

Thesis guide, Bachelor's Degree, Humak

(OLD VERSION)

This thesis guide will be used for theses that have been started before January 2026

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According to section 2 of the government decree on universities of applied sciences, studies leading to a university of applied sciences' degree include a thesis or a final project. At Humak, this requirement is demonstrated by preparing a thesis or completing a final project, which are essentially development assignments commissioned by representatives of working life. The objectives of the development work are agreed in writing between the thesis author, thesis commissioner and the thesis supervisor before starting the work.

1. WHAT IS A HUMAK THESIS?

1.1 WHAT IS A HUMAK THESIS?

According to section 2 of the government decree on universities of applied sciences, studies leading to a university of applied sciences' degree include a thesis or a final project. At Humak, this requirement is demonstrated by preparing a thesis or completing a final project, which are essentially development assignments commissioned by representatives of working life. The objectives of the development work are agreed in writing between the thesis author, thesis commissioner and the thesis supervisor before starting the work.

By writing a thesis students demonstrate their professional maturity and ability to engage in systematic, long-term working-life development in collaboration with the commissioner of the thesis. A thesis is an expression of the student's competence to apply the methods of the development work, of the student's ability to write high-quality, fluent expert text and, in general, the ability to perform a limited but demanding expert task.

A Humak final project and thesis produces something concrete for the commissioner – it is not just a piece of paper. The development task is always future-oriented: every project produces new knowledge, reforms operations or does both. The concrete output can be a useful operational model, a product, a guide, or a service. The output may also be the renewal, evaluation or application of a working method to suit a new operating environment. It can also be a plan, but the implementation of the plan is often a more interesting development task than just planning. The concrete output may be included as an appendix to the thesis, or the author may describe its implementation in the content chapters of the thesis.

The extent of the thesis is 15 credits (ECTS) and is part of a study module on development operations, the extent of which is 25 credits. The other 10 ECTS consist of the courses Approaches of research-based methods (5 ECTS) and Methods of research-based development (5 ECTS). In the Approaches of research-based methods course the students learn how to design and manage research-based development processes and how to use appropriate approaches. In the course Methods of research-based development, the students familiarise themselves with various research-based development methods, practice development of a practical assignment and create a preliminary thesis plan.

The recommended length of the bachelor's thesis is approximately 40–60 pages of body text written by the student. In addition, the thesis may contain appendices. The thesis is written primarily in the language of teaching, but for justified reasons, it can also be written in another language. Such reasons could include, for example, the working language of the commissioner.

Writing in languages other than the language of instruction requires the consent of the teacher and the evaluator of the thesis. The evaluation statement shall be written in the same language as the diploma.

The final project or thesis can be made as an individual effort, in pairs, or as a group. The development of work in a group setting is a natural way to working, as in practice, development work is seldom carried out alone in working life. A final project or thesis prepared in a group is expected to have more depth and a more versatile processing of the subject than final projects/theses completed alone. In addition, the written part of group final projects may be slightly more extensive than in projects carried out alone. The prerequisite for a well-functioning group work is that everyone is responsible for the whole project, while each group member has his or her own main area of responsibility. The group can also produce several parallel individual projects on the same topic. The grade and statement of the final project and thesis are the same for all members of the group, if the output of the group is one shared thesis/final project. This guide talks about the student in the singular, but all instructions and regulations given are also applicable to members of a student group.

1.2 INTRODUCTORY NOTE

The learning objectives and formal requirements of the final projects and theses for the bachelor's degrees at the Humak University of Applied Sciences are similar in all degree programmes. This thesis guide provides the general outlines for the implementation of final projects and the evaluation of theses to be applied in practice. The guide is intended to be used by both the student and the supervising teacher. The guide also provides information for the working life partners of Humak, who commission final projects and act as working-life supervisors of the work in the final project.

The key background material for this guide include the literature on the methods of development work as well as the Universities of Applied Sciences Act (Ammattikorkeakoululaki, 932/2014), the Government Decree on Universities of Applied Sciences (Valtioneuvoston asetus ammattikorkeakouluista, 1129/2014), the Copyright Act (Tekijänoikeuslaki, 404/1961), the quality recommendations for UAS bachelor's theses (Ministry of Education and OAMK, 7 September 2006), the Data Protection Ombudsman's guidance on the data protection principles and GDPR (Tietosuojavaltuutetun toimisto 20210; 2020), law concerning digital distribution services (306/2019), The Finnish National Board on Research Integrity's instructions on good scientific principles and the ethical principles of research focused on humans (TENK 2012; 2019), the letter of the Ministry of Education on the publicity of theses (DNO 3/500/2004) and the ethical recommendations for theses of universities of applied sciences (Arene 2019).

In order to harmonise the practices related to final projects and theses, this guide will use the terms appropriate for all fields of education in accordance with the quality recommendation, such as thesis, final project, thesis author, the commissioner of the thesis, thesis seminar, topic proposal, thesis plan, thesis cooperation agreement, thesis evaluation, thesis supervisor, a second evaluator, thesis coordinator, working life instructor, peer reviewer and knowledge base. These

terms should be used consistently in all matters relating to final projects and theses, so that the common language and understanding of the nature of UAS theses and final projects is strengthened between the students, the supervisors as well as the working life instructors.

Working group, 14 May 2018: Arto Lindholm and Reijo Viitanen, supplements and updates Minna Hautio 22.10.2020, translation from Finnish by Ossi Muurinen 10.12.2020.

The guide has been discussed in the Pedagogical Development Group on 3.12.2020 and approved by the Managerial Group on 12.2.2021

2. FROM THE FIRST IDEA TO THE FINAL SEMINAR

2.1 FROM THE FIRST IDEA TO THE FINAL SEMINAR

Humak uses Wihi as a platform for working on theses. Wihi relays messages between the student, a thesis supervisor and a thesis commissioner. A thesis proposal, a thesis plan, a thesis cooperation agreement and different turn-in stages of theses are processed in Wihi.

Wihi is also the place where a thesis gets its final evaluation. Wihi works together with Thesis (Bachelor) learning environment found in Humak's Moodle online learning environment.

The learning environment's tabs have information about how the thesis process works for specific degree programmes, educational structures and classes. You don't have to register anywhere else to start your thesis progress.

More information about [how Wihi works can be found here](#).

The final project/thesis process usually progresses as follows

1. A student or a student group will prepare a topic proposal and save it in Wihi.
If there is more than one creator, only one student will save the topic proposal in Wihi, and invites other members as a part of the thesis group in Wihi.
2. A thesis coordinator receives the topic proposal in Wihi, and either accepts the proposal or asks that the proposal be supplemented.
3. Once the topic proposal has been accepted, the thesis coordinator chooses a supervisor for the thesis, and the supervision process begins.
4. A student makes a thesis plan and saves it to Wihi.
5. A lecturer either approves the plan or asks that the plan is amended.
6. Thesis commissioner, supervisor and thesis make write a cooperation agreement in Wihi.
7. The student works on their thesis under the supervision and guidance of the thesis supervisor and working life instructor.
Messaging concerning the thesis is wholly done through Wihi.
8. The student sends their nearly completed work for a pre-evaluation in Wihi.

9. Once the student's thesis or final project is nearly finished, it will be discussed in the final project seminar, which will take place between 1 to 2 weeks before the theses/final projects are submitted for evaluation.
10. The student submits the thesis for evaluation in Wihi by the specified deadline. When returned, it goes through a plagiarism check. The thesis supervisor and its second examiner evaluate the thesis.
11. The student shall take a maturity test according to given instructions.
12. The student shall save their thesis in the Theseus online database, and add a Theseus link to their work in Wihi. Only after this can the student see their grade in Wihi.
13. The student saves their grade statement for themselves and later includes it as part of other graduation documents (diploma, transcript).

2.2 TOPIC SELECTION AND COMMISSIONING OF FINAL PROJECTS

Students should be active themselves and seek out and identify development needs in working life, and offer their work input for discovering the solution as a final project. Often enough, important thesis topics are discovered in connection with the demanding practical training carried out at the end of the degree programme. Combining the Skills Development Training with a final project provides a chance to carry out highly demanding working life development tasks.

When selecting a topic for the final project, the supervising teacher should guide the student, first and foremost, to identify potential development needs. For example, the operations of the subscriber may be outdated, the organisation may have a need for modernization, the organisation may want to try a new approach, or there may be a lack of guidance for a function.

However, the need for development can not only exist in the mind of the student, but it must also be recognized by the subscriber. This way, the thesis and final project can be carried out in good cooperation and interaction between the parties concerned.

A thesis subscriber can be Humak's research and development projects, or projects by Humak's partners as well as other working life operators. The principle behind Humak's RDI-based learning involves the idea that completing a thesis within Humak's own development projects is recommendable. If a thesis or a project is made for Humak's development projects, the project subscriber is the project coordinator. For information on Humak projects, please consult the university staff. Often, the student is offered an interesting assignment in the course of practical training or paid work, which is suitable for a thesis or final project. In addition, Humak also receives subscriptions for theses and final projects, which are advertised to students in the Peppi forums.

[The instructions for the thesis commissioner](#) outline the responsibilities, obligations, and rights of the commissioner. It is advisable to use these instructions to explain the nature and purpose of the thesis to the commissioner already at the stage when a commissioner is being sought. The thesis author must ensure, at the latest before drafting the agreement, that the commissioner has reviewed the instructions.

2.3 TOPIC PROPOSAL AND COOPERATION AGREEMENT OF THE FINAL PROJECT/THESIS

The form of the topic proposal should be: needs (why it is developed), objectives (what is developed and what is the goal), measures (how it is developed), results (what is the end product). The topic proposal includes the thesis commissioner's information.

Not all working life commissions are suitable for final projects as such. Sometimes the project may be too routine to be considered a topical, interesting and significant work in the professional sector, as specified in the evaluation criteria of theses and final projects. At times, the commissioner's order may be too extensive. It is the supervising teacher's task to ensure that the goals are set for the work are realistic and within the limits of the time or resources available for the final project. In most cases, the subject can be limited or expanded when making the cooperation agreement.

It is recommended that the thesis cooperation agreement be completed face-to-face at the workplace or through a video connection to ensure that all parties understand each other. If the agreement is drawn up remotely without the parties meeting each other, the agreement often becomes just a formality with minor significance. The agreement is prepared on the Humak's thesis cooperation agreement [template](#) (see section Other forms needed for your thesis). When making the agreement, it is important to highlight the section of the agreement according to which all theses are published in the [Theseus online library](#). Any permits and confidentiality obligations must be clarified in the agreement negotiations. It is also important to discuss salary or compensation.

The thesis can also be connected to the author's own business. In such cases, there is no need for a cooperation agreement, as the author does not need to order the work from himself/herself. A thesis or final project on the development of the student's own business can only be successful if the operations of the business are genuinely renewed or the business is genuinely started, and the project is not just about mapping or planning business opportunities.

The student shall print the thesis agreement and fill in the necessary contact information in the form before signing the cooperation agreement. Actual signatures are not needed. The student will upload the cooperation agreement to Wihi, and link it to the project commissioner's email address before sending it to the commissioner. Once the commissioner has answered the message and agreed to the contract, the commissioner has agreed to the contract terms. A thesis supervisor will also approve the message chain. Once all participants have accepted the contract, it is valid. The contract and all related messages are saved in Wihi.

2.4 THESIS PLAN

The thesis plan is made for three actors: the author, the commissioner of the project, and the educational institution. The plan will help to outline the project as a whole and to encourage the student to reflect upon the most important issues involved. The commissioner can, in turn, ensure

that the parties have understood each other and that the objectives of the project meet the subscriber's expectations. The plan ensures that the project fulfils the criteria set by the educational institution for the topic and method of implementation of the thesis. The date on which the plan shall be completed is defined in the cooperation agreement of the final project/thesis.

The thesis plan also includes a data management plan, outlining how you will collect and preserve your data, how you will handle it ethically, and how you will ultimately either dispose of it or deposit it in a permanent archive. Permanent archiving of the data is rare in the context of theses; it is more common for the data to be destroyed after the thesis evaluation. However, proper procedures for the final handling of the data must be ensured. Write the data management plan according to the [Template for Data Management Plan](#) and attach it as an appendix to your thesis plan.

The thesis plan should be written keeping in mind the following four key areas

- 1. Needs**
- 2. Objectives**
- 3. Measures**
- 4. Results and products.**

Start by defining the development need by answering the questions: Why should the commissioner's operations have to be developed and why is this final project or thesis important? Justifying the reasons for the development need almost always requires an in-depth familiarization with the conceptual knowledge, i.e. theory, as well as the knowledge base, of the topic. A good understanding of the needs for change in the professional sector and of the current discussions within the field will make the student's presentation of the development need convincing.

When the development need has been properly defined, determining the objectives of the thesis is fairly straightforward. The objectives should be written in such a way that when realized, they resolve the previously defined development needs. The objectives should be sufficiently concrete to enable the reader to understand what this exact thesis or final project is aiming at. For example, the definitions, such as the objective is to develop the operations are too vague.

The indicated measures will explain what is actually done in the final project and describe the kind of development process that is to be carried out within the final project. It is important to choose purposeful measures for the development need, so the information gained is best suited for development work. The measures taken should be planned out ahead of time in detail. Choosing the right measures and actions isn't only related to the gathering of information. It's important to plan how the results of the work will be implemented as part of the commissioner's operations.

The measures may be research methods, such as interviews, surveys and observations, but often enough the measures used in final projects and theses at universities of applied sciences are also functional and operational. There are various things in development projects which cannot be discovered just by conducting surveys and interviews, rather new approaches or methods must be tested or piloted in practice. The plan should indicate the subject of experimentation, how the

experimentation is carried out in practice, and how data will be collected and evaluated with regard to the experiment. In data collection, there is almost always a need for participant observation and often also for interviews with the participants. When writing down the measures, the student should also reflect on how the developed activity or new knowledge is to be put into practice and established as part of the commissioner's operations. Measures should be planned in as much detail as possible already in the planning phase.

The description of the product or the development task means the product the commissioner or the entire professional sector gains after the final project and thesis have been completed. It may not be possible to describe the content of the output in the planning phase, but it should be possible to outline the outputs in the first place. If the output is a new mode of operation, a guide, a set of instructions, etc., the way the product is to be put into practice for the subscriber should also be described. The possibility to test the output or product in practice often yields the best results: how does the new guide, product or service, for instance, actually work? If, however, the product is of a more abstract nature, such as new research information, you should ensure that the new information, too, can be used to influence the development of operations. For example, the new information can be used to organise a brainstorming meeting at the premises of the subscriber. The main thing is that the new information will not be forgotten as just one more file gathering dust in the depths of the Theseus online library.

The plan, based on the four key focus areas, is complemented with a schedule and a preliminary table of contents. The key concepts, as well as relevant sources, should also be outlined. In group projects, the distribution of work between the authors should also be indicated. A descriptive title is also an important part of the plan. A good plan is about 5 to 8 pages long.

However, the plan for any development project is never carved in stone: development work is typically characterised by the change and refinement of the plan as the work progresses. The changed plan does not have to be rewritten and reapproved again, but any major changes must be agreed upon with the supervising teacher and the commissioner. If the topic of the thesis changes completely, the planning process must be started afresh and a new plan prepared.

2.5 THESIS SEMINAR AND PRE-EVALUATION

The thesis supervisor and the second evaluator will comment the thesis even before you turn it in for final evaluation. This is called a pre-evaluation phase, but it may have different names depending on your degree programme. The purpose of pre-evaluation is to help the student develop his thesis even further. In the pre-evaluation phase the student's thesis must be at the point where all relevant chapters are nearly finished and in place. The thesis as a whole should be complete enough, so a clear summary, results and product can be formed. This is still a working phase of the thesis, and it is possible to substantially change the thesis even after this phase.

The thesis will be presented in a seminar before the thesis is submitted for evaluation. The seminar is the last opportunity to provide and receive feedback on the thesis before the final evaluation. The seminar is however, not the place to give promises or hints at the possible final grade for the thesis.

The appropriate time for the seminar is one to two weeks before the thesis is to be submitted for final evaluation. For this reason, the thesis should be sufficiently close to being completed so that the teachers and the supervising teacher get a complete picture of the project. However, the time is long enough to allow the student to make the necessary changes in order to finalise the thesis. At the seminar, each thesis is also peer-reviewed. Peer-review instructions should be sent to students in good time before the seminar by the supervising teacher. The purpose of peer review is to train students in providing constructive criticism and to give the author of the thesis additional perspectives to the topic at hand.

The student is encouraged to invite the representative of the commissioner of the thesis to the seminar. If the commissioner cannot attend the seminar, a free-form statement of how useful the project has been for the commissioner may be requested. The statement of the commissioner may be taken into account when evaluating the applicative value of the project for the commissioner, even though the final evaluation is always implemented according to criteria approved by Humak.

3. IMPLEMENTATION OF THE THESIS

3.1 IMPLEMENTATION OF THE THESIS

All final projects and theses are unique and original work-life development assignments. However, there are a number of things that all authors of theses have to pay attention to. These include a strong knowledge base, a combination of development methods and prolific writing.

In addition, all UAS basic examination thesis writers need to be able to follow the research and development ethical guidelines listed below

- **Responsible conduct of research in the thesis work process**
- **Responsibilities of research practice**
- **General ethical principles for research on people**
- **The premises of, need for, and advance evaluation procedure of ethical advance evaluation.**

For more information

- [Ethical recommendations for thesis writing at Universities of Applied Sciences](#)
- [Responsible conduct of research and procedures for handling allegations of misconduct in Finland](#)
- [The ethical principles of research with human participants and ethical review in the human sciences in Finland](#)
- [Office of the data protection ombudsman FAQ](#)

Humak also provides [templates](#) for informing research subjects

3.2 THESIS ETHICAL INSTRUCTIONS

Humak is committed to the HTK guideline for good scientific practices. Good scientific practices consists of research ethics guidelines, which include informing subjects, requesting the subject's consent and complying with the data protection regulation in the processing of personal data, among other things. The Rectors' Conference of Finnish Universities of Applied Sciences (ARENE) has prepared ethical guidelines for UAS theses to support thesis studies and supervision. Humak follows these instructions. Good scientific practice also includes referring to the publications of others in an appropriate manner. You can find Humak's source reference guide [here](#).

When researching organizations, the process also includes applying for a research permit. An permit is usually requested via the organisation's own research permit form. Humak also has a research permit, which is used when researching Humak's own operations, for example by conducting surveys that are answered by Humak's students or staff.

Humak is a member of the Ethics Committee of Humanities of the Helsinki Metropolitan Area Polytechnics. Upon request, the Commission conducts an ethical evaluation of its member organizations and issues opinions on plans that are not subject to the evaluation of regional medical ethical activities under the Medical Research Act. The committee does not deal with bachelor's theses, but the master's thesis plan may require an ethical pre-assessment. The need to apply for a statement is discussed with the thesis supervisor.

For more information

- [Ethical recommendations for thesis writing at Universities of Applied Sciences](#) (Arene 2019)
- [Responsible thesis](#) (Arene 2020)
- [Responsible conduct of research and procedures for handling allegations of misconduct in Finland](#) (TENK 2012)
- [The ethical principles of research with human participants and ethical review in the human sciences in Finland](#) (TENK 2019)
- [Office of data protection ombudsman](#) (Office of data protection 2019)

Document templates – such as **Participation Information Sheet** and **Participant Consent Form** – can be found in the Student's Guide under Thesis > ["Other forms needed for your thesis."](#)

If a personal data register is formed during the research, a separate data protection statement must be made. This statement can be made by filling out the **Research Data Protection Privacy Policy** form. This can also be found in the location mentioned above. The form is then saved to Wihi. Read more about the personal data register and in what cases one is formed from tietosuoja.fi/en. If you are unsure whether you need a data protection statement or not, contact your thesis supervisor.

3.3 FORMS NEEDED FOR THESIS WORK

In the implementation of almost all theses, various forms are needed. This text covers four of them:

- Participation Information Sheet
- Participant Consent Form
- Research Data Protection Privacy Policy Form
- Research Permit Form

You can find them in the Student's Guide under Studies > Thesis, under the subheading 'Other forms needed for your thesis'. Save all the forms you use in your thesis and the confirmations received for them in Wihi apart from Participant Consent Forms. Keep the Participant Consent Forms securely in your own possession and destroy them once your thesis is completed and any potential appeal process has ended.

Participation Information Sheet and Participant Consent Form

When researching people, you must inform them. Based on the information they receive, they make an independent decision on whether to participate in your research. This decision must be clearly expressed, and whether the answer is affirmative or negative, it must be respected. Participant Consent Form requests consent for two different things: participation in the research itself and the processing of personal data as described in the Participation Information Sheet and in the Research Data Protection Privacy Policy Form.

The Participation Information Sheet and Participant Consent Form are meant to be customized, so add essential information related to your work and remove the instructions and irrelevant sections from the Participation Information Sheet that are not relevant to your work. To allow the participant sufficient time to consider participation, it is important that informing takes place before requesting consent. This is why the templates are separate. For example, you can formulate text from the Participation Information Sheet that you send to the subject when asking them to participate in the study. After they have agreed to participate, you can then send them the Participant Consent Form and the Description of Research Data Protection Privacy Policy Form.

The subject confirms their consent either by signature or by email. If they confirm it by message, save the entire email response in a way that shows the sender's email address. Also, ensure that the email response is from the specific personal email address of the sender and the response clearly indicates what they are consenting to. Instruct the respondent to copy the text from the form into the response message.

Description of Research Data Protection Privacy Policy Form

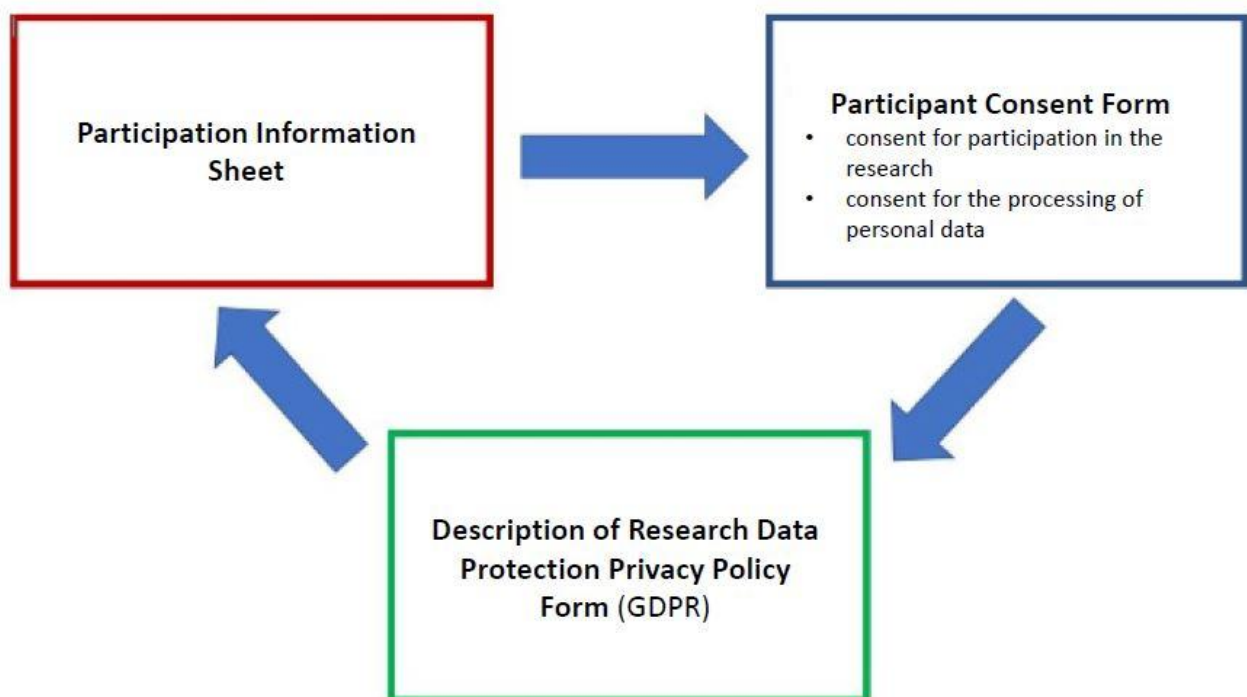
The Description of Research Data Protection Privacy Policy Form is related to the General Data Protection Regulation (GDPR) of the European Union. According to it, there must be a description for all registers containing personal data, describing the principles of processing that data. Personal data is created surprisingly easily. For example, the aforementioned Participant Consent Form, which includes the name of the person participating in the study, contains personal information. Also, an audio or video recording of an interview and its transcribed version (transcription) identify the individual and are considered personal data. The interview transcription

can be anonymized or pseudonymized, but there will inevitably be enough details in the interview content that it is not completely anonymous despite this.

The Research Data Protection Privacy Policy Form must be completed whenever the voice or image of the interviewee is recorded, or other direct or indirect identifiers leading to the identification of an individual are created. Indirect identifiers refer to the fact that an individual can be identified based on factors such as age, gender, place of residence, interview content details, or a combination of these factors. More information about the personal register and the cases in which it is created can be found at www.tietosuoja.fi.

When you retain these documents and files in your possession, even if only temporarily, you become the data controller, and you must complete the Description of Research Data Protection Privacy Policy Form. The form describes in detail all the information related to the collection, processing, and destruction of data containing direct or indirect personal identifiers. Include in this form the information about all the registers generated in your thesis, such as Participant Consent Forms, recordings, and transcriptions.

Relationship between the forms



You can think of the Participation Information Sheet, Consent of the Subject Template, and the Research Data Protection Privacy Policy Form as a kind of trio: the Participation Information Sheet informs the purpose of the research, allowing the subject to know what they are consenting to with the Consent of the Subject Form. The Participant Consent Form filled with the subject's information contains personal data, so simply based on that, the threshold for completing the Research Data Protection Privacy Policy Form is crossed. This description must, in turn, be consistent with how the data processing is described in the Participation Information Sheet.

You have likely gathered information in your previous studies through interviews, observations, or surveys. In those cases, the described forms were not needed, as studying is considered

household use where they are not required. However, it is still important to handle the processing of those materials with special care and ethics. The thesis differs from your previous learning tasks in that the thesis is a public document in status. Therefore, a different permit process is applied to it compared to previous exercises.

Research Permit Form

If your research subject is an organization, you may need a separate permit from that organization to conduct the research. Ensure this in good time before starting the work. Organizations requiring such a permit usually already have a ready-made form for this purpose, so use it. The research permit form in the Student Guide is intended for situations where the research subjects are students or staff of Humak.

For Surveys, the Process Is Slightly Different

The use of the aforementioned templates and forms is particularly relevant in situations where people are being interviewed or observed. However, in surveys as well, informing and obtaining unambiguous consent are essential. Information is included in the introductory statement of the survey (cover letter), and a separate section is added to the form where the respondent specifically indicates their desire to participate in the research.

If the survey requests direct or indirect personal information, a data protection statement created using the Research Data Protection Privacy Policy Form is also needed. This statement can be linked in the introductory statement, for example. If personal data is requested, the form must also have a separate mandatory tickable section where the respondent can express their consent to the processing of personal data under the conditions outlined in the data protection statement.

Checklist:

- Apply for a research permit (if necessary)
- Complete the Research Data Protection Privacy Policy Form
- Inform the research subject using the Participation Information Sheet
- Request consent from the subject using the Participant Consent Form
- Save the completed forms in Wihi apart from the Participant Consent Form which you keep yourself.

If you are unsure about which forms and templates you need for your thesis, contact your thesis supervisor.

Example 1:

In your thesis, you are developing online education for institution X. For this, you want to find out what experiences the students at the institution have on this matter. You conduct an extensive anonymous survey and also interview some students. Proceed as follows:

- Obtain a research permit from the organization in question.
- Ensure that the survey produces genuinely anonymous data, meaning respondents cannot be identified even indirectly based on their responses.

- Inform about the survey in the survey cover letter. Since you do not collect personal information, you do not need a description of personal data processing actions. Add a mandatory tickable section to the survey where the respondent indicates their desire to participate in the research.
- Complete the Description of Research Data Protection Privacy Policy Form for the interviews.
- Inform the interviewees using the Participation Information Sheet formulated by you.
- Request consent from the interviewees using the Participant Consent Form ap

3.4 KNOWLEDGE BASE

In order to succeed in projects commissioned for the development of operations, the author must be very familiar with the specialised professional literature of the field and have a concept of what kind of knowledge or competence the field is lacking. Often the author must familiarise him- or herself with similar projects both in Finland and abroad. Before starting the development work, the student should obtain a clear understanding of what is already known about the topic. The goals of a thesis often become clear only once the student has researched the subject extensively.

Existing knowledge, such as research and reports, makes up the knowledge base of the thesis. Learnedness and the ability to apply the literature are key issues for theses in higher education. In the best case, the student is able to demonstrate how the new knowledge gained from the final project increases the competence and knowledge base of the entire professional sector.

Theory is an integral part of understanding the topic which can be used to develop the operations. With theory, the author will be able to identify the need for development and to find clues as to how the development work should be carried out in practice. In most universities of applied sciences, including Humak, the term knowledge basis is used instead of theory in order to better highlight the practical nature of the applied knowledge. The concept of knowledge base also refers to the knowledge which is not necessarily peer-reviewed research literature, but can also be different strategy papers, documents and unwritten experiential knowledge which can help in the developing task. However, the knowledge base must not be purely based on experimental knowledge, or so-called tacit knowledge. Any references to tacit knowledge should also be documented.

Students are often shy about modifying the text in the source literature. An inexperienced writer may be afraid of misrepresenting the message of the source. This is evident, for example, in a generous use of direct citations from the research literature. However, a thesis must be written in the student's own words and ideas, by combining different sources. This way, the knowledge base is shaped to become a unique text that conveys precisely the perspective of the particular student writing the thesis. If the student is limited too much to using a single source, the knowledge base will inevitably become too much of a summary of that source.

Where will the student find the right sources? The supervising teacher can, of course, recommend sources if he or she is sufficiently well read for this. Informaticists can also be asked to help find

concrete sources, and also for making sure the sources the student has found are up-to-date and relevant. Finding relevant sources is primarily the student's task and a part of the thesis process.

The minimum requirement is that the student is able to define the key concepts relevant for the project, and use them to search for sources in the following databases:

- [Humak Finna](#)
- **Melinda**
- **Google Scholar**

All databases can be easily found online, for example by using Google. In Humak Finna and Melinda, it may be best to use the Advanced Search function, which will enable the student to search for sources with combinations of two or more search terms. Humak Finna also has a tab for International e-resources search, which can be used to find scientific publications available in electronic format. In addition, the ARTO – Reference Database of Finnish Articles in Humak Finna finds both scholarly articles and newspaper articles. The search function in Google Scholar works in the same way as the search function in Google in general, which means that search terms are entered in one field without any words in between them.

Today, many people are accustomed to googling the information they need, trusting that almost all relevant information can be found with search engines. However, this is insufficient for theses and final projects in institutions of higher education. Help using databases is available from the supervising teacher as well as the library staff.

3.5 UTILIZING THE METHODS OF DEVELOPMENT WORK

In academic institutions, method means something slightly different from what is meant by method at universities of applied sciences. In many faculties at universities, empirical research methods refer to either quantitative (e.g. questionnaire studies and surveys) or qualitative research methods (including interviews and observation). The objective of academic research is generally not the development of operations; rather, the results of the research are more in dialogue with the theory than with actual working life. The possible application of the research results into practice remains the responsibility of others. Instead of copying research methods from academic research, be inspired by the systematic approach and in-depth familiarisation with the previous knowledge of the field, which are typical traits of academic research.

The objective of final projects and theses at Humak is to develop the operations of the commissioner of the project. Therefore, it is more appropriate to talk about methods for research-based development work, rather than research methods as such. These include, for example, various collective brainstorming methods, think tanks, process analyses, peer reviews and future workshops. For further information about such methods, you can look up "Kehittämistyön menetelmät" (2009 or 2015, Katri Ojasalo et al). Methodological questions will be discussed in the course Research-based Development.

The methods of development work are characterised by combining different methods in order to achieve the objective. For example, the author of the thesis may begin the development work with

a group interview to identify the need for development. After this, a think tank or brainstorming session can be used in the work community to together find different solution models. Benchmarking can be used to discover good practices in Finland and abroad. After the concrete completion of development work, you can collect feedback, for example, through an e-mail questionnaire.

Development work is often done in the spirit of the increasingly popular culture of experimentation. The starting point for a culture of experimentation is not so much in making numerous reports and preliminary reports to reports, but rather diving into genuine operational experiments quickly and on a low budget. The experiment may be small, but even small experiments always aim at a bigger change. The idea is also to experiment with things that cannot be tested in any other way than experimenting. Experiments can be very bold and original, and they produce important information also when they do not succeed. It is important that experiments are carefully and systematically documented, and data is collected by means of participatory observation, for example. The culture of experimentation can be interpreted as one approach to development work, in the same way as action research or case study.

Development work is usually carried out in collaboration with the working community. Even if the ideas and solution models had been developed in a collaborative way, the student can make full use of them in the thesis. The ability to engage in development work with an open mind together with others prepares students for working in teams and networks also after the studies, which is a highly valued working life skill. In collaborative development processes it is essential that the student itself plays an important part (for example as a development process leader). The student needs to be able to analyse received information systematically and objectively, using them to arrive to concrete conclusions.

Observations produced in the development work are usually called the material. In universities of applied sciences, the term research material is usually not used, and the more descriptive concept, development material, has not yet been established in wider use – that is why we simply talk of material. Material can also be called a primary source. This means that the material has been gathered specifically for this project and is now used for the first time. The word material also appears as a part of the word source material. Source material and material are different things, however. Source material refers to the knowledge base, while material is subject to analysis. These two intertwine in theses analysis and conclusion chapters. Both have meaning as a base for refining and producing new information.

The material should be documented carefully. However, often the students are so focussed on managing and completing the interviews, etc., that they tend to forget to document their efforts. The material obtained through interviews and collaborative brainstorming methods should be recorded and transcribed with sufficient precision in terms of the objective of the project. In operational experiments, it is often necessary to keep a journal of the final project, as otherwise a big part of the important observations will simply be forgotten. The material will not be attached to the thesis as an appendix, but questionnaires and interview structures are.

A careful assessment of the success of the project and identification of the need for further development are crucial aspects of any development work. Development work involves a pragmatic understanding of knowledge: the better something works, the closer we are to the correct knowledge. Too often students forget to evaluate how well the work or project functions.

Collecting feedback from the commissioner and other interested parties is one way to evaluate success. Another is identifying application opportunities for the project elsewhere. Sometimes the success of a final project can be assessed by objective, pre-determined criteria. The main thing is that the critical assessment is more profound than simply the presentation of one's superficial opinion. The supervising teacher should also stress that evaluation does not just mean simply praising one's work: a careful analysis of failures and a complex reflection of development needs are also an important part of evaluation in successful development projects.

Development work does not always need to involve numerous different methods and materials. In some cases, the development project may be based on one set of materials, such as one interview or survey. In such cases, the analysis of the material requires more than cases where interview or query is used just to collect feedback. The minimum requirement for quantitative analysis can be set at the level of cross-tabulation, i.e., the material is examined separately and cross examined. Simply listing percentage distributions is seldom sufficient for the development of operations. The minimum level for interview studies and surveys is grouping the transcribed material in a meaningful way, or in the case of expert interviews, systematically seeking new factual information.

The most common question students ask their supervisor about the material is: How much material is enough? When using qualitative methods, the adequacy of the material is often assessed by means of reaching the saturation point of the material. Often, however, resources are exhausted before the saturation point. A good rule of thumb is that five interviews will suffice if the content of the interviews is relevant and the interviews are the central material for the development work. In surveys, the representativeness of the data is more important than the amount. If the data is collected with the Webropol survey tool, it is good to prepare for the fact that only 10 to 20% of recipients of the survey will answer the survey. If data collection fails, it is good to have a backup plan.

When conducting interviews or surveys, it is good to bear in mind that the ultimate goal is to develop the operations of the commissioner. The thesis cannot end with the presentation of the results. As a minimum requirement, the author of the thesis will have to make recommendations to the commissioner for the development of operations. In many cases, the student can present the results of the project as well as the development proposals to the commissioner in a dedicated meeting and finally report this in the thesis. In the best case, the author will get to apply the results of the final project in practice as a paid employee.

3.6 WRITING A THESIS

The thesis shall be written in accordance with good practices of academic writing. Even though this objective may sound intimidating, do not be put off, as the good practices of academic writing apply to the production of any expert-level text. The text of a good thesis is clear, reflective and easy to read: a text which is written clearly is also thoroughly thought through. Stylistically, the thesis should represent good, formal writing rich in nuances; however, no colloquial language is allowed. The objective, sober style does not mean dry and boring, but rather those interested in the subject should find the text very interesting and convincing.

In the thesis, source material is utilized. Information from the sources is extracted and rephrased in one's own words. The information is indicated as originating from the source with reference markers. Sometimes, finding the balance between one's own text and the text from sources can feel challenging. [Turnitin Draft Coach](#) program, available with Humak's Microsoft account in Word Online, can be helpful in this regard. The program compares the written text with the sources and highlights their similarities.

When writing the thesis, consider the text from the reader's point of view. The thesis is not written only to the commissioner, and especially not to the supervising teacher, but ultimately to a broader readership. The development tasks carried out in one's own long-term workplace may easily become very insider-like, making it difficult for both the supervisor and any outside reader to follow the thread of the text. One way to avoid such a near-sighted approach is to imagine the reader being a cultivated specialist of your professional field, living far away in another city, and then writing as if to that reader. In the same vein, it is a good idea for students to let someone outside the organisation read the thesis.

A thesis should not be thought of as a report. The word report is in many ways problematic in connection with the thesis. However, the final project is too extensive a work to be reported in this way. Writing is not just a method of putting your thoughts on paper, but also one of the most efficient methods of thinking and producing ideas. This is why it is a good idea to keep continuously writing your thesis. If a thesis is heavily based upon development practices, it's easy to forget writing. Keeping a thesis journal is a good way to keep track of the project's phases, and it can be applied to every type of project. It's important to remember that the actual thesis is not a journal-like product.

Stiffness or rigid formality are not virtues in a thesis. Overtly long sentences made up of chains of dependent and subordinate clauses, or opaque jargon, have no place in a thesis. Avoid the heavy noun-based style characteristic to bureaucratic texts, such as "carry out an examination", "perform an analysis", or "execute an interview", etc, which can be expressed simply with verbs such as to examine, analyse and interview. Use abbreviations sparingly. In general, a good text contains abbreviations only within parentheses. Introductory phrases such as "However, it is important to consider that...", are often unnecessary. A good guideline for writing is to get straight to the point and keep the text simple.

Beware of using the passive voice too much, as it may confuse the reader as to who did what. Expressions such as "the material was collected" and "the material was analysed" evoke the impression that the author has a mysterious data collection and analysis group working in the background. The thesis can usually be written in the active voice, and even prolific references to the author as I are not forbidden. However, expressing the author's subjectivity does not mean that the thesis is just a neatly expressed personal opinion, in the sense of a letter to the editor. The reader has the right to know what the author's views are based on.

Careful references to the sources and the bibliography will make the thesis more convincing, as will neat and consistent layout and formatting in accordance with the applicable instructions. The references must be made in accordance with the instructions approved by Humak and discussed with the supervising teacher. It is a good idea to mark the references in the correct way from the start, because finding missing sources afterwards can be a laborious task. It is important also to make sure that the questions raised at the beginning of thesis have been answered in the

conclusion chapter at the latest. In addition, the thesis should be grammatically correct and not include anything that the student does not fully understand.

The abstract is usually written last, which does not mean that it should be given any less attention. The reader often decides whether or not to read the rest of the thesis based on the abstract. A good way to structure a good abstract is to follow the same model of four key areas as in the plan: for example, to write one paragraph about the need for the work, one about the objectives, a couple of paragraphs about the measures taken, and a couple of the results and outputs. Many students forget to write about the results and outputs in the abstract, which is why particular attention should be paid to them. In addition, a summary of the assessment of whether or not the objectives of the project were met should be included in the abstract. The abstract shall therefore answer the following questions:

- Why did the commissioner's operations need development?
- What were the objectives of the project?
- How was the development work done?
- What new information was discovered and what kind of new knowledge did the project bring to the whole professional field?
- What concrete outputs did the work generate for the commissioner?
- How were the objectives met?

3.7 OVERCOMING WRITING PROBLEMS

Writing problems are quite common. Excessive self-criticism can prevent the process from even getting started, fear of failure may paralyse the student, and fear of mediocrity may encourage the student to polish the text indefinitely. Try not to be too harsh on yourself in the early stages of writing: the final version will only contain a fraction of the first drafts. Remember that when it comes to writing, quantity is more important than quality to get you going. Even vague observations and considerations are best put on paper, rather than endlessly turning them over in your mind. Even just one page of text is much more than a blank page with the word Introduction typed at the top. Fear of failure can be reversed into pursuit of success, and respect for the set schedule sets a clear deadline for polishing.

A good way to get started is to draw concept maps, listing the items in each chapter on paper, or writing them on Post-it notes. You should decide in advance when and how long to write. It is a good idea to mark the time reserved for writing on your calendar – and to stick to that decision. One good way to get going with writing is to start by reading and editing the text written the last time. You should only stop writing when you have an idea about what to write in your next session.

There are many myths associated with writing. It is often said that writing requires long, completely peaceful moments. Preferably, writing would only take place when you are alone, in a quiet cabin in the middle of wilderness, in the early hours of the morning, and in a particularly creative state. It is best to simply let go of such myths. Leading writing experts say that sometimes

just getting twenty minutes of writing done in the middle of every-day noise and business is a good goal. You can start by laying your fingers on the keyboard without having to necessarily feel like you have anything special to say. An experienced supervising teacher will appreciate an abundance of text, never mind the quality, in the early stages of the process.

What if there simply is not enough text or the thesis seems too short? It is never a good idea to try to artificially inflate a concise text with adding text that has no content. The right way to expand the text is to compare, apply, combine, analyse and present arguments for and against your statements or results. This will keep the text concise and deepen processing and understanding of the topic.

3.8 STRUCTURE OF THE THESIS

The structure of the thesis should be kept simple. A good number of main chapters is about 6 to 7. 1 to 2 chapters of background information, one chapter about methods used, 1 to 2 analysis chapters and a chapter to end the thesis. The introduction stirs the reader's interest and introduces the topic of the thesis. The introduction explains why the operations of the commissioner should be developed, what are the objectives of the project, and what is the concrete output the project will produce. The introduction should not be confused with the abstract: the role of the introduction is to justify the importance of the development task and the thesis and to present the objectives of the final project. A good introduction is clear, concise and logical.

The content of the knowledge base is discussed in Chapter 3.1 of this guide. In between the knowledge base and the content chapters, a chapter describing how the methods for the development work were applied in practice in the work may be placed. Thesis material is introduced and applied in the analysis chapter of the thesis. The chapters that describe the operations should be sufficiently detailed to enable the reader to see how the author has arrived at the results. All matters discussed should be examined in light of the available materials, the practical professional experiences and the perspective provided by the professional literature.

In the conclusion chapter the results of the work are compiled, and the final result of the work is presented. The final result can be applied as an attachment to the thesis, if it can be applied directly to the text because of its form or length. In this case the student needs to clearly describe the relation between the actual thesis and the separate product/result. How has the knowledge base and material affected the end product/result.

The final chapter assesses the success of the development work and describes how the results of the project work were applied and implemented in the commissioner's operations. Finally, the perspective presented in the beginning should be revisited and the general significance of the development work should be described. Justified ideas and bold, original operational experiments can even challenge an earlier understanding, or at least bring more complex perspectives to it. Therefore, the final chapter should not be considered as a summary, which merely recapitulates the topics discussed in the content chapters.

The conclusion chapter is followed by a separate reflection chapter, where the success of the development work is objectively evaluated with well-reasoned arguments, and the implementation of the results into the commissioner's operations is described. At this stage, the feedback

provided by the client about the work is also discussed. Towards the end, the perspective introduced at the beginning is revisited, and the overall significance of the development work for the advancement of the field is outlined. The thesis can, through its example, provide applicable knowledge and ideas for a broader professional audience, especially if the thesis has been conducted with quality and transparency, combining practical and conceptual knowledge. Well-founded development proposals and bold experimental actions may even challenge previous understanding or at least diversify it. The reflection chapter should not be considered merely a summary that repeats what has been mentioned in the previous chapters.

The structure of the titles should be reader-friendly. The two heading-level structure is significantly better than headings on three levels. The fourth heading level should not even be considered. The chapters should not be too short. Sections should include at least three paragraphs, and each of them should contain at least three sentences. Sections are only used if at least two are needed.

A thesis is not just any written assignment comprised of isolated sections. Headings should not only relate to the content of the chapter, but also to each other. In practice, however, it is wise to think of the chapters as relatively independent entities – after all, it is easier to eat an elephant one bite at a time. The thread of the thesis can and should be clarified at later stages of the process. Although writing is usually started with the introduction, it can also be started at any section which feels easier. However, it is often sensible to return to the introduction once more and to re-write it, once the conclusion and development suggestions of the final project have been written.

3.9 THESIS AND AI

The ability to harness artificial intelligence is an important skill in many professions, and in the future, it will be even more crucial. Humak encourages its students to utilize the possibilities of artificial intelligence during their studies, including various stages of thesis work. In the early stages, feedback can be sought from AI for thesis ideation. AI may also propose useful, innovative, creative, and participatory development methods when encouraged to do so. When building the knowledge base, AI may suggest relevant sources. In the final stages, AI can assist in proofreading for correctness.

It is permissible to use artificial intelligence, for example, in testing and developing ideas and as a content commenting aid. In the data analysis phase, AI can be a useful tool, but the thesis author is always responsible for the interpretations presented in the thesis.

At its best, AI is an excellent conversational partner and an interactive collaborator. Text written by AI should rarely, if ever, be directly copied into one's own thesis. Familiarize yourself with the terms of use of AI applications. Do not input datasets containing personal information into AI applications.

The use of AI in the thesis should be transparently disclosed. The student must write a description at the end of the thesis detailing which AI applications were used and how. The description should be sufficiently detailed for the reader to understand the role of AI in various stages of the work. Humak does not recommend leaving direct quotations from AI-generated text in the thesis. If this is done, the citation should follow the guidelines in [Humak's citation guide](#).

This guidance is based on the recommendations of the Rectors' Conference of Finnish Universities of Applied Sciences (ARENE). The guidelines may be quickly updated with technological developments and changes in common policies among universities. Any new guidelines will be promptly added to the thesis guides.

4. EVALUATION AND SUBMITTING A THESIS FOR EVALUATION

4.1 EVALUATION AND SUBMITTING A THESIS FOR EVALUATION

The assessment schedules for the theses are specific to each degree program. Find out about the schedules for your own program.

Before the final evaluation a thesis presentation will be held at a seminar, where a student gets feedback on their thesis from the thesis supervisor and peer reviewers. Asking for feedback from the thesis commissioner is an important part of the thesis finalization process as well. After the seminar, the thesis can still be edited so that the student gets the thesis approved or may be able to achieve a better grade.

The finalized version should be submitted with [accessibility markings](#) and in PDF/A format to Wihi through the plagiarism checking program included in it. A thesis review is based on this version, and afterwards the thesis cannot be changed. The same version will be uploaded to Theseus.

The options for uploading the thesis to Theseus are either:

1. Theses (Open collection) i.e. thesis is freely available in Theseus.
2. Theses (Restricted collection) i.e. thesis can only be read online at Humak University of Applied Sciences local network.

The metadata (author, title, subject terms, summary) of the uploaded thesis in both collections are visible to everyone online. The PDF/A file of thesis stored in a limited collection will not open except in IP addresses defined by the Humak University of Applied Sciences. The students can choose the collection in which they will upload their thesis.

Before submitting the thesis to Theseus, the student must check that there are no privacy-sensitive issues in the thesis or its attachments, such as phone numbers. The description field in the Theseus submission should be left blank.

Finnish universities of applied sciences have signed an open declaration of science and students are encouraged to publish openly whenever possible. The thesis is always a public document to which all interested parties can get acquainted ([Act on the Openness of Government Activities 621/1999](#)). If one wants to explore the work of a limited collection outside the university's network, the university must offer them the opportunity to do so regardless of the restrictions listed above.

A thesis return process works like this

1. A thesis gets a peer review and feedback from the thesis supervisor at a thesis seminar

2. Finishing a thesis text and uploading it to Wihi, and through it to Urkund plagiarism checker
3. Taking the maturity test
4. Uploading a thesis to the Theseus web repository
5. Evaluation of a thesis and writing a statement in Wihi
6. Adding the Theseus link of the thesis to Wihi
7. If all parts of the studies are complete, you can apply for a degree certificate

The thesis has two evaluators, one of which is usually the supervising teacher. A second reviewer is called the second evaluator. The evaluators write a one-page statement about the thesis and give the thesis a grade on the following scale: Satisfactory (1–2), Good (3–4) or Excellent (5). Theses are assessed based on the knowledge and information exhibited in the literary contribution of the final project. The success of the output of the project is not necessarily assessed, because failure can also produce valuable experience and knowledge.

4.2 EVALUATION CRITERIA

A thesis review focuses on three main points. Underneath the main points are sub-points, which are used to evaluate the main points. Every main point is evaluated with a partial grade, that adds to the final grade. A grade for the thesis is based on the combined average of partial grades.

I. Significance of the final project to the professional sector (emphasis 50%)

In the first evaluation section, the thesis is examined from the point of view of the commissioner of the work and the professional sector as a whole. Often the choice of topic determines whether the project can develop operations and therefore, service the entire professional field. Identifying development needs in the professional field means that the author must have a curious approach to familiarisation with the professional literature of the field and in networking with the sector. The applicability of the work may be immediate or subsequent: the most important thing is the careful assessment of the usability of the work. Critical evaluation means the ability of the author to reliably assess the significance of the work to the commissioner and to a broader readership. In the best case, the thesis will serve both the concrete objectives as well as increase the knowledge and competence base of the professional sector. Sometimes the product of a thesis may fail, at least in part, but a careful analysis of the causes of the failure may produce valuable information and thereby lead to a successful thesis and final project. The evaluated points are:

- 1. Importance and topical nature of the theme 1–5
- 2. Identifying the development needs of the subject field 1–5
- 3. Applicability value of the project for the commissioner 1–5
- 4. Significance of the work for the professional sector 1–5
- 5. Critical evaluation of the project 1–5

Significance of the work to the profession is considered excellent (5) if the choice of the topic is bold, original and future-oriented. Furthermore, a thesis evaluated as excellent offers a good application value for the commissioner and is particularly interesting from the perspective of the entire professional industry. The significance of the work to the profession is considered good (3) if the work is important to the commissioner but the value of the work for the profession remains unclear. The significance of the work to the professional sector is considered satisfactory (1), if the development project is a routine task the usability of which cannot be truly assessed or demonstrated.

II. Generation of knowledge and competence (emphasis 30%)

This section assesses the ability of the thesis author to perform a demanding task independently and in an original manner. Versatile use of references and other sources of information means that the information is modified instead of simply listed. Good methodological competence is the ability to apply research methods – not just to quote methodology guides. In final projects that emphasise functionality, the author's ability to use, for example, the final project journals and in general, the ability to produce reliable information through critical evaluation of operations, is evaluated. Compliance with the principles of ethical research is a part of methodological competence. Meaningful development work often requires courage, innovation and determination. Conventionality hardly ever produces surprising information. Establishing the development work on bold operational experiments is the most obvious way to be original, but even more research-based approaches can be original, especially at the stage in which the results of the work are being implemented in the commissioner's operations. The evaluated points are:

- **6.** Versatile utilisation of information sources 1–5
- **7.** Originality and courage of the development work 1–5
- **8.** Methodological competence 1–5

The generation of knowledge and competence is considered excellent (5), if the author has managed to set the different sources of information in dialogue with each other and personal perspective has been established and applied in practical tasks. The production of knowledge and competence is considered good (3) if the sources are relevant and they have been used in a diverse way, but the information is presented in a list-like form rather than modified and applied. In a satisfactory (1) thesis, the written sources remain unconnected with the content, the text is fragmentary, and the objectives of the final project are not clearly defined.

III. Appearance and readability of the thesis (emphasis 20%)

This section evaluates the internal and external functionality of the thesis. It is not only a matter of form, but also usability value of the thesis in working life. Functionality also bears accessibility: all theses must follow the guidelines of the EU's accessibility directive (2016/2012) about text accessibility. If the accessibility requirements are completely ignored, a work cannot be submitted for evaluation. Instruction for an accessible thesis can be found [through this link](#). The evaluated points are:

- **9.** Clarity of the layout and structure and careful formatting of the thesis 1–5
- **10.** Ability to write good and clear expert text 1–5

A thesis considered excellent (5) is linguistically impeccable, has convincing content, and is structurally reader-friendly. In a good (3) thesis, some flaws in layout and structure are allowed, if the text itself is fluent and written in an expertly manner. In addition, any tables, figures and illustrations are appropriate and neatly formatted. The source references and bibliography have been made with care. A satisfactory (1) thesis work is not very attractive on the outside, the presentation is rigid, and the author clearly has difficulties in writing good expert text.

4.3 MATURITY TEST

For University of Applied Sciences' degrees, students must write a maturity test in the field of their thesis, which shows familiarity with the field and proficiency of Finnish or Swedish (Section 8 of the Government Decree on Universities of Applied

Sciences, Valtioneuvoston asetus ammattikorkeakouluista, 1129/2014). The maturity test is written in the student's language of education. The language of education is determined by the language used in the student's primary or grammar school, and from which the student has got an accepted grade in mother tongue (in Finnish or Swedish) in their diploma. If the student has been educated in a language other than Finnish or Swedish, the maturity test will be written in the language used in the degree programme. The assignment in the maturity test is to write a press release or some other product that promotes the work carried out in the final project, such as a published blog post.

In the maturity test, the student demonstrates the depth of their knowledge on the topic they have researched. In order for the maturity test to be approved, it has to be prepared in a professional manner. The text must conform to the requirements of good and objective professional style and have a clear and coherent structure, linguistic form and appearance. The maturity test is written on the day the thesis is submitted or at another agreed time after that. The content as well as the linguistic form of the maturity test are assessed. However, no grade is given for the maturity test, but it is assessed on the approved – not complete basis. The evaluation must be given within one week of writing the maturity test. If the maturity test is assessed as "not complete", the student will be given feedback before the repeat attempt.

4.4 RECTIFICATION OF EVALUATION

A written evaluation is provided of the thesis, and the student is given an opportunity to examine the evaluation promptly after it has been given. The student may choose to discuss the evaluation criteria with the evaluators. If the author and the evaluators of the thesis do not agree about the evaluation, the following procedure shall be observed:

1. The students shall ask for rectification of the evaluation of the thesis in writing from the teacher supervising the final project. The request for rectification shall be made to the supervising teacher within seven days of when the written evaluation of the thesis has been given to the student. The supervising teacher will examine reasons for the request, request the opinion of a third party if necessary and discuss with the student before answering the request for rectification.

2. A student who is dissatisfied with the decision to a request for rectification may apply for rectification of that decision from the Humak Examination Board within 14 days from the date of having been notified of the decision on the request for rectification.
3. The Humak Examination Board processes the request for rectification prepared for presentation by the Chairperson of the Board. The board does not have a schedule for processing the request. The board shall inform the student of its decision. The board will not re-evaluate the thesis, but it can either confirm the evaluation or resubmit the thesis to be re-evaluated.

5. THESIS LAYOUT

5.1 THESIS LAYOUT

All publication series require that the layout of the theses is consistent. The Humak instructions for theses, references and bibliographies should be observed in all theses completed at Humak. With precise references, the reader knows at all times which text is the author's own contribution and which is quoted from sources. With the reference list, the reader is able to obtain further information and to check the accuracy of the quoted material. In addition, the references give credit to and respect the copyright of the original author. Insufficient referencing is considered a failure in research ethics. You can find instructions on how to comply with standardized Humak references from the [Humak citation guide](#).

Theses must be accessible. This is required by digital service distribution law (306/2019) and EU's accessibility directive (2016/2102). Works that completely disregard accessibility cannot be accepted for evaluation. [Accessibility requirements for theses can be found here](#).

A thesis is written on a [thesis template](#) (Choose: Other forms needed for your thesis). It has the right layouts for a thesis text, but it doesn't yet include accessibility options. A student needs to follow the template's layout and add an alternative text to pictures, add subtitles to AV-material and sent a PDF/A-format text for final evaluation.

The page numbering is started from the cover page, but the page number should not be visible on the cover page, the abstracts and the table of contents (in a word processor, this may require section breaks to separate the first pages from the body text). The numbering should be continued as running numbers throughout the bibliography and appendices.

The headings are numbered and start at the left margin. The main headings are capitalised, and the subheading written with lowercase letters. Headers must use the styles used in the template (header styles, running text etc.) A blank space must be left above and below both the main headings and sub-headings. If you want to emphasise something in the text, using bolding rather than cursive. Usually even bolding isn't necessary. Direct quotations longer than three lines are indented and typed with line spacing 1.

Abstracts are written on the dedicated form template. The abstract is placed immediately after the cover page. If the thesis of a Finnish degree programme is written in a language other than Finnish, the thesis will also have to include a Finnish abstract. Theses of English degree programmes do

not have to include a Finnish abstract. Detailed bibliographic information and key words of the thesis are recorded in the abstract for the purposes of information search. References or page numbers should not be included in the abstract. The maximum length of an abstract is one page with line spacing 1. The passive voice should be used when writing the abstract. As a rule, the past tense should be used, except for the commentary of generic results and conclusions, which should be written in the present tense. It is worth putting a lot of effort into the quality of the abstract, because the reader often decides whether or not to read the thesis further based on the abstract.

The table of contents is placed after the abstracts and the heading "contents" or "table of contents" is used. The page number should not be visible on the table of contents page. The abstract is listed at the beginning of the table of contents in capital letters before the actual content of the thesis. If the thesis includes appendices, "APPENDICES" will be added to the end of the table of contents in uppercase letters with the page number from which the appendices begin.

It's a good idea to use figures and tables to illustrate the text, although this should not be overdone. Figures, tables and images should be named and numbered. The name and number of the figures and images are placed under the image, and for tables, above the tables. Both have their own sequential numbering. Photographs must contain a caption which must complement the other information and not simply copy what has already been said in the text.