Framework for Master thesis at AISS

The final semester of the Artificial Intelligence for Sustainable Societies (AISS) program focuses on writing and submitting a master's thesis.
The master thesis is an independent academic product that awards 24 ECTS credits. It can be written within the areas taught in the AISS master program.

The master's thesis may take a traditional scientific form or be connected to developing a system, program, service, or process. Choosing to write a thesis of the last kind must contain an apparent element of scientific research connected to the choice of methodology and testing concerning the practical problem to be solved.

The master thesis is an individual task.

Through the master thesis, the student shall document their

- Insight and overview of the scientific literature on the subject discussed in the thesis
- Ability to form a theoretically and/or practically interesting research problem
- Knowledge of relevant theories and methodology for collection, analysis and interpretation of data to shed light on the chosen subject/hypothesis
- Ability to write a report that documents the different phases in the research process. The thesis should adhere to standard academic demands concerning form and presentation, documentation and presentation of sources used and literature lists.

Organisation of the thesis work process

The students must choose a subject for a master's thesis and sign a master's thesis agreement in cooperation with a supervisor by a date set by the AISS committee. The student and supervisor receive a copy of the signed agreement, which is also sent to the study counsellor and AISS coordinator in Tallinn.

At least two thesis seminars will be arranged during the program. In these seminars, the students will be prepared to give and receive comments on their work from co-students and teachers.

Thesis Seminar 1: Preparation and Methodology
In this seminar, the student should be able to present the subject or hypothesis to be studied. The form can be compared to an application for funding in a project or admission to a PhD program. The text presented should consist of about 5-8 pages with double spacing.
Questions to be covered at this stage:

- Introductory oversight of literature and research in the field and reflection on how one's project can connect to and build on existing research
- What is the project's material/ data?
- A short reflection on relevant theoretical approaches
- Formulation of questions to be answered in the thesis, based on an overview of sources and theoretical approaches
- Methodological discussions and design

- Plan for further work.

Thesis Seminar 2: Analysis
In this seminar, an outline of the thesis analysis should be presented.

A finished master's thesis will typically include the following:
1. Formulation of problem/hypothesis/subject to be studied and a short description of the background for the problem.
2. Review of literature presenting the research status in the area
3. Methods used
4. Choices and limitations that have been made
5. Results
6. Conclusion and suggestions for further work

Submission of thesis

The Master thesis shall be delivered in PDF format with appendices, an author's declaration and a non-exclusive licence for using the thesis in a DigiDoc container signed by the student and the supervisor. Large files included in the appendices of the thesis (e.g. videos) shall be submitted on separate data media and do not have to be digitally signed. If the student or supervisor cannot digitally sign the author's declaration and non-exclusive licence for the use of the thesis, the signed document shall be submitted on paper. A student shall inform the study counsellor by e-mail of the intention to submit a final thesis for defence and the final title approved by the supervisor in Estonian and English two weeks before the term for the submission of the final thesis at the latest.

Review of final theses

The supervisor of a final thesis may propose to the study programme administrator to appoint a reviewer according to the requirements established for reviewers in the Tallinn University Study Regulations.
The study programme administrator shall approve the reviewers of the final theses within five working days from the term for submission, consulting the head of studies (project coordinator) if necessary.
In the review, the reviewer shall present justified opinions concerning the substantive part of the thesis, the author's achievements, and the main deficiencies of the thesis in accordance with the AISS thesis reviewing guidelines.

Avoidance of plagiarism

Plagiarism shall be considered a breach of academic practices, and cases of plagiarism shall be processed by analysing the plagiarism check results and hearing the student. After this, the security of the plagiarism is determined. In case of severe plagiarism, a deletion from the matriculation register shall be initiated at the instigation of the university.
The following is considered intentional plagiarism: Knowingly presenting text or paragraphs word for word without correctly referencing the author or source; Making minor changes in the text of another author and presenting the text without complying with the quoting and referencing requirements; Presenting the figures or tables of another author or translations or adaptations thereof without correctly referencing the author or source; Presenting the reasoning or ideas of another author in one's own words without correctly referencing the author or source; Translating paragraphs of text or reasoning from a foreign-language source without correctly referencing the original source.
Before allowing a final thesis for defence, the supervisor shall check it using a plagiarism detection system.

Defence process

The defence committee consists of six members (4 need to present in a defence), including the heads of the study programs from each university and at least one academic staff member from each university.

The defence of final theses shall be done via video bridge.

Here is the defence procedure:

The defence will last 45 minutes: 15 minutes for the student to present the thesis and 30 minutes for questions and discussion.

The structure of the defence is as follows:

1) the student's presentation 15 minutes

2) questions from the reviewer and student's answers

3) questions from the defence committee and student's answers

4) final words from the student

Final grade

The results shall be announced to students within three working days after the date of the examination (defence). The chairman of the committee shall inform the students of the date and place of announcing the results just before the start of the final examination.

Students shall be informed of the results of an oral final examination on the day of defence immediately after the protocols are prepared.

A positive grade on the final examination cannot be improved.

Absence from the final examination without a valid exceptional reason shall equal failure (F).

A student absent due to a valid exceptional reason shall have the right to take the final examination/defence during the defence session on a date given by the committee's chairman.

If the student who was absent for a valid exceptional reason does not submit proof within three working days of the day of the final examination, a negative result shall be entered into the protocol.

SHOULD HAVE SUCH AND PROCESS TABLE Taken from TAU

The stages of the Master's thesis are outlined below.

Responsibilities of students during a thesis process	Responsibilities of supervisors and examiners during a thesis process
Consider potential topics in advance (1st year of studies), become familiar with the institutional repositories and look into available thesis placements	Assist the student in choosing the topic, formulating the research problem, selecting methods, selecting relevant literature and other sources, and in providing academic credibility;
Complete courses integrated into the curriculum to develop your research skills and become familiar with the principles of good scientific practice	Programme offers courses such as research methods.
Enroll on the thesis stage or thesis seminar	The seminar is implemented according to the curriculum of the student's degree programme/field of study.
agree on the topic and the supervisor(s) and prepare a Thesis Supervision Plan within one month of starting work on the thesis. Delivers a copy of the Thesis Supervision Plan (first 2 pages) to https://dti.tlu.ee/digiois/thesis_registration_form.php?lang=en To submit parts of the final thesis for perusal and commentary to the supervisor, according to the agreed action plan.	The Thesis Supervision plan is prepared in collaboration between all the parties. The plan must be prepared within one month of starting work on the thesis Coordinate the action plan of the research, counsel the student, supervise and consult with the student during the process of conducting research in all its phases;
Compile an action plan for research, identify and evaluate thematic literature and formalize the research results in the form of a correct and final thesis. . Use the plagiarism system for originality check during the writing process of your thesis. You may ask for guidance from your thesis supervisor	maintain regular contact with the student, review the written work submitted by the student and provide feedback; peer activities
The student shall submit the final thesis to review	Thesis is reviewed by opponents, who provide feedback.

Improve thesis according to the feedback discussed with supervisor and submit to the institutional system for defence.	Guide the student in the review feedback implementation and grant the permit to submit.
Submit your thesis to plagiarism check for originality. The thesis undergoes an originality check	The supervisor examines the originality report generated by plagiarism detection software Turnitin
The student shall submit the final thesis, (digitally) signed by the student and the supervisor, and register for the defence	
Defend you thesis in the defence, answering the reviewers questions	The committee takes part in the defence and agrees on the grade The grade is announced to the students after the defence

Deliver the thesis pdf file of your thesis and 2) author's declaration and non-exclusive licence for the use of the thesis (see the form under General documents here: https://www.tlu.ee/en/dt/studies/documents-and-manuals), two pdf files in one container digitally signed by you and your supervisors. The thesis is deposited all three universities to their Library repository. Student sends the link of the manuscript to the examiners for assessment purposes. In TLU the guidelines for submission are here https://www.tlu.ee/en/dt/studies/documents-and-manuals and uploading to database are found here: https://www.tlu.ee/sites/default/files/Instituudid/DTI/Dokumendid/PhD%20guidelines/Submitting%20Thesis%20for%20Defence(1).pdf For TAU Read more from Library guide all guides and the library database is in https://libguides.tuni.fi/theses/submitting-tau For Lusófona University (UL), Lusofona has a database called RECIL, where all defended theses are stored. The repository is accessible at the following link: Repositório: Página inicial For submission, students should first upload a version of their thesis to Moodle before the defense. After the defense, a final revised version should also be uploaded to Moodle in a designated folder. Once this final version is submitted, no further changes can be made. The process of adding the thesis to RECIL is managed by the University's administrative services. However, there are currently no formal, documented guidelines for this process. Typically, the faculty secretaries are responsible for retrieving the final version from Moodle and uploading it to RECIL.
The thesis is released into the public domain after it has been approved. If you do not give convent to publish the thesis online, it will be available publicly in the University Library
The supervisor and the student have the right to initiate termination of cooperation due to disagreements by submitting a justified application to the head of studies.