

Università di Pisa

Academic regulation

Study Programme	WNCR-LM - NEUROSCIENCE
Type of Study Programme	Laurea Magistrale
Class of Degree	Biologia (LM-6 R)
year of academic order	2026/2027
year of academic regulation	2026/2027

Presentation

Academic Structure	BIOLOGY
	- ANDREA CERASE
	- ROBERTO GIOVANNONI
	- JOSE' FERNANDO MAYA-VETENCOURT
	- ROBERTA MOSCHINI
Faculty	- MARCO ONORATI
	- MICHELA ORI
	- MASSIMO PASQUALETTI
	- TOMMASO PIZZORUSSO
	- GIAN MICHELE RATTO
	- PAOLA BINDA
Tutor	- FEDERICA GEMIGNANI
	- PAOLO LUSCHI
	- JOSE' FERNANDO MAYA-VETENCOURT
Lenght of the programme	2 Years
CFU	120
Qualification awarded	Laurea Magistrale in NEUROSCIENCE
Joint Degree	No
Double Degree	No
Mode of study	Convenzionale
Language	Inglese
Study Programme web site	https://www.biologia.unipi.it/home-neuroscience.html

The Study Program is	Corso di nuova istituzione
Maximum num. of recognizable credits	24
Same class degrees	WNFR-LM - BIOLOGY APPLIED TO BIOMEDICAL SCIENCES, WBMR-LM - MARINE BIOLOGY, WTBR-LM - MOLECULAR AND CELLULAR BIOLOGY
Program Location	Università di Pisa (Responsabilità Didattica)

Programme Aims

job profile (ISTAT code):

- Biologi e professioni assimilate (2.3.1.1.1)

Admission procedure

In order to be admitted to the Master's Degree Course in Neuroscience, candidates must meet specific curricular requirements and have an adequate initial preparation.

Curricular requirements:

1. Bachelor's degree in class 12 or L-13, or
2. a four-year or five-year degree in Biological Sciences, or

Bachelor's degree in a different class from those indicated in points 1 and 2, Second Degree, Master's degree,

old-system degree, provided that they have acquired at least 60 CFUs in the following disciplines:

- both scientific academic disciplines of Biology: all BIO fields (BIO/01 to BIO/19), MPSI/01, MPSI/02, MPSI/03, MED/01, MED/03, MED/04, MED/05, MED/07, MED/25, MED/26, MED/27, MED/36, MED/37, MED/39, ING-IND/34, ING-INF/06, FIS/07;

- and other scientific academic disciplines: all FIS fields (FIS/01 to FIS/08), all MAT fields (MAT/01 to MAT/09), INF/01, ING-INF/05, CHIM/01, CHIM/02, CHIM/03, CHIM/06, SECS-S/01, SECS-S/02, SECS-S/03, SECS-S/05, MPSI/03.

Of these 60 CFUs, at least 24 must be obtained in three different scientific disciplinary fields among the Biology fields indicated above and at least 18 in the scientific disciplinary fields among the other fields indicated above.

4. or a qualification obtained abroad and recognised as suitable.

The evaluation of the initial preparation consists of a potential written test and an oral examination, conducted by a dedicated commission, to assess the possession of adequate knowledge of the disciplines related to the above-mentioned "Biology" scientific academic disciplines.

The written test will be carried out at the discretion of the Commission according to the number of applications for admission to the Master's Degree Course.

The oral test will also aim to assess the level of English language proficiency, therefore, it will be conducted entirely in

English.

Only students who already hold the required qualification can take the test/s.

Only students who pass any written test and who meet the curricular requirements can take part in the oral test.

Based on the result of the oral test, the following situations may occur:

- unconditional admission to the Master's Degree Course, or
- non-admission to the Master's Degree Course, or
- admission subject to passing specific training activities (up to a maximum of 40 CFUs). In this case, students will be enrolled in Single Transition Courses to reach the required level of preparation.

Knowledge and understanding and Applying knowledge and understanding (in details)

1.

Knowledge and understanding:

Applying knowledge and understanding:

2.

Knowledge and understanding:

Applying knowledge and understanding:

3.

Knowledge and understanding:

Applying knowledge and understanding:

Class/Curriculum choice

Class of Degree

Biologia (LM-6 R)

Curricula

List of Course Units

Caratterizzante				
disciplinary field	CFU	range of CFUs from RAD	SSD	Training Activities
Biodiversità e ambiente	12	12 - 15	BIOS-04/A	1 - , 6 CFU, MAN
				1 - , 6 CFU, MAN
Biomolecolare	12	12 - 15	BIOS-07/A	1 - , 3 CFU, MAN (Segmento del Modulo 1 - dell'Attività formativa integrata)
		12 - 15	BIOS-08/A	1 - BIOTECHNOLOGY FOR NEUROSCIENCES, 6 CFU, MAN
		12 - 15	BIOS-14/A	1 - , 3 CFU, MAN (Segmento del Modulo 1 - dell'Attività formativa integrata)
Biomedico	27	24 - 27	BIOS-06/A	1 - , 6 CFU, MAN
				1 - , 6 CFU, MAN
				1 - , 6 CFU, MAN
				1 - , 3 CFU, MAN (Segmento del Modulo 1 - dell'Attività formativa integrata)
		24 - 27	BIOS-11/A	1 - , 3 CFU, MAN (Segmento del Modulo 1 - dell'Attività formativa integrata)
		24 - 27	BIOS-12/A	1 - , 3 CFU, MAN
Total Caratterizzante	51	48 - 57		

Affine/Integrativa				
disciplinary field	CFU	range of CFUs from RAD	SSD	Training Activities
Attività formative affini o integrative	12	12 - 15	MATH-04/A	1 - , 6 CFU, MAN
		12 - 15	PSIC-01/B	1 - , 6 CFU, MAN
Total Affine/Integrativa	12	12 - 15		

A scelta dello studente				
disciplinary field	CFU	range of CFUs	SSD	Training Activities

		from RAD		
A scelta dello studente	9	9 - 9	BIOS-04/A	1 - , 3 CFU, OPT
				0004E - ADVANCED METHODOLOGY IN TRANSGENIC MODELS ANALYSIS, 3 CFU, OPT
				1 - , 3 CFU, OPT
		9 - 9	BIOS-06/A	1 - , 3 CFU, OPT
				1 - , 3 CFU, OPT
				1 - , 3 CFU, OPT
		9 - 9	MEDS-24/B	1 - , 1 CFU, OPT
Total A scelta dello studente	9	9 - 9		

Lingua/Prova Finale				
disciplinary field	CFU	range of CFUs from RAD	SSD	Training Activities
Per la prova finale	22	22 - 47	PROFIN_S	1 - MASTER DEGREE THESIS B, 22 CFU, OPT (Integrated Training Activity Module MASTER DEGREE THESIS B (1985Z))
				1 - MASTER DEGREE THESIS A, 47 CFU, OPT (Integrated Training Activity Module MASTER DEGREE THESIS A (1984Z))
Total Lingua/Prova Finale	22	22 - 47		

Altro				
disciplinary field	CFU	range of CFUs from RAD	SSD	Training Activities
Altre conoscenze utili per l'inserimento nel mondo del lavoro	1	1 - 1	NN	2 - MASTER DEGREE THESIS B, 1 CFU, OPT (Integrated Training Activity Module MASTER DEGREE THESIS B (1985Z))
				2 - MASTER DEGREE THESIS A, 1 CFU, OPT (Integrated Training Activity Module MASTER DEGREE THESIS A (1984Z))
Total Altro	1	1 - 1		

Per stages e tirocini				
disciplinary field	CFU	range of CFUs from RAD	SSD	Training Activities

Per stages e tirocini presso imprese, enti pubblici o privati, ordini professionali	25	0 - 25	NN	1 - , 25 CFU, OPT
Total Per stages e tirocini	25	0 - 25		
Total	120	92 - 154		

Curriculum: (PDS0)

CFU totali: 169, di cui 54 derivanti da AF obbligatorie e 115 da AF a scelta

1° Year (Academic year 2026/2027)

Course Units	CFU	Degree class	Training activity type	Scope	Subject area	Mandatory
ADVANCED METHODOLOGY IN TRANSGENIC MODELS ANALYSIS (0004E)	3	LM-6 R	D	A scelta dello studente	BIOS-04/A	No
ANALYSIS OF TEMPORAL SERIES (480EE)	3	LM-6 R	D	A scelta dello studente	BIOS-06/A	No
BIOTECHNOLOGY FOR NEUROSCIENCES (512EE)	6	LM-6 R	B	Biomolecole	BIOS-08/A	Yes
COMPARATIVE NEUROBIOLOGY (494EE)	3	LM-6 R	D	A scelta dello studente	BIOS-04/A	No
DEVELOPMENT AND DIFFERENTIATION OF THE NERVOUS SYSTEM (414EE)	6	LM-6 R	B	Biodiversità e ambiente	BIOS-04/A	Yes
ENVIRONMENTAL EXPERIENCE AND BRAIN PLASTICITY (425EE)	3	LM-6 R	D	A scelta dello studente	BIOS-06/A	No
HUMAN FUNCTIONAL IMAGING (422EE)	3	LM-6 R	D	A scelta dello studente	BIOS-06/A	No
MATHEMATICS FOR NEUROSCIENCES (623AA)	6	LM-6 R	C	Attività formative affini o integrative	MATH-04/A	Yes
NEURAL STEM CELLS (428EE)	3	LM-6 R	D	A scelta dello studente	BIOS-04/A	No
NEUROBIOLOGY I (420EE)	6	LM-6 R	B	Biomedico	BIOS-06/A	Yes
NEUROBIOLOGY II (419EE)	6	LM-6 R	B	Biomedico	BIOS-06/A	Yes
NEUROBIOLOGY II (419EE)	3	LM-6 R	B	Biomedico	BIOS-12/A	Yes
NEUROGENOMICS (418EE)	3	LM-6 R	B	Biomolecole	BIOS-14/A	Yes
NEUROGENOMICS (418EE)	3	LM-6 R	B	Biomedico	BIOS-06/A	Yes
NEUROPHARMACOLOGY AND BIOCHEMISTRY OF SIGNALLING (417EE)	3	LM-6 R	B	Biomolecole	BIOS-07/A	Yes
NEUROPHARMACOLOGY AND BIOCHEMISTRY OF SIGNALLING (417EE)	3	LM-6 R	B	Biomedico	BIOS-11/A	Yes
SALUTE E SICUREZZA IN LABORATORIO (378FF)	1	LM-6 R	D	A scelta dello studente	MEDS-24/B	No
TRANSGENIC MODELS AND MOLECULAR METHODS FOR NEUROSCIENCES (415EE)	6	LM-6 R	B	Biodiversità e ambiente	BIOS-04/A	Yes

2° Year (Academic year 2027/2028)

Course Units	CFU	Degree class	Training activity type	Scope	Subject area	Mandatory
MASTER DEGREE THESIS A (1984Z)	48	LM-6 R	E, F	Per la prova finale, Altre conoscenze utili per l'inserimento nel mondo del lavoro		No
Modules MASTER DEGREE THESIS A (1) MASTER DEGREE THESIS A (2)	47 1				PROFIN_S NN	
MASTER DEGREE THESIS B (1985Z)	23	LM-6 R	E, F	Per la prova finale, Altre conoscenze utili per l'inserimento nel mondo del lavoro		No
Modules MASTER DEGREE THESIS B (2) MASTER DEGREE THESIS B (1)	1 22				NN PROFIN_S	
NEUROBIOLOGY III (421EE)	6	LM-6 R	B	Biomedico	BIOS-06/A	Yes
SALUTE E SICUREZZA IN LABORATORIO (378FF)	1	LM-6 R	D	A scelta dello studente	MEDS-24/B	No
SENSORY AND COGNITIVE NEUROSCIENCE (467MM)	6	LM-6 R	C	Attività formative affini o integrative	PSIC-01/B	Yes
STAGE (1539Z)	25	LM-6 R	S	Per stages e tirocini presso imprese, enti pubblici o privati, ordini professionali	NN	No

Study Plan: WNCR-LM-26-26-26

Academic Regulation Year	2026/2027
Cohort Year	2026/2027
Revision Year	2026/2027

Generated Plan Status	Approvato
Statutory Scheme	Yes
Total CFU	120
Total Mandatory CFU	63

Academic Year: 1° (2026/2027)

Rule 1: OBBLIGATORI PRIMO ANNO (Obbligatoria)
Attività Obbligatorie. 8AF.

Mandatory CFU	51
Overnumbered	NO
Enable selection from transcript	NO

Educational Activity	CFU	TAF	Field	Sectors	Statutory	Year Control
BIOTECHNOLOGY FOR NEUROSCIENCES (512EE)	6	B	BIOTECHNOLOGY FOR NEUROSCIENCES	BIOS-08/A	Yes	No
DEVELOPMENT AND DIFFERENTIATION OF THE NERVOUS SYSTEM (414EE)	6	B	DEVELOPMENT AND DIFFERENTIATION OF THE NERVOUS SYSTEM	BIOS-04/A	Yes	No
MATHEMATICS FOR NEUROSCIENCES (623AA)	6	C	MATHEMATICS FOR NEUROSCIENCES	MATH-04/A	Yes	No
NEUROBIOLOGY I (420EE)	6	B	NEUROBIOLOGY I	BIOS-06/A	Yes	No
NEUROBIOLOGY II (419EE)	9	B	NEUROBIOLOGY II	BIOS-12/A, BIOS-06/A	Yes	No
NEUROGENOMICS (418EE)	6	B	NEUROGENOMICS	BIOS-14/A, BIOS-06/A	Yes	No
NEUROPHARMACOLOGY AND BIOCHEMISTRY OF SIGNALLING (417EE)	6	B	NEUROPHARMACOLOGY AND BIOCHEMISTRY OF SIGNALLING	BIOS-11/A, BIOS-07/A	Yes	No
TRANSGENIC MODELS AND MOLECULAR METHODS FOR NEUROSCIENCES (415EE)	6	B	TRANSGENIC MODELS AND MOLECULAR	BIOS-04/A	Yes	No

		LAR METHOD S FOR NEUROSC IENCES			
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Rule 3: SALUTE E SICUREZZA IN LABORATORIO (Da elenco)

1 CFU a scelta tra i seguenti.

Overnumbered	SI					
Enable selection from transcript	NO					
Educational Activity	CFU	TAF	Field	Sectors	Statutory	Year Control
HEALTH AND SAFETY IN LABORATORY (378FF)	1	D	HEALTH AND SAFETY IN LABORAT ORY	MEDS- 24/B	No	No

Rule 5: ELECTIVE CLASSES (Da elenco)

9 CFU a scelta tra i seguenti.

TAF	D - A scelta dello studente					
Field	83778 - A scelta dello studente					
Overnumbered	NO					
Enable selection from transcript	SI					
Educational Activity	CFU	TAF	Field	Sectors	Statutory	Year Control
ADVANCED METHODOLOGY IN TRANSGENIC MODELS ANALYSIS (0004E)	3	D	ADVANC ED METHOD OLOGY IN TRANSGE NIC MODELS ANALYSI S	BIOS-04/A	No	No
ANALYSIS OF TEMPORAL SERIES (480EE)	3	D	ANALYSI S OF TEMPOR AL SERIES	BIOS-06/A	No	No
COMPARATIVE NEUROBIOLOGY (494EE)	3	D	COMPAR ATIVE NEUROBI OLOGY	BIOS-04/A	No	No
ENVIRONMENTAL EXPERIENCE AND BRAIN PLASTICITY (425EE)	3	D	ENVIRON MENTAL EXPERIE NCE AND BRAIN PLASTICI TY	BIOS-06/A	No	No
HUMAN FUNCTIONAL IMAGING (422EE)	3	D	HUMAN	BIOS-06/A	No	No

			FUNCTIONAL IMAGING			
NEURAL STEM CELLS (428EE)	3	D	NEURAL STEM CELLS	BIOS-04/A	No	No

Rule 6: ELECTIVE CLASSES (Libera da offerta)

9 CFU a scelta libera dall'Offerta Didattica dell'Ateneo.

Filter: BIOTECHNOLOGIES AND APPLIED ARTIFICIAL INTELLIGENCE FOR HEALTH

The student may choose the educational activities that meet all the following rules:

- E' nel corso WBHR-LM - BIOTECHNOLOGIES AND APPLIED ARTIFICIAL INTELLIGENCE FOR HEALTH

- Non è del TAF S - Per stages e tirocini

- Non è del TAF F - Altro

- Non è del TAF E - Lingua/Prova Finale

- Non è del TAF G - Attività specifiche della sede

- E' del tipo corso LM - Laurea Magistrale

OR

Filter: ANALYTICAL TECHNIQUES IN BIOCHEMISTRY

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 0041E - ANALYTICAL TECHNIQUES IN BIOCHEMISTRY

OR

Filter: APPLIED CELLULAR MICROSCOPY

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 0040E - APPLIED CELLULAR MICROSCOPY

OR

Filter: BIODIVERSITY DATA MANAGEMENT AND ANALYSIS

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 0017E - BIODIVERSITY DATA MANAGEMENT AND ANALYSIS

OR

Filter: BEHAVIOURAL ECOLOGY

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 522EE - BEHAVIOURAL ECOLOGY

OR

Filter: CALCIUM, MITOCHONDRIA AND NEURONAL DEATH

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 0009E - CALCIUM, MITOCHONDRIA AND NEURONAL DEATH

OR

Filter: CANCER BIOCHEMISTRY

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 0005E - CANCER BIOCHEMISTRY

OR

Filter: CELL BIOPHYSICS

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 0039E - CELL BIOPHYSICS

OR

Filter: PATHOLOGY OF NATURAL PLANT SYSTEM

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 516GG - PATHOLOGY OF NATURAL PLANT SYSTEM

OR

Filter: PLANT CONSERVATION

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 382EE - PLANT CONSERVATION

OR

Filter: PLANT MOLECULAR PHYSIOLOGY AND TRANSFORMATION OF PLANTS

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 444EE - PLANT MOLECULAR PHYSIOLOGY AND TRANSFORMATION OF PLANTS

OR

Filter: PLANT SYNTHETIC BIOLOGY

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 527EE - PLANT SYNTHETIC BIOLOGY

OR

Filter: PRECLINICAL AND CLINICAL DRUG DEVELOPMENT

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 0038E - PRECLINICAL AND CLINICAL DRUG DEVELOPMENT

OR

Filter: PRIMATE ADAPTATION AND EVOLUTION

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 354EE - PRIMATE ADAPTATION AND EVOLUTION

OR

Filter: SOCIAL BEHAVIOUR AND COGNITION IN MAMMALS

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 500EE - SOCIAL BEHAVIOUR AND COGNITION IN MAMMALS

OR

Filter: SYNTHETIC VIRUSES: MOLECULAR TOOLS FOR RESEARCH AND THERAPY

The student may choose the educational activities that meet all the following rules:

- E' l'attività formativa 0074E - SYNTHETIC VIRUSES: MOLECULAR TOOLS FOR RESEARCH AND THERAPY

TAF	D - A scelta dello studente
Field	83778 - A scelta dello studente
Overnumbered	NO
Enable selection from transcript	SI

Academic Year: 2° (2027/2028)

Rule 2: OBBLIGATORI SECONDO ANNO (Obbligatoria)

Attività Obbligatorie. 2AF.

Mandatory CFU	12
Overnumbered	NO
Enable selection from transcript	NO

Educational Activity	CFU	TAF	Field	Sectors	Statutory	Year Control
NEUROBIOLOGY III (421EE) Prerequisites: Attività formative: NEUROBIOLOGY I (420EE) NEUROBIOLOGY II (419EE)	6	B	NEUROBIOLOGY III	BIOS-06/A	Yes	No
SENSORY AND COGNITIVE NEUROSCIENCE (467MM)	6	C	SENSORY AND COGNITIVE	PSIC-01/B	Yes	No

		NEUROSCIENCE			
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Rule 4: THESIS (Da elenco)
48 CFU a scelta tra i seguenti.

TAF	E - Lingua/Prova Finale
Field	83779 - Per la prova finale
Overnumbered	NO
Enable selection from transcript	SI

Educational Activity	CFU	TAF	Field	Sectors	Statutory	Year Control
MASTER DEGREE THESIS A (1984Z)	48		MASTER DEGREE THESIS A		No	No
Modules						
MASTER DEGREE THESIS A (1)	47	E	MASTER DEGREE THESIS A			
MASTER DEGREE THESIS A (2)	1	F	MASTER DEGREE THESIS A			
MASTER DEGREE THESIS B (1985Z)	23		MASTER DEGREE THESIS B		No	No
Modules						
MASTER DEGREE THESIS B (2)	1	F	MASTER DEGREE THESIS B			
MASTER DEGREE THESIS B (1)	22	E	MASTER DEGREE THESIS B			
WORK PLACEMENT (1539Z)	25	S	WORK PLACEMENT	NN	No	No