

Master Artificial Intelligence - Student manual

Academic year 2022-2023

MSc AI thesis team - Andrew Yates, Ciara Snijders

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1. Important information

a. Contact Information

Thesis Coordinators – Andrew Yates and Ciara Snijders

Study Advisor – Cecilia Sigvardsdotter (A.K.C.Sigvardsdotter@uva.nl)

Education Desk FNWI - e-mail: servicedesk-esc-science@uva.nl (If you contact the Education Desk FNWI by e-mail, please provide your student ID and your master's programme).

 $\textbf{Examinations Board -} \underline{\text{https://student.uva.nl/ai/content/az/examinations-board/examinations-board.html}}$

Student Service Desk (for general questions about studying at the UvA) - https://student.uva.nl/en/topics/central-student-service-desk

MSc AI thesis email address - mscAIthesis-GSI@uva.nl

b. Links

MSc AI website - https://student.uva.nl/ai

List of Examiners - https://datanose.nl/#program[MSc%20AI]/examiners

Graduation (and getting your diploma) procedure - https://www.uva.nl/en/shared-content/studentensites/fnwi/lw-gedeelde-content/en/az/graduation/graduation.html

Graduating and degree certificate - https://student.uva.nl/en/topics/graduating-and-degree-certificate

2. Important Information

a. Thesis Submission deadline

For the academic year 2021-2022 the official start and end dates are as follows:

Start date: 31/10/2022 End date: 26/06/2023

b. Number of EC

All students will be undertaking a 48EC thesis.

Only students who enrolled in 2018-2019 or before are eligible to apply for a 36EC (as long as students have 42 EC of compulsory components and at least 18 EC of restricted-choice elective components).

c. No thesis defences

Defences are no longer a part of the MSc AI thesis process. For more details please see section 6.

Note: If you started before Sept 2021, you have the option to choose how you want your thesis graded, either with a defence or with the new system (review and rebuttal). Please consult with your supervisor/examiner about what is best for you.

3. Before starting your thesis

a. Course registration

You need to register for this course. The registration for this course follows the same procedure for other courses which is available at https://student.uva.nl/ai, under the A-Z list, 'course registration'.

In order to register you will need to have successfully re-enrolled for programmes for the upcoming academic year. It may take up to two working days for your re-enrollment to be processed.

For any questions related to course enrolment please contact: vakaanmelding-fnwi@uva.nl

 $\underline{https://student.uva.nl/ai/shared/studentensites/fnwi/esc-gedeelde-content/en/az/course-registration-fnwi/course-registration.html#anker-i-am-a-master-student-i-have-already-started$

Please ensure that you are registered for the MSC AI thesis before starting your thesis.

b. Permission and Personal Study Plan

You may start with the Master Thesis if your personal study plan has been approved by the Examinations Board. Please fill in your personal study plan in SPA (unless you already have an (old) PEP form approved by the Examinations Board) to ask the Examinations Board for approval of your personal curriculum.

https://acadplan.datanose.nl/

In order to graduate your personal study plan needs to be approved by the Examinations Board. If you have doubts or questions regarding your programme, you can make an appointment with your Study Adviser.

4. Choosing an MSc AI thesis project

a. Thesis Marketplace

There is a Thesis Marketplace integrated in Datanose which provides you with available projects.

You can find projects available for MSc AI at: https://datanose.nl/#program[MSc%20AI]/projecttemplates

b. Al Thesis Fair

The 2022 AI Thesis Fair will be held in person.

When: Thursday, October 6th 2022, 12:15 - 17:30

Location: USC, Science Park

Al Thesis Fair Information Session: 9th September 2022, 9:00 - 11:00

Please note that the AI Thesis Fair and Information Session are only for MSc AI Year 2+ students who are starting their thesis in the 2022/2023 Academic Year

About the Fair:

The Al Thesis Fair is an opportunity for you to meet with up to 5 organisations and research groups and discuss their offered projects with the hope that you will match with one of them.

In order to participate in the Fair, you must vote for 5 organisations/research groups on DataNose. The participants include local and international companies, start-ups, government agencies, non-profits and UvA research groups. You vote on individual projects and then the organisation/research group appears on your voting ranked list. This ensures you have at least 5 organisations/research groups that you rank.

The projects are available on DataNose and you vote for the projects you are interested in. A schedule will be generated for you based upon your ranked top 5 projects.

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Commented [CS2R1]: ah great catch! should be 12:15

We invite you to check out the Thesis Fair website (https://informatics.amsterdam/), where you will find all important information. Please read through the FAQ sections that you can find under the 'Students' section for details on any questions that you might have. You may also find videos on our UvA internal projects (please select 'About' then navigate to 'Research') and the Thesis Marketplace (with both internal and external projects) can be found on DataNose where you will find a specific MarketPlace tile.

If you have any additional questions that are not listed on the website please contact us at thesisfair-IvI@uva.nl.

Al Information Session webinar

Ahead of the AI Thesis Fair, we will hold an AI Information Session webinar on Friday 9th September at 9:00. This webinar will inform you about the expectations for the upcoming Fair and for the thesis itself. A presentation will be given on what to expect, how to vote for projects, and how to prepare.

Information Session Details

Date: Friday, 9 September
Time: 9:00 (until +/- 11:00)

Location: SP C1.110

Questions?

If you have any questions about the AI Thesis Fair please contact thesisfair-IVI@uva.nl.

If you have any questions about your MSc AI thesis please consult the MSc AI webpage. If you cannot find the answer to your thesis questions there, please contact mscAIthesis-GSI@uva.nl.

c. Submitting your own project proposal

If your project does not come from the Project Marketplace you will need to have your project proposal approved before you can start to ensure it is a MSc AI thesis.

Your proposal will need to have the following:

- 1. a research question or subject that is relevant for the AI program and
- 2. a supervisor from the UvA

For the first requirement, it is important to note that the thesis should be equivalent to 8 months of full-

time work. The proposed research question or direction should therefore be novel and of high scientific interest. Please make sure you add as much detail as you can in your project proposal so that we can clearly evaluate the project.

The second requirement is equally important: you need to find a supervisor before starting the thesis. The supervisor can then also help with the research question and direction.

Please send us your proposal and supervisor before starting the thesis to the MSc AI thesis email address (mscAIthesis-GSI@uva.nl).

5. Thesis committee – roles

a. The committee

The committee will comprise of:

- An UvA supervisor (a staff member affiliated with the Master Artificial Intelligence)
- An UvA examiner
- If the project is external: A daily mentor

Your UvA supervisor can act as your examiner if they are on the list of examiners. In this case you will need to find a second assessor for your project.

Two separate members of staff are required to complete the grading of the thesis. The external supervisor will act as a mentor, advisor to the student.

b. Definition of roles

Role Supervisor (for an internal project): The supervisor for internal projects is a staff member, postdoc, or PhD student at the Faculty of Science (FNWI). The role of the supervisor is to provide periodic supervision about the thesis. This includes day-to-day supervision and scientific guidance of the project. The supervisor also deliberates with the examiner regarding the grade. In the case that the supervisor is a PhD student, the PhD student will work alongside a staff member at the Faculty of Science (FNWI).

Role Mentor (for an external project): Used to be called external supervisor, it is now named mentor to reduce confusion as only the UvA Supervisor can grade. The primary role of the mentor, in this case, is an advisory role there to provide high-level guidance and to provide input for the organisation's project material. Sometimes they may provide scientific support if they are also researchers or experts. The

mentor will not have a part in the grading procedure but can provide insight into the actions and behaviour of the student during the process.

Role Examiner: The examiner is a staff member or postdoc at the Faculty of Science (FNWI). The role of the examiner is to provide an independent assessment of the quality of the thesis. This includes reading the thesis, asking questions, and deliberating with the supervisor regarding the grade. The examiner is not involved with direct supervision of the student but can be involved indirectly, e.g. to guide the supervisor in the process, or to co-author a publication. The examiner must be pre-approved by the Examination Committee and be on the list of examiners.

The role of examiner can be done by your UvA supervisor (so long as they are on the list of examiners). If your UvA supervisor takes on the role of examiner you will need to find a second assessor.

c. How to find your supervisor

Please use the document available on Canvas as a guide to finding your supervisor.

When searching for a Supervisor please use the following protocols:

- only contact one potential supervisor at a time
- wait for their response before moving on to a further possibility
- explain your project in detail and why the person you are contacting would be the best fit to supervise your project

d. Finding your second assessor

You do not need to find an examiner/second assessor for your project. If an examiner has already been linked to your project as examiner please add them to your project page on DataNose. Else one will be appointed to your project with the help of your UvA daily supervisor.

6. DataNose project form

It is mandatory to fill in an online Master Thesis Contract in DataNose your Master Thesis project. We highly advise that you complete this page together with your Supervisor as soon as you start your project.

a. Completing the form on DataNose

You will be asked to complete the 'Base Data' form:

- A working title
- The ECs (please refer to the start of this page for the correct ECs)
- Your Daily Supervisor
- Your Mentor (optional)
- If the project is Internal or External
- The organisation or Institute (and department/research group)
- The location of the project:
- Citv
- Country

You will then be required to upload your 'Project Description'. This description can be the same description found on the Thesis Marketplace.

7. Interim milestones and completing course

Please keep the following points in mind during your research project.

Schedule

Follow the time scheme described in your Master Thesis Contract (in DataNose). DATES HAVE BEEN ASSIGNED

Finish courses

Make sure that you complete unfinished courses as agreed in your Personal Education Plan.

a. Thesis milestone 1: The Thesis project form

The Thesis Project form can be found in Datanose. For details on the contract see section 6 above.

The students working on the 48 EC thesis have their thesis contract due in week 10 of their thesis. This translates to the first week of January, as students should start their 48 EC thesis in block 2 starting in November.

The students who started their master programme are eligible to choose between the 48 EC or 36 EC thesis. The thesis contract of the 36 EC thesis is due in week 4 of their thesis. For example students who start their 36 EC thesis at the beginning of January should have their contract due at the end of January.

b. Thesis milestone 2: The Thesis Proposal

The goal of the thesis proposal is to ensure that you have a solid understanding of the existing literature, what you are trying to research, and how you are planning to do your research before diving deep into experimentation. In other words, ensuring that you have a sound research design.

The Thesis Research Proposal is due 18 weeks after the start of the thesis for 48 EC students (Due 9 weeks after the start date for 36 EC students).

You will submit the Thesis Research Proposal on your project page on DataNose.

When you upload you proposal you will need to check the following components:

- · Updated title if necessary
- Updated timetable
- Upload proposal a specific section has been added to DataNose.
- The proposal should have the following sections completed:
 - Research Question: the question(s) that your research is targeted to answer (see Further reading: Zobel: Writing for Computer Science, ch 4, p35-50)
 - \circ $\;$ Literature Review: positioning your research in the relevant background and related research
 - Methodology: which methods you are using to systematically research your topic, and by which you are answering your research questions. This helps to check the validation and verification of your research.
 - o Planning: your planning on experimenting, evaluation, writing etc.

The content of this proposal can be reused for your final thesis.

Discuss your proposal with your supervisor before uploading it to Datanose on your thesis project page, using the 'submit proposal' on the upper right of the page. This is not evaluated or graded. It is just to ensure you are on track.

Datanose or uploading problems?

If this option is not available, then this is a Datanose issue, please use the 'feedback' button on the lower right of your Datanose thesis project page, stating that you are missing this option. The Datanose team will then 'update' your page re-enabling this option.

"COVID update: Under normal settings your thesis proposal is used during the thesis sessions. Since there are no thesis sessions this year due to COVID-19, we will not go through the designs this year. You will need to submit a Thesis Proposal and it is a step in the DataNose process and therefore required in order for you to be able to submit your final thesis. For feedback, we recommend you go through the Thesis Proposal with your supervisor to ensure you are on the correct path to complete a successful thesis."

8. Writing your thesis

a. Thesis template

When writing your thesis, you must use the template provided.

The thesis template is available on Canvas > Master Artificial Intelligence > Files > thesis-ai-template.zip.

b. Examples of previous theses

The UvA Scripties Online database offers previously written Theses from former students of the master Al. You can use this database to find examples.

The database is available at: http://www.scriptiesonline.uba.uva.nl/cgi/b/bib/bib-idx?c=uvascript;sid%3Dd9e03aac50d3e2210a286731cc2de1a2;lang%3Den;tpl%3Dbr-fnwi.tpl

9. Thesis Submission

a. Thesis submission deadline

All students have the same start and end date for their thesis project. You will be able to ask for an extension if required. If you do not complete an extension form and go over the stated end date, you will be subject to a grade penalty.

For the academic year 2022-2023 the date are as follows:

Start date: 31/10/2022 End date: 26/06/2023

b. Thesis extension

If you require an extension for your thesis you are required to send us a Thesis Extension request. Thesis Extension Requests are processed via email (mscAlthesis-GSI@uva.nl).

To submit a Thesis Extension Request you will need to submit please send the following information:

- Your full name
- Reason for extension:
 - o Physical health and mental health reasons
 - o Personal/family issues
 - o Taking courses alongside thesis
 - o Element of external research has been delayed
 - External company issues
 - o Issues with thesis committee
 - o Research has expanded for possible journal submission
 - Other
- Please provide details/a description of the situation
- Proposed end date/length of extension requested
- Link to your DataNose project page
- Attach evidence for your extension (this is not required for physical health/mental health reasons or for personal/family issues)

Your request will be reviewed by the MSc AI Thesis Coordinators who will approve or reject the extension based on the information provided as well as accept or propose a new end date. The form may also be sent to the study advisor if required (based on which reason is selected).

The form must be submitted as soon as the relevant issue arises, not at a later date. Extensions requests submitted more than a month after the issue/event arises will automatically be rejected.

The form must be completed one week before your end date as listed on DataNose. Extension requests submitted after the deadline will automatically be rejected.

If your extension has been approved, your end date will be updated on your DataNose project page.

10. Evaluation and Rebuttal

a. Evaluation

The grade is determined by the committee members and will be found on DataNose.

You can find the evaluation rubric on Canvas. This is used as a guide by your Thesis Committee members to determine your final grade.

At this point you have the choice to accept the grades and receive your final grade. If you do not accept the grades then you can submit a rebuttal. The rebuttal is optional.

The final step of the assessment is your examiner registering your grade with the ESC Servicedesk.

b. Rebuttal

You have the opportunity to complete a rebuttal after you have received your grade. The rebuttal will be done through the evaluation system on DataNose. The rebuttal form will be completed by the supervisor, examiner and student. The rebuttal will provide detailed feedback and give you the opportunity to give clarifications or explanations to questions asked by your thesis committee in your evaluation form. You will have the chance to have your grade changed.

This rebuttal is optional.

The rebuttal consists of 4 parts:

- 1. Rebuttal clarifications and corrections on supervisor review
- 2. Rebuttal clarifications and corrections on examiner review
- 3. Rebuttal answers to questions by supervisor
- 4. Rebuttal answers to questions by examiner

This will then lead to a final grading to take place jointly between the supervisor and examiner.

The timeline is as follows:

- 2 weeks for the review
- 1 week for the rebuttal
- 1 week for final grading

You can find the rebuttal form on Canvas.

11. Graduation

For information on graduation procedure and dates, please follow the link Graduation Procedure Al: https://student.uva.nl/en/topics/graduating-and-degree-certificate

If you have any questions regarding graduation and diplomas you will need to contact the Education Desk FNWI.

You can contact them at E-mail: servicedesk-esc-science@uva.nl (If you contact the Education Desk FNWI by e-mail, please provide your studentID and your master's programme).

You will also find more information at Applying for your diploma "step by step"