

Appendices Master's degree programme

Artificial Intelligence 2012-2013

Appendix A Teaching outcomes of the degree programme (art. 1.3)

The degree programme is designed to:

- prepare for participation in the field of Artificial Intelligence
- impart specialized knowledge, skills and insight in the field of Artificial Intelligence and its applications at a high national and international academic level
- prepare for conducting academic research or designer in the field of Artificial Intelligence

Appendix B Specializations of the degree programme (art. 2.2)

Students must choose one of the following specializations:

- specialization Computational Intelligence and Robotics
- specialization Multi-Agent Systems

Appendix C Content of the degree programme (art. 2.3)

- The **degree programme** consist of the following compulsory modules with a study load of 5 ECTS unless otherwise stated, with their related form of examination:

Compulsory modules with a study load of 5 ECTS, unless otherwise stated	Form of examinations ¹							
	A	CA	IA	RA	PP	RP	WE	PR
Cognitive Robotics	X				X			X
Machine Learning			X				X	
Multi-Agent Systems	X		X					X
Perception				X	X			X
Final Research project (45 ECTS)						X		

In individual cases the Board of Examiners may define one other compulsory module (5 EC) from the following fields: logic, artificial intelligence, knowledge systems, Autonomous Systems, Mathematics, Statistics or Computer Science.

- The different **specializations** also contain the following compulsory modules with a study load of 5 ECTS, with their related form of examination:

Computational Intelligence and Robotics

Compulsory modules with a study load of 5 ECTS, unless otherwise stated	Form of examinations ¹							
	A	DA	IA	RA	PP	RP	WE	PR
Handwriting Recognition	X				X			X
Robotics		X	X		X			
Sound Recognition		X	X		X			

Multi-Agent Systems

Compulsory modules with a study load of 5 ECTS, unless otherwise stated	Form of examinations ¹							
	A	DA	IA	RA	PP	RP	WE	PR
Arguing Agents	X						X	
Cognitive Modeling – Basic Principles and Methods	X			X	X			
Design of Multi-Agent Systems			X				X	X

¹ Form of examinations:

A: assignments; CA: computer assignment; DA: design assignment; IA: implementation assignment; IS: internship; RA: research assignment; PP: paper; RP: research project; WE: written exam; PR: oral presentation

Appendix D Optional course units (art. 2.4)

1. With the approval of the Board of Examiners, a student may choose one or more of the following optional modules with a study load of 5 ECTS, with their related form of examination:

Elective courses with a study load of 5 ECTS, unless otherwise stated	Form of examinations ¹							
	A	CA	DA	IA	RA	PP	WE	PR
Arguing Agents	X						X	
Auditory Biophysics					X			X
Cognitive Engineering			X		X	X	X	
Cognitive Modeling – Basic Principles and Methods	X				X	X		
Cognitive Modeling – Complex Behaviour	X				X	X		
Computational Cognitive Neuroscience	X					X		X
Computational Discourse	X	X						X
Design of Multi-Agent Systems				X			X	X
Handwriting Recognition				X		X		X
Language Modeling					X	X		X
Neuro-ergonomics								X
Robotics			X					X
Signals and Systems	X						X	
Sound Recognition			X	X		X		
User Models			X			X		

2. With the approval of the Board of Examiners, a student may also choose one or more of the following optional modules with a study load of 5 ECTS unless otherwise stated (for form of examination refer to the Teaching and Exam regulations of the appropriate Degree Programmes):

- Advanced Computer Graphics
- Advanced Self-organisation of Social Systems
- Advanced Web Technology
- Automated Reasoning
- Computational Simulations of Language Behaviour
- Computer Vision
- Dynamic Logic
- Legal Knowledge Management
- Natural Language Processing
- Neural Networks
- Pattern Recognition
- Philosophy of Logic: Conditionals
- Philosophy of Mind II: Consciousness and Action
- Philosophy of Neuroscience
- Philosophy of Probability
- Philosophy of Science, Technology and Society: The Information Society
- Programming in C++ (part 1, 2 and/or part 3: 8 EC maximum)
- Robotics (Industrial Engineering)
- Scientific visualization
- Semantic Web Technology (10 EC)

Appendix E Entry requirements and compulsory order of examinations (art. 3.2)

- Final Research project: at least 60 ECTS of degree programme
- Robotics: Cognitive Robotics
- Handwriting Recognition: Signals and Systems

Appendix F Admission to the degree programme (art. 4.1.1 + art. 4.2)

1. Students in possession of a Dutch or foreign certificate of higher education that indicates that they have the following knowledge and skills shall be admitted to the degree programme:
 - knowledge of and insight in the subject of Knowledge Systems
 - knowledge of and insight in the subject of Autonomous Systems
 - knowledge of and insight in the subject of Mathematics, notably discrete and continuous mathematics
 - knowledge of and insight in the subject of Statistics
 - knowledge of, insight in and practical skills in the subject of Computer Science, notably programming, data structures and search techniques
 - knowledge of and insight in the subject of Logics, notably set theory, predicate logic and modal logic
2. The holder of a certificate from the Bachelor's degree programme "Artificial Intelligence" of any university in the Netherlands is expected to have the knowledge and skills listed in Article 4.1.1 and is admitted to the degree programme on that basis.

Appendix G Application deadlines for admission (art. 4.5)

Deadline of Application	Non-EU students	EU students
Artificial Intelligence (admission dates for semester 1 and 2)	1 April and 1 November	1 May and 1 December
Human-Machine Communication (admission dates for semester 1 and 2)	1 April and 1 November	1 May and 1 December

Decision deadlines for international students (art. 4.5.3)

Deadline of Decision	Non-EU students	EU students
Artificial Intelligence	1 June and 1 January 1	1 June and 1 January
Human-Machine Communication	1 June and 1 January	1 June and 1 January