

It is recommended to include 5 credits of the doctoral programme-specific studies to general studies and/or to discipline-specific studies of the postgraduate study whole (40 credits).

GENERAL STUDIES 10-20 credits (LTOH1000)

The doctoral candidate has to complete general studies the minimum amount of 10 credits. Postgraduate studies altogether must form 40 credits including general studies and discipline-specific studies. E.g. If the doctoral candidate completes 10 credits of general studies, s/he has to complete 30 credits of discipline-specific studies.

The minimum amount of general studies (10 credits) must include the obligatory Philosophy of Medicine course 2 credits.

Competence Course for Persons Who Carry Out Experimental Procedures in Animals (2-5 credits) is obligatory for those who want to get permission for conducting animal experiments independently.

The doctoral candidate may gather study module of other general studies from the **ALTERNATIVES BELOW OR FROM OTHER CORRESPONDING TRAINING**. (credit = ECTS)

OBLIGATORY GENERAL STUDIES (2 ECTS)

PGS_1668 Philosophy of Medicine (obligatory course), 2 ECTS

OPTIONAL GENERAL STUDIES (8-18 ECTS)

Methodological Studies (LTOH1002)

PGS_1675 Laboratory Animal Science Course (ENG), 2-5 ECTS

PGS_1374 Statistical thinking and performing basic analyses using JMP, 2–4 ECTS

BIMA5105 Fluorescence in Bioanalytical Research, 4 op

BIMA5101 Physical Basis of Medical Imaging, 4 op

BIMA3209 Bioimage Informatics 1, 5 op

BIMA3210 Bioimage Informatics 2, 4 op

Doctoral programme-specific methodology studies

- freely chosen doctoral programme-specific methodology studies

Other methodology training (e.g. study modules LTOH1201-9)

- freely chosen methodology training
- In addition to the Faculty of Medicine, postgraduate training (courses) suitable for a doctoral degree is organized by the University of Turku Graduate School (UTUGS) and other faculties. Also study attainments (courses, seminars) organized by other parties than the University of Turku (e.g. other universities, Open University, scientific associations) may be approved as general studies.

General Studies in Finnish:

PGS_1405 Tilastolliset perusanalyysit SPSS-ohjelmistolla, 1 op)

PGS_1568 Tilastollisten analyysien jatkokurssi SPSS-ohjelmistolla, 1 op

PGS_1732 Kliinisen tutkimuksen statistiikan perusteet, 2–3 op

PGS_1786 Kliinisen tutkimuksen perusteet, 1 op

PGS_1731 Elin aika-analyysin tiiviskurssi, 1 op

Language Studies (LTOH1003)

KIEN3321 English: Advanced Academic Writing, 3 ECTS

KIEN3341 English Oral Presentation Skills, 3 ECTS

KIEN3041 English: Academic Presentation Skills, 2 ECTS

KIEN3023 English: Academic Writing for Researchers, 2 ECTS

KIEN3024 Writing Grant Proposals, 2 ECTS

KIEN3025 Grammar for Academic Writing, 2 ECTS

Other language courses (e.g. study modules LTOH1301-9)

- other freely chosen language courses

General Transferable Skills (LTOH1004) (e.g. study modules LTOH1401-9)

Teaching in the undergraduate or postgraduate study programme, max 8 credits

Supervision of advanced studies or Master's studies (pro gradu), 2 credits according to the statement of the supervisor.

Other general transferable skills

- e.g. research ethics, management-, presentation-, interaction- and communication skills, teaching skills, entrepreneurship and project management skills (credits according to the course programme and participation)
- management education which is part of specialist training in medicine/dentistry, maximum 6 credits

DISCIPLINE-SPECIFIC STUDIES 20–30 credits (LTOH2000)

*The doctoral candidate has to complete general studies the minimum amount of 20 credits. Postgraduate studies altogether must form 40 credits including general studies and discipline-specific studies. E.g. If the doctoral candidate completes 10 credits of general studies, s/he has to complete 30 credits of discipline-specific studies. The doctoral candidate may gather discipline-specific studies (minimum 20 credits) from the **ALTERNATIVES BELOW OR FROM OTHER CORRESPONDING TRAINING**. (credit = ECTS)*

Doctoral programme-specific discipline studies (LTOH2001) (e.g. study modules LTOH2101-9)

- freely chosen doctoral programme-specific discipline studies

Postgraduate seminars / academic seminars (LTOH2002) (e.g. study modules LTOH2201-30)

- participation in the seminar (10 hours/1 credit)
- seminar presentation (1 presentation/1 credit)

Research seminars / journal clubs of the institution/department/clinic, max 8 credits (LTOH2003) (e.g. study modules LTOH2301-9)**Postgraduate and field specific national and international courses (LTOH2004)**

- credits according to the course programme and participation
- for example LMIM2005_Course on Advanced Immunology, 2 credits
- other courses (e.g. study modules LTOH2401-30)

Scientific national and international conferences, max 8 credits (LTOH2005) (e.g. study modules LTOH2501-30)

- poster presented in a national conference 1 credit and oral presentation 2 credits
- poster presented in an international conference 3 credits and oral presentation 4 credits
- participation (without a presentation) in a congress 0,5 credits, max 1 credit

Scientific publishing (LTOH2006) (e.g. study modules LTOH2601-10)

- academic article which has been approved for publishing and is not part of a doctoral thesis 1-4 credits / max 4 credits
- acting as a referee in an international journal which IF is defined, 1 credit/evaluation, max 3 credits. The supervisor will check the evaluation before sending.

Book exams, max 12 credits (LTOH2007) (e.g. study modules LTOH2701-10)

- Academic text fitting the topic of the doctoral thesis is approved based on the proposal of the supervisor. Before the exam, the doctoral candidate shall hand in a request mentioning the receiver of the exam (other than the supervisor) and the supervisor's statement on the applicability of the book's theme, suggestion on the amount of credits and supervisor's signature / max 12 credits

Academic work, educational trips, methodology education and practical training as an expert in Finland or abroad, max 12 credits (LTOH2008) (e.g. study modules LTOH2801-10)

- the doctoral programme approves the credits based on the proposal of the supervisor
- the doctoral candidate's employment relationship for preparing the doctoral thesis in his/her own unit cannot be regarded as a study attainment
- During the practical training the doctoral candidate works as an expert in the field of her/his own educational background (e.g. ministry, research institute, private company), the doctoral candidate writes a report of the practical training period.

Doctoral programme-specific progress reports, max 2 credits (LTOH2009) (e.g. study modules LTOH2901-10)

- 0,5 credit/report

Personal supervision of work given by the doctoral thesis supervisor/s, max 4 credits (LTOH2010) (e.g. study modules LTOH3001-10)

- Personal supervision of work given by the doctoral thesis supervisor/s to the doctoral candidate

Applicable trainings related to specialisation, max 6 credits (LTOH2011) (e.g. study modules LTOH3101-10)

- Applicable completed specialisation training in Medicine or in Dentistry
- Credits according to participation if the training continues