

**GENERAL STUDIES 12-30 credits**

The doctoral candidate has to complete 10-20 credits. The minimum amount of general studies (10 credits) must include the obligatory Philosophy of Medicine course 2 credits. **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).** The doctoral candidate may gather study module of other general studies from the **ALTERNATIVES BELOW OR FROM OTHER CORRESPONDING TRAINING.**

(credit = ECTS)

- **PGS\_1668 Philosophy of Medicine (obligatory course in English), 2 ECTS**
- PGS\_1542 Laboratory Animal Course, 3 ECTS
- Doctoral programme-specific methodology studies
  - freely chosen doctoral programme-specific methodology studies
- (PGS\_1405 Tilastolliset perusanalyysit SPSS-ohjelmistolla, 1 op)
- (PGS\_1568 Tilastollisten analyysien jatkokurssi SPSS-ohjelmistolla, 1 op)
- (PGS\_1730 Tilastolliset perusanalyysit JMP-ohjelmistolla, 1 op)
- PGS\_1374 Statistical thinking and performing basic analyses using JMP, 2–3 ECTS
- (PGS\_1732 Kliinisen tutkimuksen statistiikan perusteet, 2–3 op)
- ANAT5105 Fluorescence in Bioanalytical Research, 4 ECTS
- ANAT5101 Physical Basis of Medical Imaging, 4 ECTS
- BIMA2101 Digital Image Processing I, 5 ECTS
- BIMA2108 Digital image processing II, 4 ECTS
- (PGS\_1396 Kliinisen tutkimustyön perusteet, 1–2 op)
- (PGS\_1677 Porin tutkijakoulutus 2016-2018, 3 op)
- Other methodology training
  - 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.
- KIEN3321 English: Advanced Academic Writing, 3 ECTS
- KIEN3341 English Oral Presentation Skills, 3 ECTS
- Other language courses
  - other freely chosen language courses
  - courses organised by the Language Center are for example:
    - 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
- General transferable skills
  - teaching in the undergraduate or postgraduate study programme, max 8 credits
  - 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)

## DISCIPLINE-SPECIFIC STUDIES 30–48 credits

The doctoral candidate has to complete 20–30 credits. **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).** 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
  - freely chosen doctoral programme-specific discipline studies
- Postgraduate seminars / academic seminars
  - participation in the seminar (10 hours/1 credit)
  - seminar presentation (1 presentation/1 credit)
- Research seminars / journal clubs of the institution/department/clinic
- Postgraduate and field specific national and international courses
  - credits according to the course programme and participation
- Scientific national and international conferences
  - 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
  - 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
  - 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
  - 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
  - 0,5 credit/report
- Personal supervision of work given by the doctoral thesis supervisor/s, max 6 credits