Doctoral Programme in Business and Technology Management

Guidelines for studies counted towards a doctoral degree

Study plans and degree requirements

Doctoral students must agree on the units and modules counted towards their doctoral degree in advance with their responsible supervisor. In practice, this means that you must draw up a doctoral study plan and discuss your plan with your responsible supervisor when you start working towards your doctoral degree and whenever you need to make changes to your plan. Your study plan must indicate the skills and competencies you are looking to achieve, the courses and assignments that you will complete to achieve them, the number of credits that you will earn, and the year when you are planning to complete the units and modules listed in your plan.

When you apply for admission to doctoral studies and later enrol at Tampere University, you and your responsible supervisor will review your study plan to ensure that your plan will enable you to develop the expected competencies. You will continue to update and review your study plan in cooperation with your responsible supervisor at least once a year throughout your studies.

The minimum scope of doctoral study is 40 ECTS credits. The required scope may be extended, especially if it is necessary considering the skills and competencies you are looking to acquire. Doctoral students are expected to complete units and modules to develop an in-depth understanding of their field of research and expand their methodological expertise.

Units of study that may not be counted towards your doctoral degree include pedagogical studies that qualify you to teach at university level (exceptions may apply), basic courses (exceptions may apply) and scientific articles or other publications that you have authored yourself. Credits that you have earned outside of Tampere University while pursuing a different degree will not be double counted towards your Tampere University degree (exceptions may apply).

Degree structure

Doctoral students must earn 40 credits towards their degree by completing doctoral studies. This requirement applies to all doctoral students.

Discipline- and field-specific studies, min. 25 credits

- Doctoral students complete this module to develop an in-depth understanding of their field of research, develop their scientific writing skills and enhance their ability to generate new scientific knowledge.
- The units of study included in your discipline-specific studies are intended to provide you with in-depth knowledge of the core subject areas relating to your field of research and help you make sound and justified choices when carrying out your dissertation research.
  - Of all the units included in this module, at least 50% should explore the core subject areas relating to your field of research and up to 50% should support your research work.
- The units included in this module may involve the reading of scientific literature, the completion of doctoral courses and doctoral seminars, participation in scientific conferences (with a learning diary to demonstrate your learning), etc. as agreed between you and your responsible supervisor. In some cases, credits earned by completing basic courses (which are specifically identified as suitable for postgraduate studies) may be accepted.
General academic competences, min. 10 credits

- Doctoral students complete this module to develop their methodological competencies and to ensure they are familiar with the principles of scientific integrity and research ethics.
- The minimum scope for doctoral students who started their studies on 1 August 2019 or thereafter is 10 credits (for students who started earlier the minimum scope is 5 credits).
- Besides the required doctoral seminar and ethics course or TAUJ041b Orientation to Doctoral Studies, 4 cr, all doctoral students are strongly recommended to attend the TRT-28046 Doctoral Course on Research Methods, 5 cr, possibly the advanced course on research methods and/or complete an applied review of the key scientific methods relating to their field of research, for example, based on assigned reading.
- Compulsory (all doctoral students admitted after 1 August 2020):
  - TRT-28004 Tuotantotalouden ja tietojohtamisen jatko-opintoseminaari, 5 credits
  - TAUJ041b Orientation to Doctoral Studies, 4 credits + either course TAUJ12a Research Ethics I, 1 cr or TAUJ12 ab Research Ethics I (online), 1 cr
- Compulsory (for doctoral students admitted after 1 August 2019):
  - ethics, such as research ethics (may be included as part of a different course)
  - the course TRT-28004 Tuotantotalouden ja tietojohtamisen jatko-opintoseminaari, 5 credits does not include ethics
- Recommended units of study:
  - TRT-28046 Doctoral Course on Research Methods (5 credits) or equivalent
  - scientific writing (may also be included in your discipline- and field-specific studies)
  - advanced methodological studies based on your chosen research methods
- Other general academic competences related studies, such as doctoral courses or similar that explore ethics, philosophy of science or information management.

Options for completing units of study towards your doctoral degree

You can have four options for completing different units of study towards your doctoral degree. You must plan your studies as a whole to support the achievement of your overall goals. The options are described in more detail below.

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<tr>
<th>Completion option</th>
<th>Purpose</th>
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<tbody>
<tr>
<td>1. Scientific literature</td>
<td>deepening and broadening your content knowledge and methodological competencies; scientific writing skills</td>
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<tr>
<td>2. Course-based learning</td>
<td>deepening and broadening your content knowledge and methodological competencies; peer learning</td>
</tr>
<tr>
<td>3. Doctoral seminars</td>
<td>refining your research plan or research work; gaining access to peer support and external supervision; developing supervisory collaboration; becoming familiar with the activities of the scientific community</td>
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<tr>
<td>4. Scientific Community Participation</td>
<td>becoming familiar with the activities of the scientific community</td>
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1. Scientific literature included in your doctoral studies

Your assigned reading will be selected individually in accordance with your expected learning outcomes. The assigned literature must cover a sufficient breadth and depth of relevant learning. Here the term literature may refer to (scientific) books or articles. A single unit of study in this category may be an assignment, essay, review, or a written or oral presentation or examination that you complete to demonstrate your learning after reading a number of books, articles or other assigned literature. Each unit must be given a clear title that describes the content. The individual research groups and disciplines at Tampere University may develop literature packages that allow students to start exploring themes relating to their field of research.

- Your assigned reading should focus on advanced scientific content.
  - For example, to earn 1 credit doctoral students will be expected to read an intermediate-level text with approximately 135 pages and prepare an analytical essay/assignment or take an examination to demonstrate their learning.
  - If students are assigned to read complex scientific articles, they will earn 1 credit by reading 60-80 pages of text and writing an essay/assignment or taking an examination to demonstrate their learning.
  - Students would have to go through about 300 pages to earn 1 credit by reading popularised but relevant scientific texts. The reading of non-scientific literature should generally not be included in doctoral degrees.

- You should gain a broad and in-depth understanding of relevant scientific literature that supports your dissertation research. Typically, a minimum of 15 credits (logically divided into units of 3-7 credits) may be earned by completing assigned reading.

- Each unit of study made up of assigned reading must be given a title that clearly describes your acquired knowledge. The required reading must be defined in advance. You may propose relevant reading to your responsible supervisor, or the responsible supervisor may assign the required reading.

- You will be expected to demonstrate your understanding of scientific literature in order to earn credits by taking a written or oral examination, writing an essay, or completing a combination of assignments and exercises. All partial completions must be separately agreed upon with your responsible supervisor.

Example of literature packages and their completion options:

<table>
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<tr>
<th>Contents</th>
<th>Composition</th>
<th>Completion options</th>
<th>Scope</th>
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<tbody>
<tr>
<td>Theme 1 (knowledge area 1)</td>
<td>two intermediate-level compact books; 10-15 scientific articles</td>
<td>analytical summary</td>
<td>5 credits</td>
</tr>
<tr>
<td>Theme 2 (knowledge area 2)</td>
<td>1 intermediate-level extensive book; 20-30 scientific articles</td>
<td>review essay</td>
<td>5 credits</td>
</tr>
<tr>
<td>Theme 3 (knowledge area 3)</td>
<td>1 complex and extensive book (such as a collection of articles); 5-10 scientific articles</td>
<td>set of slides (with notes) and an oral presentation delivered to a professor or to a research group at a seminar (incl. discussion)</td>
<td>5 credits</td>
</tr>
<tr>
<td>Theme 4 (combination of knowledge areas 2 and 3)</td>
<td>30-40 scientific articles</td>
<td>meta-analysis or review accompanied by an essay and/or presentation</td>
<td>5 credits</td>
</tr>
<tr>
<td>Theme 5 (knowledge area 1)</td>
<td>1 book; 5 articles; collection of empirical data in a host organisation and a related written analysis</td>
<td>assignment report (assignment concerning, for example, the development and testing of an analysis framework)</td>
<td>5 credits</td>
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2. **Course-based learning**

Units of study that expand your knowledge of your field of research may be counted towards your doctoral degree.

- These units of study may be courses or seminars that are specifically intended for doctoral students and explore scientific content and scientific work. They may be offered by Tampere University or some other university. These units of study may also comprise tutorials, content-based seminars, summer/winter schools with a limited scope or other similar courses that involve lectures, assignments, supervision and/or other scientific work and for which you receive a certificate.
  - You must contact your responsible supervisor in advance to ensure that the proposed unit may be counted towards your doctoral degree (your responsible supervisor will consult the head of doctoral programme, if necessary).
  - The majority of the units of study that are counted towards your degree in this category must be doctoral courses.
- If you complete courses outside of Tampere University, you will be required to present a course certificate and a document outlining the course programme and requirements.
- Basic courses that may be counted towards doctoral degrees may only be accepted if they explore content that is especially relevant to your field of research or a closely related field.
- Other basic courses may only be accepted if they explore advanced content that is especially relevant to your field of research or a closely related field. Your responsible supervisor will need to justify the decision in writing. For example, MBA courses or professional development courses cannot be counted towards a doctoral degree.

3. ** Attending doctoral seminars**

You will be able to claim credit for attending general doctoral seminars (doctoral workshop, colloquium, seminar etc.) where students revise and present their research plans and results, receive and offer feedback to their peers and receive mentoring services from an external professor.

- The doctoral seminar offered by the doctoral programme and the course Orientation to Doctoral Studies offered by Tampere University are examples of these seminars with a defined content, learning outcomes and scope.
- Different scientific societies, networks, conferences and project consortia may host their own doctoral seminars (1-6 days), which usually include pre- and/or post-assignments, active attendance and possibly expert lectures and group work. You will be required to present a certificate of attendance enclosed with the seminar programme and requirements.
- You will be able to claim up to 3 credits for participating in seminars outside of Tampere University (which must include a pre-assignment, active participation, and a report to your responsible supervisor). When your responsible supervisor assesses your learning, he or she will consider the actual workload associated with your participation in the seminar based on the following principles (regardless of how the organiser may have defined the workload):
  - 1 credit: a seminar/workshop (1-1.5 days) with pre-assignments (such as updating a research plan, peer reviewing the research plan or a fellow student)
  - 2 credits: a seminar/workshop (2-3 days) with pre- and post-assignments
  - 3 credits: a seminar/workshop (4-6 days) with pre- and post-assignments
  - Please note that you cannot claim double credits for the same research plan or the same
presentation in this category. Here a pre-assignment means that that an earlier plan is significantly revised.

- In addition to the doctoral seminar offered by Tampere University, you may claim **up to 4 credits** for attending other doctoral seminars.

## 4. Scientific community participation

This module means that you can earn credits towards your doctoral degree by participating in the activities of the academic community in various ways. Only scientific assignments will be accepted in this category (no practical or commercial seminars). You will not be able to claim double credits, for example, for articles that will be included in your compilation-based dissertation or licentiate thesis or their earlier versions. You can earn up to **4 credits** towards your degree by completing units of study in this category.

a) **Delivering a presentation at a scientific conference** (max. 3 credits in total)
   - 1 credit / conference
   - You can only claim credit for conferences where you are an active participant, meaning that you deliver a presentation based on your research and/or serve as a chairperson or discussant during a conference session.
   - The units of study included in this category must clearly identify your active participation (such as the title of your written/oral presentation OR the theme of the session where you served as chairperson/discussant) and the event you attended (name, time and place of the conference).

b) **Serving as the official supervisor of a master’s thesis** (max. 2 credits in total)
   - 1 credit / thesis
   - You must have actively supervised the master’s student throughout the thesis process.
   - Supervising a master’s student will enable you to become closely familiar with the guidelines, requirements and practical arrangements that apply to master’s theses.
   - Doctoral students may supervise master’s students under the guidance of their responsible supervisor.

c) **Serving as a peer reviewer for a scientific journal** (max. 1 credit in total)
   - 3 reviewed manuscripts / 1 credit
   - The task needs to be demonstrated by your correspondence with the editor.
   - Your responsible supervisor will assist you and ensure you follow good review practices.

d) **Communicating research to external audiences and engaging in societal interaction** (max. 1 credit in total)
   - 1 credit / 27 hours of work
   - Newspaper articles, speeches, presentations

e) **Participating in the planning of a research project** (max. 1 credit in total)
   - 1 credit / planning of a research project together with your supervisor and an external collaboration partner throughout the whole planning stage

### Performance requirements:

You will be expected to demonstrate your active participation by keeping a learning diary, preparing an essay or a self-assessment or delivering an oral report demonstrating the achieved competence and approved by your responsible supervisor. The format and scope of the study attainment are agreed in advance with the responsible supervisor.
Approving and recording completed units of study

The credits you earn by completing courses offered by Tampere University will be recorded by the course teacher as usual. However, you must agree on the completion of these courses with your responsible supervisor in advance, so that your supervisor can ensure that the courses may be counted towards your doctoral degree.

If you complete doctoral courses or doctoral seminars outside of Tampere University (other universities or networks), you will need to write an application for the credits via study draft function in the Sisu system, and it must be favoured by your responsible supervisor. Your responsible supervisor will ensure that the unit of study meets the requirements and consider the scope and workload (to ensure that the number of credits equals the workload and that the content of the unit is suitable) before deciding whether to support your application. You must send the study draft and supporting documents via Sisu system to the education specialist of the doctoral programme. The final decision to approve the credits will be made by the head of doctoral programme. The study services assistant will enter the credits in your academic records.

When you complete personal units of study (such as assignments based on independent reading of scientific literature or scientific community participation), you will be expected to provide your responsible supervisor with a written assignment, report, presentation, etc. to demonstrate your learning. Your responsible supervisor will assess your learning in accordance with the principles set out in this document.

In a case of a literature assignment the responsible supervisor sends the student services assistant and you the required information of the assignment. You need to apply for registering the credits by sending a study draft of the assignment in the Sisu system. The unit of study will be included in your academic records under a clear heading alongside a list of the scientific literature included in the unit (if applicable). The study services assistant will enter the credits in your academic records.

In a case of a scientific community participation assignment the student applies registering the assignment via study draft function in the Sisu system. The education specialist of the doctoral programme makes sure that the responsible supervisor favours the assignment. The head of the doctoral programme approves the assignment and the student services assistant will enter the credits in your academic records.