assessment methods and criteria:
Evaluation of progress reports and plans.

Grading:
pass / fail

Person responsible:
Chair of the Follow-up Group and Coordinators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit

Language of instruction:
English

Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes: After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents: The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery: lectures, discussions and networking.

Learning activities and teaching methods: obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:
Participation in lectures and discussions.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass/fail

Person responsible:
Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920022J: Nomination of follow-up group, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits / 53 hours of work

Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

Timing:
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.
Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course:
https://www.oulu.fi/uniogs/node/42690

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

920020J: Acceptance and Grading of the Thesis, 0 op

Voimassaolo: 01.08.2014 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuysikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojakosokuvauksia.

920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuysikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:
Obligatory "field-specific" studies

ECTS Credits:
3 credits

Language of instruction:
English (or other, when appropriate)

Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

**Learning outcomes:**
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

**Contents:**
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

**Mode of delivery:**
Personal work, written presentation.

**Learning activities and teaching methods:**
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

**Prerequisites and co-requisites:**
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

**Recommended or required reading:**
Background literature of own research field.

**Assessment methods and criteria:**
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

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

**Grading:**
pass / fail

**Person responsible:**
Supervisor, follow-up group and doctoral training committee

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**920019J: Permission to defend the thesis, 0 op**

Opiskelumuoto: Post-graduate Studies  
Laji: Course  
Vastuuysikkö: University of Oulu Graduate School, UniOGS  
Arvostelu: 1 - 5, pass, fail  
Opintokohteen kielet: Finnish  

Ei opintojaksokuvauksia.

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**920018J: Pre-examination, 0 op**

Opiskelumuoto: Post-graduate Studies  
Laji: Course  
Vastuuysikkö: University of Oulu Graduate School, UniOGS  
Arvostelu: 1 - 5, pass, fail  
Opintokohteen kielet: Finnish  
Voidaan suorittaa useasti: Kyllä  

Ei opintojaksokuvauksia.
920021J: Research Group, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

450023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Oulu School of Architecture
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Oulu School of Architecture
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:

450001J: Architecture, thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Oulu School of Architecture
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS

Ei opintojaksokuvauksia.
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS

Language of instruction:
Language of meeting as appropriate, progress reports in English or Finnish.

Timing:
Once per year

Learning outcomes:
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.

Course objectives:
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.

Contents:
Written and oral presentation reports and plans.

Learning activities and teaching methods:
Annual meetings.

Assessment methods and criteria:
Evaluation of progress reports and plans.

Grading:
pass / fail

Person responsible:
Chair of the Follow-up Group and Coordinators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit

Language of instruction:
English

Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.
Mode of delivery: lectures, discussions and networking.

Learning activities and teaching methods: obligatory lectures and discussion, 7.5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites: The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components: Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions.
Read more about assessment criteria at the University of Oulu webpage.

Grading: pass/fail

Person responsible: Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920022J: Nomination of follow-up group, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits / 53 hours of work

Language of instruction: The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

Timing: The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.
Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course:
https://www.oulu.fi/uniogs/node/42690

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

920020J: Acceptance and Grading of the Thesis, 0 op

Voimassaolo: 01.08.2014 -  
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -  
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:

Leikkaavuus: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:
Obligatory "field-specific" studies

ECTS Credits:
3 credits
Language of instruction: English (or other, when appropriate)

Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:
Background literature of own research field.

Assessment methods and criteria:
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass / fail

Person responsible:
Supervisor, follow-up group and doctoral training committee

920019J: Permission to defend the thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920018J: Pre-examination, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä
920021J: Research Group, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

766692J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Field of Physics
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: English
Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

ECTS Credits:
1 ECTS credits
Language of instruction:
English (or other, when appropriate)
Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course within two years of starting the doctoral training.
All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirements for the doctoral degrees established by UniOGS in Spring 2012 must complete the course within one year of transferring to the new requirements.
The students should complete 920012J Research plan and seminar, plan, 3 ECTS credits as part of their application to transfer to the new requirements.
Learning outcomes:
After the course the student knows how to present and discus his/her research progress in oral form, and has learned how to critically discuss the research of others.
Contents:
Public presentation of the research in the form of a public Research Plan Seminar, or a Research Seminar.
Mode of delivery:
Personal work, oral presentation of the research.
Learning activities and teaching methods:
Presentation and discussion of the research plan, or the research progress, to senior scientists/professionals and doctoral students (Research Plan Seminar, or Research Seminar).
Target group:
Doctoral students registered in the University of Oulu Graduate School, obligatory “field-specific” studies
Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.
Recommended optional programme components:
No alternative course units or course units that should be completed simultaneously
Recommended or required reading:
Background literature of own research field.
Assessment methods and criteria:
Public presentation of the research plan/results in a Research (Plan) Seminar.
Read more about assessment criteria at the University of Oulu webpage.
Grading:
Pass/fail

**Person responsible:**
Responsible persons of the relevant Majors/fields of doctoral studies.

**Working life cooperation:**
No work placement period

**Other information:**
The study credit is awarded by the responsible person for the Field/Major, or a person designated by the latter, after the successful completion of the research plan seminar, or research seminar by the student.

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766602J: *Ph.D. Thesis in Physics, 0 op*

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Defence of the Ph. D. thesis

**Vastuuysikkö:** Field of Physics

**Arvostelu:** suor (pass), oiv (excellent), khy (excellent)

**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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920017J: *First Follow-up Group Meeting, 0 op*

**Voimassaolo:** 01.01.2012 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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920007J: *Follow-up Group Reporting and meetings, 1 op*

**Voimassaolo:** 01.08.2012 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
1 ECTS

**Language of instruction:**
Language of meeting as appropriate, progress reports in English or Finnish.

**Timing:**
Once per year

**Learning outcomes:**
The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training.

**Course objectives:**
Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training.

**Contents:**
Written and oral presentation reports and plans.

**Learning activities and teaching methods:**
Annual meetings.

**Assessment methods and criteria:**
Evaluation of progress reports and plans.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass / fail

Person responsible:
Chair of the Follow-up Group and Coordinators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit
Language of instruction:
English
Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:
lectures, discussions and networking.

Learning activities and teaching methods:
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:
Participation in lectures and discussions .
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass/fail

Person responsible:
Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
**920022J: Nomination of follow-up group, 0 op**

**Voimassaolo:** 01.01.2012 - 01.01.2013

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

Ei opintojaksojakoelmia.

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**920002J: Scientific Research and Ethics, 2 op**

**Voimassaolo:** 01.08.2011 - 01.08.2012

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Jarmo Pulkkinen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
2 ECTS credits / 53 hours of work

**Language of instruction:**
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

**Timing:**
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

**Learning outcomes:**
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

**Contents:**
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

**Link for the course:**
https://www.oulu.fi/uniogs/node/42690

**Mode of delivery:**
Lectures and online course

**Learning activities and teaching methods:**
Lectures (6 h) and online course (47 h)

**Target group:**
The course unit is aimed at doctoral students.

**Prerequisites and co-requisites:**
The course unit does not have prerequisites or recommended prior courses.

**Recommended optional programme components:**
The course is an independent entity and does not require additional studies carried out at the same time.

**Recommended or required reading:**
None

**Assessment methods and criteria:**
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

**Grading:**
The course utilizes verbal grading scale "pass/fail".

**Person responsible:**
Jarmo Pulkkinen

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**920020J: Acceptance and Grading of the Thesis, 0 op**

*Voimassaolo:* 01.08.2014 -  
*Opiskelumuoto:* Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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**920012J: Doctoral Training Plan, 3 op**

*Voimassaolo:* 01.08.2012 -  
*Opiskelumuoto:* Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**Leikkaavuudet:**

920004J-01  Research Plan and Seminar, Research Plan  3.0 op

**Status:**
Obligatory "field-specific" studies

**ECTS Credits:**
3 credits

**Language of instruction:**
English (or other, when appropriate)

**Timing:**
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

**Learning outcomes:**
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

**Contents:**
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

**Mode of delivery:**
Personal work, written presentation.
Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:
Background literature of own research field.

Assessment methods and criteria:
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass / fail

Person responsible:
Supervisor, follow-up group and doctoral training committee

920019J: Permission to defend the thesis, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

920018J: Pre-examination, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

920021J: Research Group, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

766692J: Research Plan and Seminar, Seminar, 1 op
Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Field of Physics
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielekset: English
Leikkaavuudet:

920004J-02  Research Plan and Seminar, seminar  1.0 op

ECTS Credits:
1 ECTS credits
Language of instruction:
English (or other, when appropriate)
Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course within two years of starting the doctoral training.
All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirements for the doctoral degrees established by UniOGS in Spring 2012 must complete the course within one year of transferring to the new requirements.
The students should complete 920012J Research plan and seminar, plan, 3 ECTS credits as part of their application to transfer to the new requirements.
Learning outcomes:
After the course the student knows how to present and discuss his/her research progress in oral form, and has learned how to critically discuss the research of others.
Contents:
Public presentation of the research in the form of a public Research Plan Seminar, or a Research Seminar.
Mode of delivery:
Personal work, oral presentation of the research.
Learning activities and teaching methods:
Presentation and discussion of the research plan, or the research progress, to senior scientists/professionals and doctoral students (Research Plan Seminar, or Research Seminar).
Target group:
Doctoral students registered in the University of Oulu Graduate School, obligatory “field-specific” studies
Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.
Recommended optional programme components:
No alternative course units or course units that should be completed simultaneously
Recommended or required reading:
Background literature of own research field.
Assessment methods and criteria:
Public presentation of the research plan/results in a Research (Plan) Seminar.
Read more about assessment criteria at the University of Oulu webpage.
Grading:
Pass/fail
Person responsible:
Responsible persons of the relevant Majors/fields of doctoral studies.
Working life cooperation:
No work placement period
Other information:
The study credit is awarded by the responsible person for the Field/Major, or a person designated by the latter, after the successful completion of the research plan seminar, or research seminar by the student.

766602J: Ph.D. Thesis in Physics, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Field of Physics
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielekset: Finnish
920017J: First Follow-up Group Meeting, 0 op
Voimassaolo: 01.01.2012 - 01.01.2012
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op
Voimassaolo: 01.08.2012 - 01.08.2012
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS
Language of instruction:
Language of meeting as appropriate, progress reports in English or Finnish.
Timing:
Once per year
Learning outcomes:
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.
Course objectives:
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.
Contents:
Written and oral presentation reports and plans.
Learning activities and teaching methods:
Annual meetings.
Assessment methods and criteria:
Evaluation of progress reports and plans.
Read more about assessment criteria at the University of Oulu webpage.
Grading:
pass / fail
Person responsible:
Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op
Voimassaolo: 01.08.2011 - 01.08.2011
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English
ECTS Credits:
1 ECTS credit

Language of instruction:
English

Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or
after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information
regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral
studies and every-day life.

Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted
to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate
school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the
doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate
School and the research environment expect from the students; Procedures for addressing and redressing problems
related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel,
Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E.
U: Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;
transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web
addresses for further information.

Mode of delivery:
lectures, discussions and networking.

Learning activities and teaching methods:
obligatory lectures and discussion, 7.5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:
Participation in lectures and discussions .
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass/fail

Person responsible:
Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920022J: Nomination of follow-up group, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits / 53 hours of work

Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

Timing:
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course: https://www.oulu.fi/uniogs/node/42690

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

920020J: Acceptance and Grading of the Thesis, 0 op

Voimassaolo: 01.08.2014 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
  920004J-01 Research Plan and Seminar, Research Plan  3.0 op

Status:
Obligatory "field-specific" studies

ECTS Credits:
3 credits

Language of instruction:
English (or other, when appropriate)

Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:
Background literature of own research field.

Assessment methods and criteria:
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass / fail

Person responsible:
Supervisor, follow-up group and doctoral training committee
920019J: Permission to defend the thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920018J: Pre-examination, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

920021J: Research Group, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

450023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: Oulu School of Architecture
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
   920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

450001J: Architecture, thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuyksikkö: Oulu School of Architecture
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS
Language of instruction:
Language of meeting as appropriate, progress reports in English or Finnish.
Timing:
Once per year
Learning outcomes:
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.
Course objectives:
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.
Contents:
Written and oral presentation reports and plans.
Learning activities and teaching methods:
Annual meetings.
Assessment methods and criteria:
Evaluation of progress reports and plans.
Read more about assessment criteria at the University of Oulu webpage.
Grading:
pass / fail
Person responsible:
Chair of the Follow-up Group and Coordinators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
ECTS Credits:
1 ECTS credit

Language of instruction:
English

Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:
lectures, discussions and networking.

Learning activities and teaching methods:
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:
Participation in lectures and discussions.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass/fail

Person responsible:
Coordinators of the University of Oulu Graduate School
920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits / 53 hours of work

Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

Timing:
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course:
https://www.oulu.fi/uniogs/node/42690

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
**Laji:** Course  
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish  

**Leikkaavuudet:**  
920004J-01 Research Plan and Seminar, Research Plan 3.0 op

**Status:**  
Obligatory "field-specific" studies

**ECTS Credits:**  
3 credits

**Language of instruction:**  
English (or other, when appropriate)

**Timing:**  
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

**Learning outcomes:**  
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

**Contents:**  
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

**Mode of delivery:**  
Personal work, written presentation.

**Learning activities and teaching methods:**  
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

**Prerequisites and co-requisites:**  
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

**Recommended or required reading:**  
Background literature of own research field.

**Assessment methods and criteria:**  
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

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

**Grading:**  
pass / fail

**Person responsible:**  
Supervisor, follow-up group and doctoral training committee

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**920021J: Research Group, 0 op**

**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish
046034J: Research plan and seminar, seminar, 1 op
Voimassaolo: 01.01.2013
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Faculty of Medicine
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
920004J-02 Research Plan and Seminar, seminar 1.0 op

046001J: Medicine, thesis, 0 op
Voimassaolo: 01.08.2005
Opiskelumuoto: Post-graduate Studies

920020J: Acceptance and Grading of the Thesis, 0 op
Voimassaolo: 01.08.2014
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

920019J: Permission to defend the thesis, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

920018J: Pre-examination, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.
920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS
Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish.
Timing: Once per year
Learning outcomes:
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.
Course objectives:
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.
Contents:
Written and oral presentation reports and plans.
Learning activities and teaching methods:
Annual meetings.
Assessment methods and criteria:
Evaluation of progress reports and plans.
Read more about assessment criteria at the University of Oulu webpage.
Grading:
pass / fail
Person responsible:
Chair of the Follow-up Group and Coordinators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course


**Vastuuksikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Niina Timosaari-Hyry, Heli Ruotsalainen

**Opintokohteen kielet:** English

**ECTS Credits:**
1 ECTS credit

**Language of instruction:** English

**Timing:**
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

**Learning outcomes:**
*After the course the student knows about* the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

**Contents:**
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

**The obligatory component** addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

**The optional component** covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

**Mode of delivery:**
lectures, discussions and networking.

**Learning activities and teaching methods:**
obligatory lectures and discussion, 7.5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

**Prerequisites and co-requisites:**
The student must have been admitted to the University of Oulu Graduate School.

**Recommended optional programme components:**
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

**Assessment methods and criteria:**
Participation in lectures and discussions .
Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
pass/fail

**Person responsible:**
Coordinators of the University of Oulu Graduate School

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**920014J: Midterm Report of Doctoral Training, 0 op**

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuksikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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**920022J: Nomination of follow-up group, 0 op**

**Voimassaolo:** 01.01.2012 -
920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits / 53 hours of work
Language of instruction: The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).
Timing: The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes: After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.
Contents: Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course: https://www.oulu.fi/uniogs/node/42690
Mode of delivery: Lectures and online course
Learning activities and teaching methods: Lectures (6 h) and online course (47 h)
Target group: The course unit is aimed at doctoral students.
Prerequisites and co-requisites: The course unit does not have prerequisites or recommended prior courses.
Recommended optional programme components: The course is an independent entity and does not require additional studies carried out at the same time.
Recommended or required reading: None
Assessment methods and criteria: The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.
Grading: The course utilizes verbal grading scale "pass/fail".
Person responsible: Jarmo Pulkkinen
920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies
ECTS Credits: 3 credits
Language of instruction: English (or other, when appropriate)
Timing: All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.
All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.
Learning outcomes: After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.
Contents: 3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.
Mode of delivery: Personal work, written presentation.
Learning activities and teaching methods: Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).
Prerequisites and co-requisites: The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.
Recommended or required reading: Background literature of own research field.
Assessment methods and criteria: Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.
Grading: pass / fail
Person responsible: Supervisor, follow-up group and doctoral training committee

920021J: Research Group, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

**046034J: Research plan and seminar, seminar, 1 op**

**Voimassaolo:** 01.01.2013 -  
**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuysikkö:** Faculty of Medicine  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish  
**Leikkaavuudet:**  
920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

**920020J: Acceptance and Grading of the Thesis, 0 op**

**Voimassaolo:** 01.08.2014 -  
**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

**920019J: Permission to defend the thesis, 0 op**

**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

**920018J: Pre-examination, 0 op**

**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish  
**Voidaan suorittaa useasti:** Kyllä

Ei opintojaksokuvauksia.
046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Medicine
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS
Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish.
Timing: Once per year
Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training.
Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training.
Contents: Written and oral presentation reports and plans.
Learning activities and teaching methods: Annual meetings.
Assessment methods and criteria: Evaluation of progress reports and plans.
Read more about assessment criteria at the University of Oulu webpage.
Grading: pass / fail
Person responsible: Chair of the Follow-up Group and Coordinators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op
Voimassaolo: 01.08.2011 -  
Opiskelumuoto: Post-graduate Studies  
Laji: Course  
Vastuuysikkö: University of Oulu Graduate School, UniOGS  
Arvostelu: 1 - 5, pass, fail  
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen  
Opintokohteen kielet: English  

ECTS Credits:  
1 ECTS credit  
Language of instruction:  
English  
Timing:  
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.  

Learning outcomes:  
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and everyday life.  

Contents:  
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.  
The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).  
The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.  

Mode of delivery:  
lectures, discussions and networking.  

Learning activities and teaching methods:  
obligatory lectures and discussion, 7.5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.  
Prerequisites and co-requisites:  
The student must have been admitted to the University of Oulu Graduate School.  

Recommended optional programme components:  
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.  

Assessment methods and criteria:  
Participation in lectures and discussions .  
Read more about assessment criteria at the University of Oulu webpage.  

Grading:  
pass/fail  

Person responsible:  
Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -  
Opiskelumuoto: Post-graduate Studies  
Laji: Course  
Vastuuysikkö: University of Oulu Graduate School, UniOGS  
Arvostelu: 1 - 5, pass, fail  
Opintokohteen kielet: Finnish  

Ei opintojaksokuvauksia.
**920022J: Nomination of follow-up group, 0 op**

**Voimassaolo:** 01.01.2012 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

Ei opintojaksokuvauksia.

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**920002J: Scientific Research and Ethics, 2 op**

**Voimassaolo:** 01.08.2011 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Jarmo Pulkkinen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
2 ECTS credits / 53 hours of work

**Language of instruction:**
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

**Timing:**
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

**Learning outcomes:**
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

**Contents:**
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

**Link for the course:**
[https://www.oulu.fi/uniogs/node/42690](https://www.oulu.fi/uniogs/node/42690)

**Mode of delivery:**
Lectures and online course

**Learning activities and teaching methods:**
Lectures (6 h) and online course (47 h)

**Target group:**
The course unit is aimed at doctoral students.

**Prerequisites and co-requisites:**
The course unit does not have prerequisites or recommended prior courses.

**Recommended optional programme components:**
The course is an independent entity and does not require additional studies carried out at the same time.

**Recommended or required reading:**
None

**Assessment methods and criteria:**
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

**Grading:**
The course utilizes verbal grading scale "pass/fail".

**Person responsible:**
920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
  920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:
Obligatory ”field-specific” studies
ECTS Credits:
3 credits
Language of instruction:
English (or other, when appropriate)
Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.
All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:
Background literature of own research field.

Assessment methods and criteria:
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass / fail

Person responsible:
Supervisor, follow-up group and doctoral training committee

920021J: Research Group, 0 op
046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Faculty of Medicine
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
   920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

920020J: Acceptance and Grading of the Thesis, 0 op

Voimassaolo: 01.08.2014 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920019J: Permission to defend the thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920018J: Pre-examination, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.
**046001J: Medicine, thesis, 0 op**

*Voimassaolo:* 01.08.2005 -
*Opiskelumuoto:* Post-graduate Studies
*Laji:* Defence of the Ph. D. thesis
*Vastuuysikkö:* Medicine
*Arvostelu:* suor (pass), oiv (excellent), khy (excellent)
*Opintokohteen kielet:* English

Ei opintojaksokuvauksia.

**920017J: First Follow-up Group Meeting, 0 op**

*Voimassaolo:* 01.01.2012 -
*Opiskelumuoto:* Post-graduate Studies
*Laji:* Course
*Vastuuysikkö:* University of Oulu Graduate School, UniOGS
*Arvostelu:* 1 - 5, pass, fail
*Opintokohteen kielet:* Finnish

Ei opintojaksokuvauksia.

**920007J: Follow-up Group Reporting and meetings, 1 op**

*Voimassaolo:* 01.08.2012 -
*Opiskelumuoto:* Post-graduate Studies
*Laji:* Course
*Vastuuysikkö:* University of Oulu Graduate School, UniOGS
*Arvostelu:* 1 - 5, pass, fail
*Opintokohteen kielet:* Finnish

**ECTS Credits:**

1 ECTS

**Language of instruction:**
Language of meeting as appropriate, progress reports in English or Finnish.

**Timing:**
Once per year

**Learning outcomes:**
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.

**Course objectives:**
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.

**Contents:**
Written and oral presentation reports and plans.

**Learning activities and teaching methods:**
Annual meetings.

**Assessment methods and criteria:**
Evaluation of progress reports and plans.
Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
pass / fail

**Person responsible:**
Chair of the Follow-up Group and Coordinators of UniOGS.
920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timo-Saari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit

Language of instruction:
English

Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:
lectures, discussions and networking.

Learning activities and teaching methods:
obligatory lectures and discussion, 7.5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:
Participation in lectures and discussions
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass/fail

Person responsible:
Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
920022J: Nomination of follow-up group, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits / 53 hours of work
Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).
Timing:
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course:
https://www.oulu.fi/uniogs/node/42690

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.
Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
   920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:
Obligatory "field-specific" studies

ECTS Credits:
3 credits

Language of instruction:
English (or other, when appropriate)

Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:
Background literature of own research field.

Assessment methods and criteria:
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

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

Grading:
pass / fail

Person responsible:
Supervisor, follow-up group and doctoral training committee
920021J: Research Group, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: Faculty of Medicine
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

920020J: Acceptance and Grading of the Thesis, 0 op

Voimassaolo: 01.08.2014 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920019J: Permission to defend the thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920018J: Pre-examination, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Medicine
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: English

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS
Language of instruction:
Language of meeting as appropriate, progress reports in English or Finnish.
Timing:
Once per year
Learning outcomes:
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.
Course objectives:
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.
Contents:
Written and oral presentation reports and plans.
Learning activities and teaching methods:
Annual meetings.
Assessment methods and criteria:
Evaluation of progress reports and plans.
Read more about assessment criteria at the University of Oulu webpage.
Grading:
pass / fail
920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 - 01.08.2013
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit

Language of instruction:
English

Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:
lectures, discussions and networking.

Learning activities and teaching methods:
obligatory lectures and discussion, 7.5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:
Participation in lectures and discussions .

Grading:
pass/fail

Person responsible:
Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 - 
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
920022J: Nomination of follow-up group, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits / 53 hours of work

Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

Timing:
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course:
https://www.oulu.fi/uniogs/node/42690

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:
Obligatory "field-specific" studies
ECTS Credits:
3 credits
Language of instruction:
English (or other, when appropriate)
Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.
All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites: 
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:
Background literature of own research field.

Assessment methods and criteria:
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

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

Grading:
Person responsible:
Supervisor, follow-up group and doctoral training committee

920021J: Research Group, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

046034J: Research plan and seminar, seminar, 1 op
Voimassaolo: 01.01.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Faculty of Medicine
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
  920004J-02 Research Plan and Seminar, seminar 1.0 op
Ei opintojaksokuvauksia.

920020J: Acceptance and Grading of the Thesis, 0 op
Voimassaolo: 01.08.2014 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920019J: Permission to defend the thesis, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920018J: Pre-examination, 0 op
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuyksikkö: Medicine
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuyksikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS
Language of instruction:
Language of meeting as appropriate, progress reports in English or Finnish.
Timing:
Once per year
Learning outcomes:
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.
Course objectives:
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.
Contents:
Written and oral presentation reports and plans.
Learning activities and teaching methods:
Annual meetings.
Assessment methods and criteria:
920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit
Language of instruction:
English
Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.
Learning outcomes:
*After the course the student knows about* the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.
Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.
The **obligatory component** addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).
The **optional component** covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.
Mode of delivery:
lectures, discussions and networking.
Learning activities and teaching methods:
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.
Recommended optional programme components:
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.
Assessment methods and criteria:
Participation in lectures and discussions .
Read more about assessment criteria at the University of Oulu webpage.
Grading:
pass/fail
Person responsible:
Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
920022J: Nomination of follow-up group, 0 op

VOIMASSAOLON: 01.01.2012 -

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920002J: Scientific Research and Ethics, 2 op

VOIMASSAOLON: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish
ECTS Credits: 2 ECTS credits / 53 hours of work
Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).
Timing:
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course:
https://www.oulu.fi/uniogs/node/42690

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

**Recommended or required reading:**
None

**Assessment methods and criteria:**
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

**Grading:**
The course utilizes verbal grading scale "pass/fail".

**Person responsible:**
Jarmo Pulkkinen

920012J: Doctoral Training Plan, 3 op

**Voimassaolo:** 01.08.2012 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**Leikkaavuudet:**
920004J-01 Research Plan and Seminar, Research Plan 3.0 op

**Status:**
Obligatory "field-specific" studies

**ECTS Credits:**
3 credits

**Language of instruction:**
English (or other, when appropriate)

**Timing:**
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

**Learning outcomes:**
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

**Contents:**
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of his doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

**Mode of delivery:**
Personal work, written presentation.

**Learning activities and teaching methods:**
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

**Prerequisites and co-requisites:**
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

**Recommended or required reading:**
Background literature of own research field.

**Assessment methods and criteria:**
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
pass / fail

**Person responsible:**
Supervisor, follow-up group and doctoral training committee

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**920021J: Research Group, 0 op**
- **Opiskeluuohto:** Post-graduate Studies
- **Laji:** Course
- **Vastuuysikkö:** University of Oulu Graduate School, UniOGS
- **Arvostelu:** 1 - 5, pass, fail
- **Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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**046034J: Research plan and seminar, seminar, 1 op**
- **Voimassaolo:** 01.01.2013 -
- **Opiskeluuohto:** Post-graduate Studies
- **Laji:** Course
- **Vastuuysikkö:** Faculty of Medicine
- **Arvostelu:** 1 - 5, pass, fail
- **Opintokohteen kielet:** Finnish

Leikkaavuudet:
- 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

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**920020J: Acceptance and Grading of the Thesis, 0 op**
- **Voimassaolo:** 01.08.2014 -
- **Opiskeluuohto:** Post-graduate Studies
- **Laji:** Course
- **Vastuuysikkö:** University of Oulu Graduate School, UniOGS
- **Arvostelu:** 1 - 5, pass, fail
- **Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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**920019J: Permission to defend the thesis, 0 op**
- **Opiskeluuohto:** Post-graduate Studies
- **Laji:** Course
- **Vastuuysikkö:** University of Oulu Graduate School, UniOGS
- **Arvostelu:** 1 - 5, pass, fail
- **Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.
920018J: Pre-examination, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Medicine
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS

Language of instruction:
Language of meeting as appropriate, progress reports in English or Finnish.

Timing:
Once per year

Learning outcomes:
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.

Course objectives:
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.

Contents:
Written and oral presentation reports and plans.

**Learning activities and teaching methods:**
Annual meetings.

**Assessment methods and criteria:**
Evaluation of progress reports and plans.

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
pass / fail

**Person responsible:**
Chair of the Follow-up Group and Coorninators of UniOGS.

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**920001J: Introduction to Doctoral Training, 1 op**

**Voimassaolo:** 01.08.2011 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Niina Timosaari-Hyry, Heli Ruotsalainen

**Opintokohteen kielet:** English

**ECTS Credits:**
1 ECTS credit

**Language of instruction:**
English

**Timing:**
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

**Learning outcomes:**
*After the course the student knows about* the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

**Contents:**
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The **obligatory component** addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training, General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The **optional component** covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

**Mode of delivery:**
lectures, discussions and networking.

**Learning activities and teaching methods:**
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

**Prerequisites and co-requisites:**
The student must have been admitted to the University of Oulu Graduate School.

**Recommended optional programme components:**
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

**Assessment methods and criteria:**
Participation in lectures and discussions .

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
pass/fail

**Person responsible:**
Coordinators of the University of Oulu Graduate School
920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920022J: Nomination of follow-up group, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits / 53 hours of work

Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

Timing:
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course:
https://www.oulu.fi/uniogs/node/42690

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.
Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:
Obligatory "field-specific" studies

ECTS Credits:
3 credits

Language of instruction:
English (or other, when appropriate)

Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:
Backgroud literature of own research field.
Assessment methods and criteria:
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
- pass / fail

Person responsible:
Supervisor, follow-up group and doctoral training committee

920021J: Research Group, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

Ei opintojaksokuvauksia.

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Faculty of Medicine
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish
Leikkaavuudet:
- 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

920020J: Acceptance and Grading of the Thesis, 0 op

Voimassaolo: 01.08.2014 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

Ei opintojaksokuvauksia.

920019J: Permission to defend the thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish

Ei opintojaksokuvauksia.
**920018J: Pre-examination, 0 op**

**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish  
**Voidaan suorittaa useasti:** Kyllä  

Ei opintojaksokuvauksia.

**046001J: Medicine, thesis, 0 op**

**Voimassaolo:** 01.08.2005 -  
**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Defence of the Ph. D. thesis  
**Vastuuysikkö:** Medicine  
**Arvostelu:** suor (pass), oiv (excellent), khy (excellent)  
**Opintokohteen kielet:** English  

Ei opintojaksokuvauksia.

**920017J: First Follow-up Group Meeting, 0 op**

**Voimassaolo:** 01.01.2012 -  
**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish  

Ei opintojaksokuvauksia.

**920007J: Follow-up Group Reporting and meetings, 1 op**

**Voimassaolo:** 01.08.2012 -  
**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish  

**ECTS Credits:**  
1 ECTS  

**Language of instruction:**  
Language of meeting as appropriate, progress reports in English or Finnish.  

**Timing:**  
Once per year  

**Learning outcomes:**  
The student is able to report effectively on the plans and accomplishments of his/her training.  
The student is able to reflect on his/her training.  

**Course objectives:**  
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.

Contents:
Written and oral presentation reports and plans.

Learning activities and teaching methods:
Annual meetings.

Assessment methods and criteria:
Evaluation of progress reports and plans.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass / fail

Person responsible:
Chair of the Follow-up Group and Coordinators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit
Language of instruction:
English

Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and everyday life.

Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:
lectures, discussions and networking.

Learning activities and teaching methods:
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:
Participation in lectures and discussions.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass/fail

Person responsible:
920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920022J: Nomination of follow-up group, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits / 53 hours of work
Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).
Timing:
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.
Link for the course:
https://www.oulu.fi/uniogs/node/42690
Mode of delivery:
Lectures and online course
Learning activities and online teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
   920004J-01 Research Plan and Seminar, Research Plan   3.0 op

Status:
Obligatory "field-specific" studies

ECTS Credits:
3 credits

Language of instruction:
English (or other, when appropriate)

Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

**Recommended or required reading:**
Backgound literature of own research field.

**Assessment methods and criteria:**
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.
Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
pass / fail

**Person responsible:**
Supervisor, follow-up group and doctoral training committee

### 920021J: Research Group, 0 op

**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuksikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

### 046034J: Research plan and seminar, seminar, 1 op

**Voimassaolo:** 01.01.2013 -  
**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuksikkö:** Faculty of Medicine  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish  
**Leikkaavuudet:**  
920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

### 920020J: Acceptance and Grading of the Thesis, 0 op

**Voimassaolo:** 01.08.2014 -  
**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuksikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

### 920019J: Permission to defend the thesis, 0 op

**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuksikkö:** University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920018J: Pre-examination, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Dentistry
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS
Language of instruction:
Language of meeting as appropriate, progress reports in English or Finnish.
Timing:
Once per year
Learning outcomes:
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.
Course objectives:
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.
Contents:
Written and oral presentation reports and plans.
Learning activities and teaching methods:
Annual meetings.
Assessment methods and criteria:
Evaluation of progress reports and plans.
Read more about assessment criteria at the University of Oulu webpage.
Grading:
pass / fail
Person responsible:
Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit
Language of instruction:
English
Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.
Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.
Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.
The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).
The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.
Mode of delivery:
lectures, discussions and networking.
Learning activities and teaching methods:
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.
Recommended optional programme components:
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.
Assessment methods and criteria:
Participation in lectures and discussions.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass/fail

Person responsible:
Coordinators of the University of Oulu Graduate School

920014J: Midterm Report of Doctoral Training, 0 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920022J: Nomination of follow-up group, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Jarmo Pulkkinen
Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits / 53 hours of work

Language of instruction:
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

Timing:
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.
Link for the course: https://www.oulu.fi/uniogs/node/42690

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:
Obligatory "field-specific" studies

ECTS Credits:
3 credits

Language of instruction:
English (or other, when appropriate)

Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:
Personal work, written presentation.

Learning activities and teaching methods:
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

**Prerequisites and co-requisites:**
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

**Recommended or required reading:**
Background literature of own research field.

**Assessment methods and criteria:**
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about [assessment criteria](https://www.oulu.fi/) at the University of Oulu webpage.

**Grading:**
pass / fail

**Person responsible:**
Supervisor, follow-up group and doctoral training committee

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**920021J: Research Group, 0 op**

**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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**046034J: Research plan and seminar, seminar, 1 op**

**Voimassaolo:** 01.01.2013 -  
**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuysikkö:** Faculty of Medicine  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish  
**Leikkaavuudet:**  
920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

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**920020J: Acceptance and Grading of the Thesis, 0 op**

**Voimassaolo:** 01.08.2014 -  
**Opiskelumuoto:** Post-graduate Studies  
**Laji:** Course  
**Vastuuysikkö:** University of Oulu Graduate School, UniOGS  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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**920019J: Permission to defend the thesis, 0 op**
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920018J: Pre-examination, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Dentistry
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920017J: First Follow-up Group Meeting, 0 op

Voimassaolo: 01.01.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS
Language of instruction:
Language of meeting as appropriate, progress reports in English or Finnish.

Timing:
Once per year

Learning outcomes:
The student is able to report effectively on the plans and accomplishments of his/her training.
The student is able to reflect on his/her training.

Course objectives:
Aiming to reflect own progress and plans of the doctoral training.
Aiming to provide supplementary support for the doctoral training.

Contents:
Written and oral presentation reports and plans.

Learning activities and teaching methods:
Annual meetings.

Assessment methods and criteria:
Evaluation of progress reports and plans.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass / fail

Person responsible:
Chair of the Follow-up Group and Coordinators of UniOGS.

92001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opettajat: Niina Timosaari-Hyry, Heli Ruotsalainen
Opintokohteen kielet: English

ECTS Credits:
1 ECTS credit

Language of instruction:
English

Timing:
The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:
After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:
The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:
lectures, discussions and networking.

Learning activities and teaching methods:
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.

**Recommended optional programme components:**
Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

**Assessment methods and criteria:**
Participation in lectures and discussions.
Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
pass/fail

**Person responsible:**
Coordinators of the University of Oulu Graduate School

### 920014J: Midterm Report of Doctoral Training, 0 op

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

Ei opintojaksojuvauksia.

### 920022J: Nomination of follow-up group, 0 op

**Voimassaolo:** 01.01.2012 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

Ei opintojaksokuvauksia.

### 920002J: Scientific Research and Ethics, 2 op

**Voimassaolo:** 01.08.2011 -

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Jarmo Pulkkinen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
2 ECTS credits / 53 hours of work

**Language of instruction:**
The course unit is arranged once in the autumn (in English) and once in the spring (in Finnish).

**Timing:**
The course is held in the autumn semester, during period I (in English), and in the spring semester (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

**Learning outcomes:**
After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

**Contents:**
Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society.

Link for the course: https://www.oulu.fi/uniogs/node/42690

Mode of delivery:
Lectures and online course

Learning activities and teaching methods:
Lectures (6 h) and online course (47 h)

Target group:
The course unit is aimed at doctoral students.

Prerequisites and co-requisites:
The course unit does not have prerequisites or recommended prior courses.

Recommended optional programme components:
The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:
None

Assessment methods and criteria:
The course unit utilizes continuous assessment. Students must attend all lectures of at least one of the field-specific topics. Online course consists of five weekly assignments which must be successfully completed within the deadline.

Grading:
The course utilizes verbal grading scale "pass/fail".

Person responsible:
Jarmo Pulkkinen

920020J: Acceptance and Grading of the Thesis, 0 op

Voimassaolo: 01.08.2014 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksovakuutavia.

920012J: Doctoral Training Plan, 3 op

Voimassaolo: 01.08.2012 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:
Obligatory "field-specific" studies

ECTS Credits:
3 credits

Language of instruction:
English (or other, when appropriate)

Timing:
All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement for the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

**Learning outcomes:**
After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

**Contents:**
3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

**Mode of delivery:**
Personal work, written presentation.

**Learning activities and teaching methods:**
Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

**Prerequisites and co-requisites:**
The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

**Recommended or required reading:**
Background literature of own research field.

**Assessment methods and criteria:**
Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.
The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
pass / fail

**Person responsible:**
Supervisor, follow-up group and doctoral training committee

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**920019J: Permission to defend the thesis, 0 op**

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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**920018J: Pre-examination, 0 op**

**Opiskelumuoto:** Post-graduate Studies

**Laji:** Course

**Vastuuysikkö:** University of Oulu Graduate School, UniOGS

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

Ei opintojaksokuvauksia.
920021J: Research Group, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: University of Oulu Graduate School, UniOGS
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

780614J: Research Plan and Seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -
Opiskelumuoto: Post-graduate Studies
Laji: Course
Vastuuysikkö: Field of Chemistry
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

789610J: Chemistry, thesis, 0 op

Opiskelumuoto: Post-graduate Studies
Laji: Defence of the Ph. D. thesis
Vastuuysikkö: Field of Chemistry
Arvostelu: suor (pass), oiv (excellent), khy (excellent)
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.