

Masters program in "COGNITIVE SCIENCE" Educational Offer a.y. 2024/2025
TRACK: COGNITIVE NEUROSCIENCE
MANDATORY COURSES 1ST YEAR (Cohort 2024/2025)

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	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	Caratteriz.	2	Manuela Piazza (22 hours) DOC RIF Corrado Corradi-Dell'Acqua (20 hours)	
1	154148	Research Design	63	9 (6+3)	6 CFU M-PSI/02 3 CFU ING INF/05	Caratteriz.	2	Uri Hasson (42 hours) DOC RIF TBA (21 hours)	in common with CLC and FBN tracks 6 hours co-teaching with Christoph Huber-Huber
1	154135	Neurolinguistics	42	6	L-LIN/01	Caratteriz.	2	Costanza Papagno (38 hours) Selene Schintu (4 hours)	in common with FBN track
1	154136	Introduction to Computer Programming (Matlab)	42	6	ING-INF/05	Caratteriz.	1	Scott Fairhall (42 hours) / Moritz Wurm (42 hours)	in common with FBN track
1	154080	Neural Foundations of Human Behaviour	42	6	BIO/09	Caratteriz.	1	Luigi Cattaneo	in common with FBN track
1	154134	Foundations of Brain Imaging	42	6	M-PSI/02	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	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	Affine	2	Jorge Jovicich (22 hours) Daniel Baldauf (20 hours) Stefania Bracci (10 hours)	This course is defined as a 'Lab'.
1	154137	Cognitive neuroscience of infant development	42	6	M-PSI/02	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	Affine	2	Daniel Baldauf	in common with FBN track
1	154138	Scientific Communication	42	6	M-PSI/02	Affine	1	Uwe Mayer (18 hours), Stefania Bracci (26 hours)	

MANDATORY ACTIVITIES 2nd year (Cohort 2023/2024)*

2	154127	Advanced Cognitive Psychology and Neuroscience	42	6	M-PSI/02	Caratteriz.	1	Scott Fairhall (8 hours) Scott Fairhall (8) / Moritz Wurm (8) Luca Turella (26) /Scott Fairhall (26)	Only for second-year students who did not take the course in a.y. 2023/2024
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. 2024/2025**TRACK: COMPUTATIONAL AND THEORETICAL MODELLING OF LANGUAGE AND COGNITION (CLC)****MANDATORY COURSES 1ST YEAR (Cohort 2024/2025)**

Year	Code	Course	Hours	Credits	SSD	TAF	Semester	Professor(s)	Info
1	154139	Foundations of Cognitive Psychology and Neuroscience	63	9	M-PSI/01	Caratteriz.	1	Roberto Bottini DOC.RIF. (57 hours) Stefania Benetti (6 hours)	
1	154140	Introduction to Computer Programming (Python)	42	6	INF/01	Caratteriz.	1	Paolo Rota	
1	154101	Research Design	42	6	M-PSI/02	Caratteriz.	2	Uri Hasson DOC.RIF.	6 CFU in common with CN and FBN tracks
1	154130	Mathematical basics for Cognitive Science	42	6	M-PSI/02	Caratteriz.	1	Elisa Frasnelli	
1	154141	Machine Learning for NLP	42	6	ING-INF/05	Caratteriz.	2	Stefano Teso (36 hours) Raffaella Bernardi (6 hours)	
1	154152	Introduction to Human Language	42	6	L-LIN/01	Caratteriz.	1	Roberto Zamparelli DOC.RIF.	
1	154147	Computational linguistics	42	6	ING-INF/05	Caratteriz.	2	Raffaella Bernardi	

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

Year	Code	Course name	Hours	Credits	SSD	TAF	Semester	Professor(s)	Info
1	154144	Machine Learning for NLP II	42	6	ING-INF/05	Affine	1	Stefano Teso	This course is at an advanced level: therefore, a good knowledge in Machine Learning for NLP is pre-requisit
1	154088	Human Language Technologies	42	6	ING-INF/05	Affine	2	Carlo Strapparava	
1	154061	Logical Structures in Natural Language	42	6	M-FIL/05	Affine	2	Roberto Zamparelli	
1	154145	Semantics and Cognition	42	6	M-FIL/05	Affine	1	Jakub Szymanik	

MANDATORY ACTIVITIES 2nd YEAR (Cohort 2023/2024)*

2	154142	Computational Modelling of Perception	42	6	M-PSI/02	Caratteriz.	1	Stefania Bracci (30 hours), Raffaella Bernardi (12 hours)	Only for second-year students who did not take the course in a.y. 2023/2024
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. 2024/2025
TRACK: FUNDAMENTAL BEHAVIOURAL NEUROSCIENCE (FBN)
MANDATORY COURSES 1ST YEAR (Cohort 2024/2025)

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	Caratteriz.	1	Luca Turella (20 hours) Scott Fairhall (22 hours)	in common with CN track
1	154136	Introduction to Computer Programming (Matlab)	42	6	ING-INF/05	Caratteriz.	1	Scott Fairhall (42 hours)/ Moritz Wurm (42 hours)	in common with CN track
1	154148	Research Design	63	9 (6+3)	6 CFU M-PSI/02 3 CFU ING INF/05	Caratteriz.	2	Uri Hasson (42 ore) DOC RIF TBA (21 hours)	in common with CLC and CN tracks 6 hours co-teaching with Christoph Huber-Huber
1	154080	Neural Foundations of Human Behaviour	42	6	BIO/09	Caratteriz.	1	Luigi Cattaneo	in common with CN track
1	154146	Animal Cognition and Neuroscience	63	9	M-PSI/02	Caratteriz	2	Giorgio Vallortigara (28 hours) DOC.RIF. Paola Sgadò (21 hours) Uwe Mayer (14 hours)	
1	154135	Neurolinguistics	42	6	L-LIN/01	Caratteriz.	2	Costanza Papagno (38 hours) Selene Schintu (4 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	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	Affine	1	Alessandra Dodich (38 hours) Selene Schintu (4 hours)	
1	154137	Cognitive neuroscience of infant development	42	6	M-PSI/02	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	Affine	2	Daniel Baldauf	in common with CN track

MANDATORY ACTIVITIES 2nd YEAR (Cohort 2023/2024) *

2	154149	Brain Development and Disease	63	9	BIO/09	Caratterizz	1	Yuri Bozzi	Only for second-year students who did not take the course in a.y. 2023/2024
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
1 or 2	154122	Advanced Hands on fMRI Analysis	42	6	M-PSI/02	A scelta	2	Stefania Bracci (18 hours) Moritz Wurm (14 hours) Scott Fairhall (10 hours)	This course is defined as a 'Lab'.
1 or 2	154123	Advanced Hands on M/EEG Analysis	42	6	M-PSI/02	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	A scelta	1	Stefania Pighin	
1 or 2	154113	Advanced Topics in Motor Cognition	42	6	BIO/09	A scelta	2	Luca Turella	
1 or 2	154064	Advanced Topics in Perception and Attention	42	6	M-PSI/02	A scelta	1	Veronica Mazza (36 hours) Massimiliano Zampini (6 hours)	
1 or 2	154156	Brain Stimulation and Multimodal Electrophysiological Recording	42	6	BIO/09	A scelta	1	Paolo Belardinelli (22 hours) Carlo Miniussi (20 hours)	
1 or 2	154091	Advanced Topics in Language/Cognition	42	6	L-LIN/01	A scelta	2	Roberto Zamparelli	
1 or 2	154153	Language and Social Cognition	42	6	M-PSI/02	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	A scelta	2	Bruno Giometto	
1 or 2	154157	Cognitive Impairment and Dementia	42	6	MED/26	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) Raffaella Bernardi (10 hours)	
1 or 2	154159	Affective Neuroscience	42	6	M-PSI/02	A scelta	2	Corrado Corradi Dell'Acqua	
1 or 2	154160	Methods in Comparative Neuroanatomy	21	3	M-PSI/02	A scelta	2	Uwe Mayer	Enrolment limited to 12 students or less. Having passed 154150 <i>Comparative Neuroanatomy and Evolution</i> is prerequisite. Requires safety training. This course is run in two groups.