



Name of the study course	NEUROSCIENCE AND EDUCATION	
Cycle	37	
Presumed starting date	01/11/2021	
Expected duration	3 YEARS	
Department / Applicant scientific organization	HUMANISTIC STUDIES. LITERATURE, CULTURAL HERITAGE. EDUCATIONAL SCIENCE	
Coordinator	Prof. Isabella Loiodice – Full professor of "General and Social Pedagogy" – University of Foggia	
Positions available	 12: 8 positions with scholarship funded by the University (2 of which on TFA support funds); 2 places with scholarship funded by Apulia Region – Avviso 1/POC/2021 "Dottorati di ricerca in Puglia XXXVII ciclo", published on BURP n. 66 del 13/05/20212. The aforementioned grants are conditioned by the signing of the Unilateral Obligation Act with subsequent obligations; 2 positions without scholarship. The positions announced will be assigned as specified below: 4 positions with scholarship to Neuroscience (1 position with scholarship funded by Apulia Region); 6 positions with scholarship to the Education curriculum (2 of which on TFA support funds and 1 position with scholarship funded by Apulia Region). 1 position without scholarship to Neuroscience curriculum; 	
Curricula (if any)	- 1 position without scholarship to Education curriculum. YES	
	 Neuroscience Education Candidates may indicate their preference for either one of the curricula in the Research Project. The Neuroscience curriculum includes research projects concerning issues relating to the neurobiological, medical-clinical, investigative-legal areas and more generally to the areas CUN: 5 	





(Biological Sciences), 6 (Medical Sciences), 12 (Legal Sciences); the Education curriculum includes research projects concerning issues relating to the pedagogical, didactic, psychological, physical education and sport sciences areas and more generally to the area: 11 (Historical, philosophical, pedagogical and psychological sciences).

The ranking will be the same for both curricula.

Admission requirements

Master's degrees All Specialist Degrees or all Degrees earned according to the set of laws in force

before Min. Decree 509/99 and equivalent educational qualifications.

Admission procedure:

Oral test

✓ Language

Research project

For those who earned a degree **NO** abroad, is the admission procedure different for candidates who earned their degree in Italy?

Entrance exams:

The examination calendar will be published exclusively on the website: www.unifg.itand on the electronic bulletin board of the University. Such publication has the value of a notification for all legal purposes and will take place at least 20 days before the dates set for the exams.





Study course description and objectives

The PhD course in *Neuroscience and Education* aims at training students in higher educational research on the interdisciplinary study of the mind /brain system and relevant applications in educational and social contexts, highlighting how the cognitive development of an individual is shaped, since childhood, through learning / training experiences, also thanks to the role played by technologies. It is a new interdisciplinary research field, also developed at the legal level, and is able to bring about substantial changes to the educational system, with impacts on economic and social development.

The course is articulated in two curricula:

The *Neuroscience* curriculum, aimed at deepening knowledge in the field of molecular and cellular neurobiology, and the *Education* curriculum, focused on educational and didactic research on the topics of human biopsychic, social and cultural development.

General objectives of the Course:

- provide students with a solid theoretical-practical background to enable them to acquire suitable knowledge of the most advanced technologies related to basic disciplines applied to neuroscience;
 - ensure high quality educational research training
 - promote the acquisition of transversal skills for different research areas, including the legal field;
- create an international network of skills in *fund raising* activities through the establishment of scientifically competitive partnerships.

Envisaged employment and professional opportunities

At the end of the study course, students will be able to develop research projects autonomously and also coordinate data collection, integrating their own biological, learning and training science methods, evaluate the results, propose technological innovations for scientific and educational purposes, and work with multidisciplinary teams. PhDs will be able to continue their training in their respective areas of professional specialization as well as acquire functional expertise for a new professional figure capable of merging knowledge related to bio-neuro-psychic behaviour with issues detected in the school and training environment and the related potential development, while capitalizing on the links between neuroscience, cognition, education and educational practice, also with reference to the didactic software and web design sectors.

The skills acquired will encourage employability in various Neuroscientific areas, as well as in basic and clinical research institutes, academic and health institutes and research / development sectors of biotechnological and pharmaceutical companies, consultancy activities related to the scientific area of competence, the private sector, the public administration, the third sector within the social economy ambit, educational institutions, the businesses and people services sector, educational software development industries and the digital environment design sector.

The Doctorate is based on two fundamental categories: interdisciplinarity and internationalization

The Course favours co-tutored theses, and doctoral students will be required to spend at least a quarterly period in foreign universities. The qualification acquires a legal value in both Countries.





Doctoral curricula related to the Doctoral Course

Curriculum 1 - Title: Neuroscience

Academic discipline	Academic recruitment field	CUN¹ VQR² areas concerned	Impact in % of each SSD ³ on the scientific project subject of the course
BIO/09	05/D1 – PHYSIOLOGY	05 – Biological sciences	% 11,10
BIO/10	05/E1-GENERAL BIOCHEMISTRY	05 – Biological sciences	% 22,30
BIO/12	CLINICAL BIOCHEMISTRY AND CLINICAL MOLECULAR BIOLOGY	05 – Biological sciences	% 7,40
BIO/14	05/G1 – PHARMACOLOGY, CLINICAL PHARMACOLOGY AND PHARMACOGNOSY	05 – Biological sciences	% 7,40
MED/03	06/A1 MEDICAL GENETICS	06-Medical Sciences	% 3,70
MED/25	06/D5 – PSYCHIATRY	06-Medical Sciences	% 3,70
MED/26	06/D6 – NEUROLOGY	06-Medical Sciences	% 22,20
MED/43	06/M2 – LEGAL AND OCCUPATIONAL MEDICINE	06-Medical Sciences	% 3,70
IUS/07	12/B2 – LABOUR LAW	12 – Legal sciences	% 3,70
IUS/11	12/C2 – ECCLESIASTICAL AND CANON LAW	12 – Legal sciences	% 3,70
IUS/17	12/G1 – CRIMINAL LAW	12 – Legal sciences	% 3,70
IUS/16	12/G2 – CRIMINAL PROCEDURAL LAW	12 – Legal sciences	% 7,40
Curriculum in collaboration with:	No collaboration		
TOTAL			100%





Curriculum 2 – Title: Education

Academic discipline	Academic recruitment field	CUN-VQR areas concerned	Impact in % of each SSD on the scientific project subject of the course
M-PED/01	11/D1 PEDAGOGY AND HISTORY OF PEDAGOGY	11 - Historical, philosophical and pedagogical and psychological sciences	% 25,70
M-PED/02	11/D1 PEDAGOGY AND HISTORY OF PEDAGOGY	11 - Historical, philosophical and pedagogical and psychological sciences	% 7,40
M-PED/03	11/D2 DIDACTICS, SPECIAL PEDAGOGY AND EDUCATIONAL RESEARCH	11 - Historical, philosophical and pedagogical and psychological sciences	% 18,50
M-PED/04	11/D2 DIDACTICS, SPECIAL PEDAGOGY AND EDUCATIONAL RESEARCH	GY AND EDUCATIONAL pedagogical and psychological	
M-STO/05	11/C2 LOGIC , HISTORY AND PHILOSPHY OF HISTORY	11 - Historical, philosophical and pedagogical and psychological sciences	% 3,70
M-PSI/01	11/E 1 GENERAL PSYCHOLOGY. PSYCHOBIOLOGY AND PSYCHOMETRICS	11- Historical, philosophical and pedagogical and psychological sciences	% 3,70
M-PSI/07	11/E4 DYNAMIC AND CLINICAL PSYCHOLOGY		
M-PSI/08	11/E4 CLINICAL AND DYNAMIC PSYCHOLOGY	11 - Historical, philosophical and pedagogical and psychological sciences	
M-EDF/01	11/D2 DIDACTICS , SPECIAL PEDAGOGY AND EDUCATIONAL RESEARCH	11 - Historical, philosophical and pedagogical and psychological sciences % 11,10	
M-PSI/04	11/E - PSICOLOGY	11b - Scienze psicologiche	% 7,40
Curriculum in collaboration with:	No collaboration		
TOTAL			100%





<u>Disciplinary and interdisciplinary educational</u> <u>activity</u>

Ad hoc teachings included in the training process	Tot CFU ⁴ : 30	No. of teachings: 4	for which a final verification is foreseen:
Teachings borrowed from master's degree courses	YES	No. 2 (1+1)	for which a final verification is foreseen: 2
Teachings borrowed from bachelor's degree courses	NO		
Seminar cycles	YES		
Research internships ITALY – outside of the institutions involved	YES		Average estimated period (months per student): 2
Research internships ABROAD - within the ambit of the institutions involved	YES		Average estimated period (months per student): 3
Research internships ABROAD — outside of the institutions involved	YES		Average estimated period (months per student): 3





Description of training activities

Туре	Synthetic description
Linguistics	Advanced English language courses to be held at the University Language Center (CLA) are foreseen. Foreign PhD students may attend Italian language courses.
Computer Science	Seminars and workshops in advanced computer science, data analysis and management, use of specialist software for elementary and advanced statistical processing are foreseen.
Management of research, knowledge of research systems and funding systems	Training meetings on: epistemology and semantics of research, research dissemination systems (publications and citation databases) fundraising (related to national and international calls) are foreseen. PhD students may be included in research teams working on national and international projects.
Valorization of research results and intellectual property	PhD students will be systematically encouraged to present papers for national and international conferences. They will also be prompted to publish results of studies and researches in classified scientific journals, as well as to carry out research projects and interdisciplinary tasks.

¹ National University Council

² Evaluation of research quality

³ Scientific disciplinary sector

⁴ University credits