

# Specialization "Intelligent Technology" 2022-2023

## MSc curriculum in general:

year 1	EC	year 2	EC	
Compulsory courses	21	Free electives	15	* core choice: chose 3 out of 6 specialization courses
Specialization courses	18	Internship MKI83	15	* specialization electives: chose 18 ec of the published list
Specialization electives	18	Research project MKI92	30	or: Extended research project MKI94 45
Free electives	3			

Compulsory: 21 EC (both specialisations) + 18 EC (specialization courses) = 39 EC

period 1	EC	period 2	EC	period 3	EC	period 4	EC	
Choice ML courses: Statistical Machine Learning NWI-IMC056 (SEM1)/Machine Learning in Practice NWI-IMC030 (SEM2)/Applied Machine Learning MKI75 (SEM2)/Probabilistic Deep Learning MKI69 (SEM2)								
Advanced A&PS MKI66	Ahmadi	3	Advanced A&PS MKI66	Ahmadi	3	AI in the professional Workfield MKI76	Ahmadi	3
Ethics for AI MKI67	Mecacci	3	Ethics for AI MKI67	Mecacci	3			

### Specialization core Neurotechnology and Healthcare (select 18EC)

Neuroimaging I DGCN02	Kohn	3	Neuroimaging I DGCN02	Kohn	3	AI for Neurotechnology MKI73	Güçlütürk	3	AI for Neurotechnology MKI73	Güçlütürk	3
AI for Healthcare MKI72	Peeters	3	AI for Healthcare MKI72	Peeters	3	Intel.syst.med.Imag. IMC037	Ciampi	3	Intel.syst.med.Imag. IMC037	Ciampi	3
						Adv. Brain-Computer Interfacing MKI74	Tangermann	3	Adv. Brain-Computer Interfacing MKI74	Tangermann	3
						MKI79 Sensorimotor Neurotechnology	Miller	3	MKI79 Sensorimotor Neurotechnology	Miller	3

### Specialisation core Interactive Agents (select 18 EC):

Human-Robot Interact.MKI70	Lanillos	3	Human-Robot Interact.MKI70	Lanillos	3	Com.Graph.&Com.Vis.MKI95	Güçlü	3	Com.Graph.&Com.Vis.MKI95	Güçlü	3
Text&Multimedia Mining LCEX-06	Larson	3	Text&Multimedia Mining LCEX-06	Larson	3	New media lab MKI52	Bosse	3	New media lab MKI52	Bosse	3
						MKI79 Sensorimotor Neurotechnology	Miller	3	MKI79 Sensorimotor Neurotechnology	Miller	3

### Specialization core Societal Impact (select 18 EC):

AI for Healthcare MKI72	Colizoli	3	AI for Healthcare MKI72	Colizoli	3	AI for Neurotechnology MKI73	Güçlütürk	3	AI for Neurotechnology MKI73	Güçlütürk	3
Human-Robot Interact.MKI70	Lanillos	3	Human-Robot Interact.MKI70	Lanillos	3	Advanced Brain-Computer Interfacing MKI74	Tangermann	3	Advanced Brain-Computer Interfacing MKI74	Tangermann	3
Text&Multimedia Mining LCEX-06	Larson	3	Text&Multimedia Mining LCEX-06	Larson	3	Com.Graph.&Com.Vis.MKI95	Güçlü	3	Com.Graph.&Com.Vis.MKI95	Güçlü	3
						New media lab MKI52	Bosse	3	New media lab MKI52	Bosse	3

### Specialization electives Neurotechnology and Healthcare and Interactive Agents (select 18 EC)

period 1	EC	period 2	EC	period 3	EC	period 4	EC	
Inform. Retrieval NWI-I00041	Vries	3	Inform. Retrieval NWI-I00041	Vries	3	Social Neurocognition DGCN26	Toni	3
Neuromorphic Comp.MKI96	Kwisthout	3	Neuromorphic Comp.MKI96	Kwisthout	3	Autom.speech recogn.LCEX10	Ten Bosch	3
Complex Adaptive Systems MKI49	Gerven	3	Complex Adaptive Systems MKI49	Gerven	3	Cognition & Complexity MKI40	Rooij	3
Design of Emb. Sys. NWI-I00155	Hooman	3	Design of Emb. Sys. NWI-I00155	Hooman	3	Neurophilosophy DGCN03	Haselager	3
Intro Lang.Speech Tech REMA-LCEX19	Halteren	3	Intro Lang.Speech Tech REMA-LCEX19	Halteren	3	Upgrading the human NWI-FFIL215	Lemmens	3
Law and technology NWI-IMC006	Zuiderveen	3	Law in Cyberspace IMC006	Zuiderveen	3	Natural computing NWI-IMC042	Machiori	3
Cognitive Robotics MKI68	Thill	3	Cognitive Robotics MKI68	Thill	3	Bias in AI MKI77	Kleinherenbrink	3
The Auditory System NWI-NM102	Opstal	3						

### Specialization electives Societal Impact (select 18 EC)

period 1	EC	period 2	EC	period 3	EC	period 4	EC	
Law and Technology NWI-IMC006	Zuiderveen	3	Law and Technology NWI-IMC006	Zuiderveen	3	Upgrading the human NWI-FFIL215	Lemmens	3
Innovation management NWI-FMT003E	Barzola	6	Philosophy & Ethics for Comp.&Inf.Science NWI-FC0043B	Consoli	6	Gender, Conflict and Int.Inst.MAN-MGEM001	Joachim	6
Work in the 21st century JUR-4Work21	Laagland	3.5	Work in the 21st century JUR-4Work21	Laagland	3.5			
Comparative Societal Questions SOW-SCS10	Tonnaer	3						
Mobilising Change SOW-ADSM100	Koster	6						
Radicalisation SOW-SCS119	Spierings	6						
Diversity in Organisations SCS210	Brink	6						
Science and Public Policy NWI-FC0043B	Halfman	3						
Science and Media NWI-FC0013C	Landeweerd	3						
Science and Societal Interaction NWI-FC002B	Born van den	3						

Free electives: 18 EC

Graduation project: Either Internship (15 EC) plus research project (30 EC) or Extended research project (45 EC)