

## Study Programme

60 credits

Academic year 2024-2025

Faculty of Engineering and Architecture

Master of Science in Computer Science Engineering

Language of instruction: Dutch

Programme version 10

**General Courses** 

	CKD1 I		36221011	
Parallel Computer Systems Lieven Eeckhout Department of Electronics and Information Systems	6	1	B:1	180
Parallel and Distributed Software Systems Filip De Turck Department of Information Technology	6	1	B:1	180
Design of Multimedia Applications Glenn Van Wallendael Department of Electronics and Information Systems	6	1	B:2	180
	3 sing	1	B:1	90
Design Project Femke De Backere Department of Information Technology	9	1	B:J	270
Mobile and Broadband Access Networks  Mario Pickavet Department of Information Technology	6	1	A:2	180
•	6 ing	1	A:2	180
•	6 sing	1	B:1	180
Machine Learning Joni Dambre Department of Electronics and Information Systems	6	1	A:1	180
Information Security Eric Laermans Department of Information Technology	6	1	A:2	180
Courses				
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	6	Kei IVIII	A:1	Study 180
Natural Language Processing [en] Chris Develder Department of Information Technology	6		A:2	180
Recommender Systems [en] Toon De Pessemier Department of Information Technology	6		A:2	180
Deep Generative Models [en] Bart Dhoedt Department of Information Technology	4		A:2	120
	4 cessing		A:2	120
Computer Vision: Theory and Applications Hiep Luong Department of Telecommunications and Information Processing	6		A:2	180
Database Design Guy De Tré Department of Telecommunications and Information Processing	4		A:1	120
Big Data Technology [en] Dieter De Witte Department of Electronics and Information Systems	4		A:1	120
Cloud Storage and Computing [en] Bruno Volckaert Department of Information Technology	4		A:2	120
	Lieven Eeckhout Department of Electronics and Information Systems Parallel and Distributed Software Systems Filip De Turck Department of Information Technology Design of Multimedia Applications Glenn Van Wallendael Department of Electronics and Information Systems Research Project Joris Walraevens Department of Telecommunications and Information Proces Design Project Femke De Backere Department of Information Technology Mobile and Broadband Access Networks Mario Pickavet Department of Information Technology Information Theory Heidi Steendam Department of Telecommunications and Information Process Queueing Analysis and Simulation Joris Walraevens Department of Telecommunications and Information Process Machine Learning Joni Dambre Department of Electronics and Information Systems Information Security Eric Laermans Department of Information Technology  **Courses**  **Geredit units from the following list. Subject to approval by the faculty.**  Reinforcement Learning [en] Pieter Simoens Department of Information Technology  Natural Language Processing [en] Chris Develder Department of Information Technology  Recommender Systems [en] Toon De Pessemier Department of Information Technology  Deep Generative Models [en] Bart Dhoedt Department of Information Technology  Probabilistic Graphical Models [en] Aleksandra Pizurica Department of Telecommunications and Information Processing Up De Tré Department of Telecommunications and Information Processing  Database Design Guy De Tré Department of Telecommunications and Information Processing  Big Data Technology [en]	Lieven Eeckhout Department of Electronics and Information Systems Parallel and Distributed Software Systems 6 Filip De Turck Department of Information Technology Design of Multimedia Applications Glenn Van Wallendael Department of Electronics and Information Systems Research Project Joris Walraevens Department of Telecommunications and Information Processing Design Project Pemke De Backere Department of Information Technology Mobile and Broadband Access Networks 6 Mario Pickavet Department of Information Technology Information Theory Heidi Steendam Department of Telecommunications and Information Processing Queueing Analysis and Simulation Joris Walraevens Department of Telecommunications and Information Processing Machine Learning Joni Dambre Department of Electronics and Information Systems Information Security Eric Laermans Department of Information Technology  COUISES  Credit units from the following list. Subject to approval by the faculty.  Price Simoens Department of Information Technology  Recommender Systems [en] Fieter Simoens Department of Information Technology  Recommender Systems [en] Fon De Pessemier Department of Information Technology  Deep Generative Models [en] Fieter Simoens Department of Information Technology  Probabilistic Graphical Models [en] Fieter Simoens Department of Information Technology  Probabilistic Graphical Models [en] Fieter Computer Vision: Theory and Applications Fiep Luong Department of Telecommunications and Information Processing  Database Design Fied Data Technology [en] Fied Technology [en] Fied Technology [en]	Lieven Eeckhout Department of Electronics and Information Systems Parallel and Distributed Software Systems 6 1 Filip De Turck Department of Information Technology Design of Multimedia Applications 6 1 Glenn Van Wallendael Department of Electronics and Information Systems Research Project Joris Walraevens Department of Telecommunications and Information Processing Design Project Permke De Backere Department of Information Technology Mobile and Broadband Access Networks 6 1 Heid Steendam Department of Information Technology Information Theory 6 1 Heid Steendam Department of Telecommunications and Information Processing Queueing Analysis and Simulation 6 1 Joris Walraevens Department of Telecommunications and Information Processing Machine Learning Joni Dambre Department of Electronics and Information Systems Information Security Fric Laermans Department of Information Technology  Courses  Courses  Credit units from the following list. Subject to approval by the faculty.  CRDT Ref MT1  Reinforcement Learning [en] 6 Pieter Simoens Department of Information Technology  Recommender Systems [en] 6 On De Pessemier Department of Information Technology  Recommender Systems [en] Toon De Pessemier Department of Information Technology  Probabilistic Graphical Models [en] 4 Aleksandra Pizurica Department of Telecommunications and Information Processing Computer Vision: Theory and Applications 6 Hiep Luong Department of Telecommunications and Information Processing Database Design Guy De Tré Department of Telecommunications and Information Processing Big Data Technology [en] 4	Lieven Eeckhout Department of Electronics and Information Systems Parallel and Distributed Software Systems 6 1 B:1 Filip De Turck Department of Information Technology Design of Multimedia Applications Glenn Van Wallendael Department of Electronics and Information Systems Research Project Joris Walraevens Department of Telecommunications and Information Processing Design Project 9 1 B:J Femke De Backere Department of Information Technology Mobile and Broadband Access Networks 6 1 A:2 Mario Pickavet Department of Information Technology Information Theory Information Systems Information Security Information Systems Information Security Information Theory

10 E017942	Software Hacking and Protection [en] Bjorn De Sutter Department of Electronics and Information Systems	6	A:1	180
11 E017950	Secure Software and Systems [en] Bart Coppens Department of Electronics and Information Systems	6	A:2	180
12 E008710	Network Security [en] Bruno Volckaert Department of Information Technology	6	A:1	180
13 E019370	Robotics Tony Belpaeme Department of Electronics and Information Systems	6	B:1	180
14 E019170	Internet of Things [en] Jeroen Hoebeke Department of Information Technology	6	A:1	180
15 E099400	Research Internship [en] Patrick Segers Department of Electronics and Information Systems	3	B:J	90
16 E099400	Research Internship [en] Patrick Segers Department of Electronics and Information Systems	6	A:J	180
17 E099300	Industry Internship Engineering and Architecture [en, nl] Patrick Segers Department of Electronics and Information Systems	6	A:J	180
18 E016330	Artificial Intelligence [en, nl] Aleksandra Pizurica Department of Telecommunications and Information P	6 rocessing	C:1	180

3 Master's Dissertation 24 credi					
Nr Course	CRDT	Ref MT1	Session	Study	
1 E091103 Master's Dissertation	24	2	A:J	720	

## Teaching

When a course is not taught (solely) in the programme's language of instruction, the effectively used languages are indicated in square brackets following the cours name, using the following ISO codes:

bg: Bulgarian de: German es: Spanish ja: Japanese pl: Polish sh: Kroatian/Serbian zh: Chinese

pt: Portuguese cs: Czech el: Greek fr: French nl: Dutch sl: Slovene da: Danish en: English it: Italian ru: Russian no: Norwegian sv: Swedish

## Semester

Semesters are indicated by their number (1 or 2); semester 3 represents the summer period and J indicates a course spanning semesters 1 and 2. When a capital letter precedes a semester number, the course has multiple offerings. The letter indicates the offering concerned.

When a semester is shown in brackets, the course in not offered this year in the specific offering.

The offering frequency and first year of offering are indicated by the following codes:

c: annually, from 2025-2026 f: annually, from 2026-2027 i: annually, from 2027-2028 a: bi-annually g: bi-annually, from 2026-2027 j: bi-annually, from 2027-2028 b: tri-annually d: bi-annually, from 2025-2026 h: tri-annually, from 2026-2027 k: tri-annually, from 2027-2028 e: tri-annually, from 2025-2026

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