

Masters program in "COGNITIVE SCIENCE" Educational Offer a.y. 2025/2026
TRACK: COGNITIVE NEUROSCIENCE
MANDATORY COURSES 1ST YEAR (Cohort 2025/2026)

Year	Code	Course	Hours	Credits	SSD	TAF	Semester	Professor(s)	Info
1	154103	Foundations of Cognitive Psychology and Neuroscience I	42	6	M-PSI/01 / PSIC-01/A	Caratteriz.	1	Luca Turella (20 hours) Scott Fairhall (22 hours)	in common with FBN track
1	154104	Foundations of Cognitive Psychology and Neuroscience II	42	6	M-PSI/02 / PSIC-01/B	Caratteriz.	2	Manuela Piazza (22 hours) DOC.RIF. Corrado Corradi-Dell'Acqua (20 hours) DOC. RIF.	
1	154148	Research Design	63	9 (6+3)	6 CFU M-PSI/02 / PSIC-01/B 3 CFU ING INF/05 / IINF-05/A	Caratteriz.	2	Veronica Mazza (14 hours) Stefania Bracci (14 hours) Scott Fairhall (14 hours) Ingmar de Vries (21 hours)	in common with CLC and FBN tracks
1	154165	Brain Asymmetries in Language and Cognition	42	6	L-LIN/01 / GLOT-01/A	Caratteriz.	2	Costanza Papagno (20 hours) Selene Schintu (22 hours)	in common with FBN track
1	154136	Introduction to Computer Programming (Matlab)	42	6	ING-INF/05 / IINF-05/A	Caratteriz.	1	Scott Fairhall (42 hours) / Ingmar de Vries (42 hours)	
1	154080	Neural Foundations of Human Behaviour	42	6	BIO/09 / BIOS-06/A	Caratteriz.	1	Luigi Cattaneo DOC.RIF.	in common with FBN track
1	154134	Foundations of Brain Imaging	42	6	M-PSI/02 / PSIC-01/B	Caratteriz.	1	Jorge Jovicich (22 hours) DOC.RIF. Daniel Baldauf (20 hours)	CLC track students cannot attend this course as "free choice" course

CONSTRAINED CHOICE COURSES 1ST YEAR- choose two courses among the following:

Year	Code	Course	Hours	Credits	SSD	TAF	Semester	Professor(s)	Info
1	154120	Clinical Neurology and Neuropsychology	42	6	M-PSI/08 / PSIC-04/B	Affine	1	Alessandra Dodich (38 hours) Selene Schintu (4 hours)	in common with FBN track
1	154119	Fundamental Hands on Functional Neuroimaging Analysis	42	6	M-PSI/02 / PSIC-01/B	Affine	2	Jorge Jovicich (22 hours) Daniel Baldauf (20 hours)	This course is defined as a 'Lab'.
1	154137	Cognitive neuroscience of infant development	42	6	M-PSI/02 / PSIC-01/B	Affine	2	Eugenio Parise	in common with FBN track 6 hours co-teaching with Ambra Ferrari
1	154094	Current Topics in Brain Connectivity	42	6	M-PSI/02 / PSIC-01/B	Affine	2	Daniel Baldauf	in common with FBN track
1	154138	Scientific Communication	42	6	M-PSI/02 / PSIC-01/B	Affine	2	Stefania Bracci (30 hours) Uwe Mayer (12 hours), Elisa Frasnelli (12) – co-teaching	

MANDATORY ACTIVITIES 2nd year (Cohort 2024/2025)*

2	154127	Advanced Cognitive Psychology and Neuroscience	42	6	M-PSI/02 / PSIC-01/B	Caratteriz.	1	Scott Fairhall (8 hours) Scott Fairhall (8) / Moritz Wurm (8) Luca Turella (26) /Scott Fairhall (26)	
2	154038	Internship	375	15	NN	F	annual		
2	154039	Master Thesis	750	30	PROFIN_S	E	annual		

Masters program in "COGNITIVE SCIENCE" Educational Offer a.y. 2025/2026**TRACK: COMPUTATIONAL AND THEORETICAL MODELLING OF LANGUAGE AND COGNITION (CLC)****MANDATORY COURSES 1ST YEAR (Cohort 2025/2026)**

Year	Code	Course	Hours	Credits	SSD	TAF	Semester	Professor(s)	Info
1	154139	Foundations of Cognitive Psychology and Neuroscience	63	9	M-PSI/01 / PSIC-01/A	Caratteriz.	1	Roberto Bottini DOC.RIF. (63 hours)	
1	154140	Introduction to Computer Programming (Python)	42	6	INF/01 / INFO-01/A	Caratteriz.	1	Paolo Rota	
1	154101	Research Design	42	6	M-PSI/02 / PSIC-01/B	Caratteriz.	2	Veronica Mazza (14 hours) Stefania Bracci (14 hours) Scott Fairhall (14 hours)	6 CFU in common with CN and FBN tracks
1	154130	Mathematical basics for Cognitive Science	42	6	M-PSI/02 / PSIC-01/B	Caratteriz.	1	Elisa Frasnelli	
1	154141	Machine Learning for NLP	42	6	ING INF/05 / IINF-05/A	Caratteriz.	2	Stefano Teso (42 hours)	
1	154152	Introduction to Human Language	42	6	L-LIN/01 / GLOT-01/A	Caratteriz.	1	Roberto Zamparelli DOC.RIF.	
1	154147	Computational linguistics	42	6	ING INF/05 / IINF-05/A	Caratteriz.	2	Roberto Zamparelli DOC.RIF.	

CONSTRAINED CHOICE COURSES 1st YEAR- choose two courses among the following:

Year	Code	Course name	Hours	Credits	SSD	TAF	Semester	Professor(s)	Info
1	154088	Human Language Technologies	42	6	ING INF/05 / IINF-05/A	Affine	2	Carlo Strapparava	
1	154061	Logical Structures in Natural Language	42	6	M-FIL/05 / PHIL-04/B	Affine	2	Roberto Zamparelli	
1	154145	Semantics and Cognition	42	6	M-FIL/05 / PHIL-04/B	Affine	1	Jakub Szymanik	

MANDATORY ACTIVITIES 2nd YEAR (Cohort 2024/2025)*

2	154142	Computational Modelling of Perception	42	6	M-PSI/02 / PSIC-01/B	Caratteriz.	1	Stefania Bracci (42 hours),	
2	154038	Internship	375	15	NN	F	Annual		
2	154039	Master Thesis	750	30	PROFIN_S	E	Annual		

Masters program in "COGNITIVE SCIENCE" Educational Offer a.y. 2025/2026**TRACK: FUNDAMENTAL BEHAVIOURAL NEUROSCIENCE (FBN)****MANDATORY COURSES 1ST YEAR (Cohort 2025/2026)**

Year	Code	Course	Hours	Credits	SSD	TAF	Semester	Professor(s)	Info
1	154103	Foundations of Cognitive Psychology and Neuroscience I	42	6	M-PSI/01 / PSIC-01/A	Caratteriz.	1	Luca Turella (20 hours) Scott Fairhall (22 hours)	in common with CN track
1	154166	Introduction to Computer Programming for FBN (Matlab)	42	6	ING INF/05 / IINF-05/A	Caratteriz.	1	Moritz Wurm (42 hours)	
1	154148	Research Design	63	9 (6+3)	6 CFU M-PSI/02 / PSIC-01/B 3 CFU ING INF/05 / IINF-05/A	Caratteriz.	2	Veronica Mazza (14 hours) Stefania Bracci (14 hours) Scott Fairhall (14 hours) Ingmar de Vries (21 hours)	in common with CLC and CN tracks
1	154080	Neural Foundations of Human Behaviour	42	6	BIO/09 / BIOS-06/A	Caratteriz.	1	Luigi Cattaneo DOC.RIF.	in common with CN track
1	154146	Animal Cognition and Neuroscience	63	9	M-PSI/02 / PSIC-01/B	Caratteriz	2	Andrea Messina (28 hours). Paola Sgadò (21 hours) Uwe Mayer (14 hours)	
1	154165	Brain Asymmetries in Language and Cognition	42	6	L-LIN/01 / GLOT-01/A	Caratteriz.	2	Costanza Papagno (20 hours) Selene Schintu (22 hours)	in common with CN track

CONSTRAINED CHOICE COURSES 1st YEAR- choose two courses among the following:

Year	Code	Course	Hours	Credits	SSD	TAF	Semester	Professor(s)	Info
1	154118	Cellular and Molecular Neuroscience	63	9	M-PSI/02	6 cfu Affine 3 cfu a scelta libera	2	Paola Sgadò (63 hours) Andrea Messina (21 hours – co-teaching)	The course includes 21 hours of laboratory exercises (at CIBIO).
1	154150	Comparative Neuroanatomy and Evolution	42	6	M-PSI/02	Affine	1	Uwe Mayer	
1	154151	Invertebrate Neuroscience	42	6	M-PSI/02	Affine	1	Elisa Frasnelli	

or two courses among these:

Year	Code	Course	Hours	Credits	SSD	TAF	Semester	Professor(s)	Info
1	154120	Clinical Neurology and Neuropsychology	42	6	M-PSI/08 / PSIC-04/B	Affine	1	Alessandra Dodich (38 hours) Selene Schintu (4 hours)	
1	154137	Cognitive neuroscience of infant development	42	6	M-PSI/02 / PSIC-01/B	Affine	2	Eugenio Parise	in common with CN track 6 hours co-teaching with Ambra Ferrari
1	154094	Current Topics in Brain Connectivity	42	6	M-PSI/02 / PSIC-01/B	Affine	2	Daniel Baldauf	in common with CN track

MANDATORY ACTIVITIES 2nd YEAR (Cohort 2024/2025) *

2	154149	Brain Development and Disease	63	9	BIO/09 / BIOS-06/A	Caratterizz	1	Yuri Bozzi	
2	154038	Internship	375	15	NN	F	annual		
2	154039	Master Thesis	750	30	PROFIN_S	E	annual		

FREE CHOICE COURSES FOR CN, CLC AND FBN.
Choose 12 credits (max.15)

FREE CHOICE COURSES OFFERED BY CIMeC:

Year	Code	Course	Hours	Credits	SSD	TAF	Semester	Professor(s)	Info
2	154122	Advanced Hands on fMRI Analysis	42	6	M-PSI/02 / PSIC-01/B	A scelta	1	Stefania Bracci (18 hours) Moritz Wurm (14 hours) Scott Fairhall (10 hours)	This course is defined as a 'Lab'. Prerequisite – Fundamental Hands on Neuroimaging
2	154144	Machine Learning for NLP II	42	6	ING INF/05 / IINF-05/A	A scelta	1	Stefano Teso	This course is at an advanced level: therefore, reserved to 2 nd year students, and a good knowledge of Machine Learning for NLP is pre-requisite
1 or 2	154123	Advanced Hands on M/EEG Analysis	42	6	M-PSI/02 / PSIC-01/B	A scelta	2	Paolo Belardinelli	This course is defined as a 'Lab'.
1 or 2	154112	Advanced Topics in Reasoning and Decision Making	42	6	M-PSI/01 / PSIC-01/A	A scelta	1	Stefania Pighin	
1 or 2	154113	Advanced Topics in Motor Cognition	42	6	BIO/09 / BIOS-06/A	A scelta	2	Luca Turella	
1 or 2	154156	Brain Stimulation and Multimodal Electrophysiological Recording	42	6	BIO/09 / BIOS-06/A	A scelta	1	Paolo Belardinelli (22 hours) Carlo Miniussi (20 hours)	
1 or 2	154153	Language and Social Cognition	42	6	M-PSI/02 / PSIC-01/B	A scelta	1	Uri Hasson	
1 or 2	154154	Anatomy, physiopathology and immunology of the limbic system: an update of "Mechanism of emotion"	21	3	MED/26 / MEDS-12/A	A scelta	2	Bruno Giometto	
1 or 2	154157	Cognitive Impairment and Dementia	42	6	MED/26 / MEDS-12/A	A scelta	1	Giorgio Fumagalli	
1 or 2	154158	Language modeling and human cognition.	42	6	INF-01	A scelta	2	Jakub Szymanik (32 hours) TBA (10 hours)	
1 or 2	154159	Affective Neuroscience	42	6	M-PSI/02 / PSIC-01/B	A scelta	2	Corrado Corradi Dell'Acqua DOC. RIF.	
1 or 2	154160	Methods in Comparative Neuroanatomy	21	3	M-PSI/02 / PSIC-01/B	A scelta	2	Uwe Mayer	This course is run twice in two groups, each group 21 hours (3 credits). Enrolment is limited to 14 students (7 per group), with priority given to those who have passed 154150 Comparative Neuroanatomy and Evolution. Safety training is required.
1	154161	Bridging to Cognitive Neuroscience	21	3	M-PSI/02 / PSIC-01/B	A scelta	1	Stefania Bracci	
1	154162	Bridging to Fundamental Behavioural Neuroscience	21	3	M-PSI/02 / PSIC-01/B	A scelta	1	Elisa Frasnelli (15 hours) Paola Sgadò (6 Hours)	
1 or 2	154163	Predictive Processing in the Brain: Perception and Action	21	3	M-PSI/02 / PSIC-01/B	A scelta	2	Ingmar de Vries	
1 or 2	154164	Project-Based EEG Laboratory	42	6	M-PSI/02 / PSIC-01/B	A scelta	2	Veronica Mazza	Enrolment limited to 8 students or less. Safety training is required.