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# Appendices for the Master's degree programme in Artificial Intelligence 2025 – 2026


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# Appendix I Learning outcomes of the degree programme (art. 3.1)

1. The master graduate demonstrates knowledge, understanding and the ability to evaluate, analyse and interpret relevant data, all on a level that builds on and surpasses the level of the bachelor Artificial Intelligence, in at least five (four, for the master graduate in Artificial Intelligence track Science, Business and Policy) of the research areas below. In one research area of Artificial Intelligence the master has specialised knowledge at an advanced level.

   a. The symbolic approach to Artificial Intelligence
   b. The numerical, non-symbolic approach to Artificial Intelligence
   c. Computational theories of perception and cognition
   d. Agent systems
   e. Linguistics and language technology
   f. Autonomous systems and robotics
   g. Machine learning and pattern recognition

2. The master graduate, except for the master graduate in track Science Business and Policy, demonstrates knowledge and understanding, on a level that builds on and surpasses the level of the bachelor Artificial Intelligence, in the empirical sciences (Psychology, Biology and Physics) and has experience applying and analysing results thereof.

3. The master graduate demonstrates relevant knowledge and the ability to apply methods and techniques from mathematics and logic used in Artificial Intelligence.

4. The master graduate demonstrates relevant knowledge and the ability to use algorithms, data structures and important programming languages used in Artificial Intelligence.

5. The master graduate has the ability to, on an international academic level, analyse problems, critically and constructively review both one's own and other scientific results, even if incomplete, and communicate about this both individually as in a group, both oral and in written form, also in a broader societal context, to both specialists and non-specialists.

6. The master has the ability to critically reflect on their own working method and knowledge and to recognize the need for continued learning on a high degree of autonomy, and is able to understand the scientific developments within the field of Artificial Intelligence.

Additionally, the master graduate in Artificial Intelligence in the track Science, Business and Policy,

7. has an understanding of the way in which businesses and policy organizations are functioning (governments and non-governmental organizations, NGO's).
8. understands the connections between natural science research, business, and policy.
9. is able to integrate aspects of natural science, business and management.
10. has developed their social and communicative skills, is able to work project-based, and is capable of taking professional responsibility.

# Appendix II Tracks/Specialisations (art. 3.6)

The Artificial Intelligence MSc programme offers two main options, described in detail in Appendix III and IV:

**MSc AI programme with specialisation**
The MSc Artificial Intelligence offers five specialisations in the regular programme:

a) AI Engineering
b) Hybrid Intelligence
c) Machine Learning
d) Multi-Agent Systems
e) Robotics

Alternatively, students can do an open specialisation consisting of a set of self-selected courses in consultation with and after approval of the Board of Examiners.

**MSc AI programme with SBP track**
Instead of the regular programme with a specialisation, the MSc Artificial Intelligence programme offers a track in Science, Business and Policy (SBP), which combines a shortened AI programme with a preparation for professions in a societal, political and/or commercial context.

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# Appendix III Content of the degree programme (art. 3.8)

- **MSc Artificial Intelligence programme with specialisation**
- **MSc Artificial Intelligence programme with SBP track**

## MSc Artificial Intelligence programme with specialisation

The MSc AI with specialisation consists of:

- Mandatory course units (75 ECTS; Table 1).
- Specialisation course units (20-25 ECTS; Appendix IV, Table 3).
- Elective course units (20-25 ECTS; Appendix IV, Table 4).

Course details including entry requirements, modes of instruction, modes of assessment and examination are described in OCASYS.

***Table 1. Mandatory course units***

| Course code | Course unit name | ECTS |
|---|---|---|
| WMAI030-05 | Advanced Machine Learning | 5 |
| WMAI017-05 | Deep Learning | 5 |
| WMAI004-05 | Design of Multi-Agent Systems | 5 |
| WMAI901-45 | Final Research Project | 45 |
| WMAI026-05 | Methodology in Artificial Intelligence | 5 |
| WMAI031-05 | Natural Language Processing with Deep Learning | 5 |
| WMAI029-05 | Responsible AI | 5 |

## MSc Artificial Intelligence programme with SBP track

The MSc AI with SBP track consists of:

- Mandatory course units from the MSc Artificial Intelligence programme and the SBP programme (45 ECTS and 60 ECTS, respectively; Table 2).
- Elective course units from the MSc Artificial Intelligence programme (15 ECTS; Appendix IV, Table 6).

Course details including entry requirements, modes of instruction, modes of assessment and examination are described in OCASYS.

***Table 2. Mandatory course units***

| Course code | Course unit name | ECTS |
|---|---|---|
| *Artificial Intelligence Programme* | | |
| WMAI030-05 | Advanced Machine Learning | 5 |
| WMAI017-05 | Deep Learning | 5 |
| WMAI004-05 | Design of Multi-Agent Systems | 5 |
| WMAI026-05 | Methodology in Artificial Intelligence | 5 |
| WMAI031-05 | Natural Language Processing with Deep Learning | 5 |
| WMAI039-15 | Research Project AI for SBP | 15 |
| WMAI029-05 | Responsible AI | 5 |
| *SBP Programme* | | |

| | | |
|---|---|---|
| WMSE001-10 | Introduction Science and Business | 10 |
| WMSE002-10 | Introduction Science and Policy | 10 |
| WMSE902-40 | Work Placement Business and Policy | 40 |

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# Appendix IV Electives (art. 3.9.1)

- **MSc Artificial Intelligence programme with specialisation**
- **MSc Artificial Intelligence programme with SBP track**

## MSc Artificial Intelligence programme with specialisation

In addition to the mandatory programme, the programme consists of a 20 or 25 ECTS specialisation and 20 or 25 ECTS in electives.

The programme offers five specialisations (Table 3), which constitute coherent sets of elective courses that cover a particular subfield of Artificial Intelligence:

- AI Engineering
- Hybrid Intelligence
- Machine Learning
- Multi-Agent Systems
- Robotics

***Table 3. Specialisations***

*AI Engineering*

| Course code | Course name | ECTS |
|---|---|---|
| WMCS032-05 | Cloud Computing and Cloud-based Applications | 5 |
| WMCS022-05 | Introduction to Data Science | 5 |
| WMCS039-05 | Machine Learning Systems Deployment and Operations | 5 |
| WMCS017-05 | Scalable Computing | 5 |
| WMAI032-05 | Trustworthy and Explainable AI | 5 |

*Hybrid Intelligence*

| Course code | Course name | ECTS |
|---|---|---|
| WMAI036-05 | Advanced Hybrid Intelligence | 5 |
| WMCC023-05 | Human-Centred Artificial Intelligence | 5 |
| WBAI027-05 | Human Robot Interaction for Social Robots | 5 |
| WMCC016-05 | Non-Invasive Brain-Computer Interfaces | 5 |
| WMAI032-05 | Trustworthy and Explainable AI | 5 |

*Machine Learning*

| Course code | Course name | ECTS |
|---|---|---|
| WMAI024-05 | Deep Reinforcement Learning | 5 |
| WMAI034-05 | Deep Learning Practical | 5 |
| WMAI033-05 | Multi-agent Reinforcement Learning | 5 |
| WMAI032-05 | Trustworthy and Explainable AI | 5 |

*Multi-Agent Systems*

| Course code | Course name | ECTS |
|---|---|---|
| WMAI001-05 | Arguing Agents | 5 |
| WMAI023-05 | Collective Intelligence | 5 |
| WMAI035-05 | Computational Game Theory | 5 |

| | | |
|---|---|---|
| WMAI016-05 | Computational Social Choice | 5 |
| WMAI020-05 | Logical Aspects of Multi-Agent Systems | 5 |

*Robotics*

| Course code | Course name | ECTS |
|---|---|---|
| WMAI003-05 | Cognitive Robotics | 5 |
| WMAI037-05 | Control Methods for Robotics | 5 |
| WMAI027-05 | Human-Robot Interaction for Social Robots | 5 |
| WMAI011-05 | Robotics for AI | 5 |

Electives can be chosen from the list of electives of the Artificial Intelligence and Computational Cognitive Science programme (Table 4), pre-approved electives of other programmes (Table 5), or free electives (electives that have not been pre-approved). Students must request formal approval from the Board of Examiners to include free electives.

***Table 4. Elective course units from AI & CCS***

| Course code | Course unit name | ECTS |
|---|---|---|
| WMAI036-05 | Advanced Hybrid Intelligence | 5 |
| WMCC005-05 | Advanced Statistical Modelling | 5 |
| WMCC028-05 | AI in Education | 5 |
| WBAI040-10 | Artificial Intelligence Challenges | 10 |
| WMAI001-05 | Arguing Agents | 5 |
| WMCC001-05 | Cognitive Engineering | 5 |
| WMCC019-05 | Cognitive Modelling | 5 |
| WMCC022-05 | Cognitive Neural Networks | 5 |
| WMAI003-05 | Cognitive Robotics | 5 |
| WMAI023-05 | Collective Intelligence | 5 |
| WMCC010-05 | Computational Cognitive Neuroscience | 5 |
| WMAI035-05 | Computational Game Theory | 5 |
| WMCC009-05 | Computational Simulations of Language | 5 |
| WMAI016-05 | Computational Social Choice | 5 |
| WMAI037-05 | Control Methods for Robotics | 5 |
| WMAI024-05 | Deep Reinforcement Learning | 5 |
| WMAI034-05 | Deep Learning Practical | 5 |
| WMCC023-05 | Human-Centred AI | 5 |
| WMAI027-05 | Human-Robot Interaction Social Robots | 5 |
| WMAI020-05 | Logical Aspects of Multi-Agent Systems | 5 |
| WMCC014-05 | Models of Human-Syntax Processing | 5 |
| WMAI033-05 | Multi-agent Reinforcement Learning | 5 |
| WMCC011-05 | Neuro-ergonomics | 5 |
| WMAI028-05 | Neuroprosthetics | 5 |
| WMCC016-05 | Non-Invasive Brain-Computer Interfaces | 5 |
| WMAI021-05 | Pattern Recognition (for AI) | 5 |

| | | |
|---|---|---|
| WMCC020-05 | Psycholinguistics and Cognition | 5 |
| WMAI011-05 | Robotics for AI | 5 |
| WMAI032-05 | Trustworthy and Explainable AI | 5 |
| WMCC025-05 | User-Centred Design | 5 |
| WMCC021-05 | User Modelling | 5 |

***Table 5. Pre-approved elective course units from other degree programmes***

| **Course code** | **Course unit name** | **ECTS** |
|---|---|---|
| LIX006M05 | Advanced Topics in Natural Language Processing | 5 |
| WMCS001-05 | Advanced Topics in Security and Privacy | 5 |
| WMCS032-05 | Cloud Computing and Cloud-Based Applications | 5 |
| LIX021M05 | Computational Semantics | 5 |
| WMCS015-05 | Computer Vision | 5 |
| WMCS030-05 | Ethical Hacking | 5 |
| WMCS042-05 | Intelligent Mobile Perception in Practice | 5 |
| WMCS002-05 | Introduction to Data Science | 5 |
| LIX025M05 | Language Technology Project | 5 |
| WMCS039-05 | Machine Learning Systems Deployment and Operations | 5 |
| WMCS027-05 | Modal Logic and Proof Theory | 5 |
| WMCS026-05 | Models and Semantics of Computation | 5 |
| WMCS041-05 | Multimodal Mobile Sensing | 5 |
| WMPH044-05 | Neuromorphic Circuit Design | 5 |
| WMCS029-05 | Perception for Visual Computing | 5 |
| WMIE005-05 | Robotics for IEM | 5 |
| WMCS040-05 | Robotic State Estimation | 5 |
| WMEC006-05 | Skills in Science Communication | 5 |
| WMCS017-05 | Scalable Computing | 5 |
| WMCS018-05 | Scientific Visualization | 5 |
| LIX002M05 | Semantic Web Technology | 5 |
| WMCS028-05 | Social Network Analysis | 5 |

## MSc Artificial Intelligence programme with SBP track

In addition to the mandatory programme, the programme consists of 15 ECTS in electives from the MSc AI programme. Electives can be chosen from the list of electives below (Table 6).

***Table 6. Elective course units from AI***

| Course code | Course unit name | ECTS |
|---|---|---|
| WMAI036-05 | Advanced Hybrid Intelligence | 5 |
| WMAI001-05 | Arguing Agents | 5 |
| WMAI003-05 | Cognitive Robotics | 5 |
| WMAI023-05 | Collective Intelligence | 5 |
| WMAI035-05 | Computational Game Theory | 5 |
| WMAI016-05 | Computational Social Choice | 5 |
| WMAI037-05 | Control Methods for Robotics | 5 |
| WMAI024-05 | Deep Reinforcement Learning | 5 |
| WMAI034-05 | Deep Learning Practical | 5 |
| WMAI027-05 | Human-Robot Interaction Social Robots | 5 |
| WMAI020-05 | Logical Aspects of Multi-Agent Systems | 5 |
| WMAI033-05 | Multi-agent Reinforcement Learning | 5 |
| WMAI028-05 | Neuroprosthetics | 5 |
| WMAI021-05 | Pattern Recognition (for AI) | 5 |
| WMAI011-05 | Robotics for AI | 5 |
| WMAI032-05 | Trustworthy and Explainable AI | 5 |

# Appendix V Entry requirements and compulsory order (art. 4.4)

The examinations for the course units listed in Table 7, may not be taken before the examinations for the associated course units have been passed:

***Table 7. Entry requirements***

| **Course unit name and code** | **Entry requirements** |
|---|---|
| Deep Reinforcement Learning [WMAI024-05] | Deep Learning [WMAI017-05] |
| Final Research Project [WMAI901-45] | At least 60 ECTS from the master's programme<br>Advanced Machine Learning [WMAI030-05]<br>Methodology in AI [WMAI026-05] |
| Multi-agent Reinforcement Learning [WMAI033-05] | Deep Reinforcement Learning [WMAI024-05] |
| Work Placement Business and Policy [WMSE902-40] | At least 45 ECTS from the master's programme<br>Introduction Science and Business [WMSE001-10]<br>Introduction Science and Policy [WMSE002-10] |

# Appendix VI Admission to the degree programme (art. 2.1A.1 + 2.1B.1)

The Artificial Intelligence Master programme has a selection procedure. This means that an applicant must both meet the admission requirements and successfully complete a selection procedure in order to be admitted to the programme.

## 1. Requirements for admission to the selective Master's degree programme Artificial Intelligence

Applicants have to fulfill the following admission requirements:

- An academic Bachelor's degree in Artificial Intelligence or a related field including the following key subjects: Calculus, Linear Algebra, Probability & Statistics, Advanced Programming, Machine Learning, Advanced Logic, Neural Networks, Research Methodology Skills.
- Sufficient English proficiency: see basic TER Article 2.2

## 2. Application procedure

All candidates have to file an admission request via the FSE Application form, and upload the following documents before 1 May (start 1 September):

- ID card or passport
- Diploma of relevant Bachelor's degree programme (if possible); or if the diploma is not yet obtained, a document containing a description + planning of the remaining course units in the programme
- Official transcript of records
- Proof of English language proficiency
- Curriculum Vitae
- The completely filled-in Checklist for AI including appendices:, motivation, relevant content Bachelor's degree programme, written report in English

After candidates have filed their admission request, applications will be processed in the following way:

For holders of a Dutch BSc diploma:

1. Admission Support FSE compiles the individual selection file
2. Admission Support FSE submits the individual selection file to the Admission Board of the individual programme

For holders of a non-Dutch BSc diploma:

1. Admissions Office compiles the individual selection file
2. Admissions Office validates individual Bachelor's degree diploma
3. Admissions Office submits the individual selection file to Admission Support FSE
4. Admission Support FSE submits the individual selection file to the Admission Board of the individual programme

## 3. Selection procedure

In order to select academically suited and motivated students, the Admission Board requires a complete selection file from all candidates. The Admission Board will review all individual applicants on the basis of their selection file. All admissible candidates will be rated on the selection criteria 'academic performance' and 'motivation', as specified below.

At least two members of the Admission Board score the applicants on the selection criteria. Scoring is on a 5-point scale from 1 to 5 (1 = insufficient, 2 = sufficient, 3 = amply sufficient, 4 = good, 5 = very good). If the scores on academic performance and/or motivation deviate 1 point or more between members, they have to confer, after which they grade a second time. This outcome constitutes the final score.

Candidates are selected if they receive an average score of at least 3.0 on both 'academic performance' and 'motivation', AND a weighted average score of at least 3.5.

### A. Academic performance (60%)

The score on academic performance is the result of the scores on relevance (70%), and proficiency (30%).

a. **Relevance and affiliation/fit** of the followed bachelor programme to the master programme (list of subjects/courses followed and grades obtained; brief description of the content of key subjects/courses demonstrating the knowledge and skill(s) acquired by the student).

   **Key subjects:**
   Calculus, Linear Algebra, Probability & Statistics, Advanced Programming, Machine Learning, Advanced Logic, Neural Networks, Research Methodology Skills

   *Please consult our online catalogue www.rug.nl/ocasys/ for the intended learning outcomes of the course units that adhere to these subjects.*

b. **Proficiency** in: (1) formulating scientific research questions and completing an academic assignment in the context of the programme, and in individually producing a written report on the assignment topic. The report has to reflect the student's ability to produce a well-structured and concise report, adhering to the rules of scientific writing. The assignment handed in is free of choice, and can be a bachelor thesis; report on a practicum, experiment, or field-work; a literature review; a published peer-reviewed research paper, etc.[1] (2) programming for machine learning, image processing, robotics, and/or knowledge-based & multi-agent systems. (3) advanced statistical data analysis.

   [1] *If the student has not made an individually written report during the bachelor programme but has a report written together with another student, this can be used and the contribution needs to be indicated. Alternative option is that he/she should contact the selection committee to receive an assignment on the basis of which a written report can be prepared.*

**B. Motivation (40%)**

The candidate has to provide a motivation (500 words) for the application, by answering the following questions:

1. *Why did you choose this specific master's degree programme?*
2. *How did the bachelor's degree programme, extracurricular activities, and/or other experiences prepare you for this specific master programme?*
3. *In case it took you longer than nominal to acquire the bachelor degree, please briefly explain the cause(s) of the delay.*
4. *How does this master's degree programme prepare you for your future career and/or serve your ambitions?*
5. *The master programme contains a large research project of 45 ECTS. In which research direction(s) at the University of Groningen would you like to carry out your project? Please motivate your choices.*
6. *Free space to mention anything you feel is relevant and is not addressed by the questions above.*

***Timeline for the application and selection procedure***

The application procedure for the start on the 1st of September will open on the 1st of October and close on the 1st of May. The details of the entire application procedure are published on the *Admission and Application* website for the individual Master's degree programme.

The Admission Board will carry out the selection procedure within six weeks after the application.

Candidates who are not selected can lodge a written appeal against this decision within four weeks of the date of sending, with the Board of Appeal for Examinations, P.O. Box 72, 9700 AB Groningen, the Netherlands.

# Appendix VII Pre-master programmes

- **Pre-master programme 1**
- **Pre-master programme 2**
- **Pre-master programme 3**

FSE offers predetermined Pre-Master's programmes (Table 8.1-8.3) and individually determined Pre-Master's programmes for the MSc AI. The Board of Admissions may decide to not accept admission. Starting date for a pre-master programme is 1 September.

## Pre-master programme 1

Pre-master programme 1 (Table 8.1) is for students with a Bachelor's degree (except Artificial Intelligence and Computing Science) from the Faculty of Science and Engineering from the University of Groningen (UG) and for students with a Bachelor's degree in Econometrics from the UG. The Admission Board may decide to include/exclude different courses on an individual basis.

***Table 8.1 Pre-master programme 1 (UG FSE and Econometrics)***

| **Course code** | **Course unit name** | **ECTS** | **Period** |
|---|---|---|---|
| *Semester 1* | | | |
| WBAI003-05 | Imperative Programming | 5 | Ia-Ib |
| WBAI057-05<br>WBAI067-05 | Knowledge and Agent Systems<br>OR Introduction to Robotics | 5 | Ia<br>Ia |
| WBAI012-05 | Introduction to Logic | 5 | Ib |
| WBAI056-05 | Introduction to Machine Learning | 5 | Ib |
| *Semester 2* | | | |
| WBAI018-05 | Algorithms and Data Structures | 5 | IIa |
| WBAI011-05<br>WBAI017-05<br>WBAI045-05 | Data Analytics and Communication<br>OR Advanced Logic<br>OR Object-oriented Programming | 5 | IIb<br>IIa<br>Ia |
| WBAI063-05 | Fundamental Artificial Intelligence | 5 | IIb |
| WBAI065-05 | Applied Machine Learning | 5 | IIb |
| **Total** | | **40** | |

## Pre-master programme 2

Pre-master programme 2 (Table 8.2) is for students with a relevant Bachelor degree without a Scientific background. The Admission Board may decide to include/exclude different courses on an individual basis.

***Table 8.2 Pre-master programme 2 (non-science background)***

| **Course code** | **Course unit name** | **ECTS** | **Period** |
|---|---|---|---|
| *Semester 1* | | | |
| WBAI003-05 | Imperative Programming | 5 | Ia-Ib |

| | | | |
|---|---|---|---|
| WBAI048-05 | Calculus for Artificial Intelligence | 5 | Ia-Ib |
| WBAI057-05 | Knowledge and Agent Systems | 5 | Ia |
| WBAI012-05 | Introduction to Logic | 5 | Ib |
| WBAI056-05 | Introduction to Machine Learning | 5 | Ib |
| *Semester 2* | | | |
| WBAI018-05 | Algorithms and Data Structures | 5 | IIa |
| WBAI017-05<br>WBAI045-05 | Advanced Logic<br>OR Object-oriented Programming | 5 | IIa<br>Ia |
| WBAI063-05 | Fundamental Artificial Intelligence | 5 | IIb |
| WBAI065-05 | Applied Machine Learning | 5 | IIb |
| WBAI050-05 | Linear Algebra and Multivariable Calculus | 5 | IIb |
| **Total** | | **50** | |

## Pre-master programme 3

Pre-master programme 3 (Table 8.3) is for students with a HBO-ICT degree from Hanze University Groningen in Software Engineering, Business IT & Management or Network & Security Engineering. The Admission Board may decide to include/exclude different courses on an individual basis.

***Table 8.3 Pre-master programme 3 (Hanze University HBO-ICT)***

| **Course code** | **Course unit name** | **ECTS** | **Period** |
|---|---|---|---|
| *Semester 1* | | | |
| WBAI048-05 | Calculus for Artificial Intelligence | 5 | Ia-Ib |
| WBAI057-05 | Knowledge and Agent Systems | 5 | Ia |
| WBAI012-05 | Introduction to Logic | 5 | Ib |
| WBAI056-05 | Introduction to Machine Learning | 5 | Ib |
| *Semester 2* | | | |
| WBAI018-05 | Algorithms and Data Structures | 5 | IIa |
| WBAI017-05 | Advanced Logic | 5 | IIa |
| WBAI049-05 | Statistics | 5 | IIa |
| WBAI063-05 | Fundamental Artificial Intelligence | 5 | IIb |
| WBAI065-05 | Applied Machine Learning | 5 | IIb |
| WBAI050-05 | Linear Algebra and Multivariable Calculus | 5 | IIb |
| **Total** | | **50** | |

# Appendix VIII Transitional provisions (art. 7.1)

For students who were registered in the programme before 2025-2026, the following transitional provisions apply. The provisions are listed in reverse-chronological order. General provisions are described through text. Course units that are a direct replacement for discontinued course units are listed in table format.

Students who have completed a discontinued course are excluded from taking the respective replacement course.

Any cases not listed in the Teaching and Examination Regulations, through either the current curriculum or the transitional provisions, are to be handled by the Board of Examiners.

**Students who started in 2024-2025 or before:**
From 2025-2026 onwards, Unsupervised Deep Learning [WMAI038-05] is no longer offered. Students who started in 24-25 or before are still allowed to count this course as an elective.

**Students who started in 2023-2024 or before:**

***Table 9.***

| **Discontinued course unit** | | | **Replacement course unit** | | |
|---|---|---|---|---|---|
| **Course Code** | **Course Name** | **ECTS** | **Course Code** | **Course Name** | **ECTS** |
| WMAI019-05 | Handwriting Recognition | 5 | WMAI034-05 | Deep Learning Practical | 5 |
| WMAI010-05 | Machine Learning | 5 | WMAI030-05 | Advanced Machine Learning | 5 |
| WMAI025-05 | Topics in AI | 5 | WMAI029-05 | Responsible AI | 5 |

From 24-25 onwards, Natural Language Processing with Deep Learning [WMAI031-05] is part of the mandatory programme. Students who started in 23-24 or before do not have to include this course in their mandatory programme, provided they still obtain a total of 120 ECTS.

**Students who started in 2022-2023 or before:**
From 23-24 onwards, Topics in AI [WMAI025-05] and Methodology in AI [WMAI026-05] are part of the mandatory programme. Students who started in 22-23 or before do not have to include these courses in their mandatory programme, provided they still obtain a total of 120 ECTS.

# Appendix IX Additional requirements Open degree programmes (art. 3.10)

Students are permitted to obtain a diploma in the Artificial Intelligence MSc programme without fully fitting the curriculum set out in Appendix III and Appendix IV. This can only happen in consultation with and after approval of the Board of Examiners of the degree programme. Students are required to finish a MSc Project in the field of Artificial Intelligence, to guarantee they are able to function as a MSc level researcher in line with the Dublin level descriptors / Framework for Qualifications of the European Higher Education Area, and are required to fit the Learning Outcomes of the programme (set out in Appendix I). These Learning Outcomes have been established in accordance with the AI MSc Framework of Reference of the Netherlands.