EDUCATIONAL REGULATIONS OF THE MASTER'S DEGREE IN COGNITIVE SCIENCE

Courtesy translation of the Regulations issued by Rector's Decree
no. 600 of 30th July 2018

CONTENTS

Art. 1 – General characteristics of the degree

1. The Master's degree in Cognitive Science was first included in the Educational Offer database in academic year 2009/10. It belongs to class LM-55 – Cognitive Science (Ministerial Decree No. 270 dated 22nd October 2004 and Ministerial Decree dated 16th March 2007). The faculty responsible for the course is that of the Centre for Mind/Brain Sciences (CIMeC). The locations of educational activities are published on the website of the course: http://offertaformativa.unitn.it/en/lm/cognitive-science/courses-hours-examinations
2. The following regulations enter into effect from academic year 2018/2019, and are drafted in accordance with the 2011 University Order.
3. The course's coordinator and governing body for each academic year that the course runs are indicated in the area *Presentazione* of *Universitaly.* In the present document, where reference is made to *Universitaly*, further information can be found at: https://www.universitaly.it/index.php/cercacorsi/universita

Art. 2 – Specific educational goals, expected learning results, and employment opportunities

1. The specific educational objectives and expected learning outcomes are described on *Universitaly* in the specific area *Quadro A4* for every student cohort, sorted by academic year.
2. The employment and occupational opportunities are described on *Universitaly* in the specific area *Quadro A2*.

Art. 3 – Admission requirements

1. CIMeC sets annually the maximum number of places available in the course. A public selection is held annually to specify the dates and the procedure of student evaluations that will be carried out by a Special Committee.
2. Access to the Master's degree in Cognitive Science is subject to verification of the following requirements:
   a. Curricular requirements:
      - Bachelor's degree from an Italian university, or other educational qualification obtained abroad and recognised as sufficient.
      - Command of the English language.
   b. Specific preparation; students must demonstrate their ability to:
      - Analyse cognitive science themes.
      - Address methodological-quantitative questions.
      - Comprehend research data within the context of cognitive science and technology.
3. These skills generally include the equivalent of at least 50 ECTS credits within the five disciplines characterizing cognitive sciences: philosophical and linguistic; psychological; psychobiological and cognitive neuroscience; mathematics, computer science, and engineering; economic, statistical, and social.
4. A committee proposed by CIMeC, and nominated by Rectorial decree governs admission to the Master's degree in Cognitive Science. The deadline for submitting applications for admission is announced the Rector's decree. Extended deadlines may be established in the case of available positions. Applications received by the first deadline will be prioritised. Assessment is based on applicants' level of knowledge and skills as listed above. Possession of the requisites for admission are also verified by evaluation of:
   - Curricula

- Individual objectives
- Reference letters

5. The assessment of the candidates' curricula results in the assignment of a score for the following items:
   a. The disciplinary scope of the first-level degree and its relevant assessment (related to the distribution of grades/marks in the specific institution and/or school system).
   b. Additional training and vocational courses attended by the candidate.
   c. A short essay in which the candidate explains their choice.
   d. Reference letters.
6. The minimum score for eligibility is indicated annually in the call for applications.

Art. 4 – Transfer upon admission, course changes

Credit transfers from courses within the University of Trento or other Universities are possible if space is available within the course. Transferees must pass a specific selection and earn an appropriate position in the ranking.

If a student enrols from another course, or already holds a degree, they can apply for an evaluation of previously acquired credits to shorten the length of the course. Credit recognition is the responsibility of a specific committee. Based on the syllabi presented, the number and type of credits recognized, and subject to availability, the committee may allow admission to the second year (the number of spaces available is determined on July 31st each year).

Students from courses of study of the same class are guaranteed recognition of at least 50% of the ECTS credits previously acquired in the same disciplinary scientific sector. In the case of ECTS credits acquired 6 years earlier than the request for admission to the course, the obsolescence of the educational content will be evaluated.

Art. 5 – Organisation of the course

1. The educational activities and related learning objectives are described in table 1 (*tabella 1*) published on *Universitaly*: section B: "*Esperienza dello studente*".

   The Master's degree course is divided into two tracks leading to the acquisition of basic and specialist skills in either Cognitive Neuroscience (Cognitive Neuroscience track), or in the framework of language technology and its integration with other modalities (Language and Multimodal Interaction track).

   The integrated study of the mind and brain has assumed an increasingly important role for individuals and organizations, with important consequences for technology and science. The Cognitive Neuroscience track is aimed at the acquisition of advanced theoretical and methodological knowledge in the field of cognitive neuroscience. The approach of this track is the interdisciplinary study of biological and cognitive functions of the brain, to establish a better understanding of the human mind and mental abilities. Students will be provided with knowledge of the psychological and neurobiological underpinnings of mental mechanisms to provide a conceptual framework, and with technical skills to further their future research. The theoretical lessons and thematic studies will be augmented by workshops, and by an internship to be carried out within CIMeC research laboratories or other institutions or organizations with standing agreements with the University.

   The main objective of the Language and Multimodal Interaction track is to instil advanced knowledge and experience in the science and technology of language. This track adopts an interdisciplinary perspective, integrating computational methods (in particular, the use of machine learning techniques and analysis of large data sets), psychology and neuroscience experimental methods, and theoretical linguistics.

   Both tracks are characterized by internships and a substantial amount of research. The Master's programme aims to attract foreign as well as Italian students and to offer them an international experience. For this reason, the Master's programme is taught entirely in English. The teaching faculty also includes international researchers from foreign institutions that hold agreements with CIMeC.

2. The course structure is explained in table 2 (*tabella 2*) published on *Universitaly*: section B: "*Esperienza dello studente - Descrizione del percorso di formazione*".

3. The educational path includes classroom lessons and seminars aimed at instilling basic knowledge in the areas of language technology, integration of multi-modal computational models, linguistics, psychology, and neuroscience.

   The effort required of the student for each educational activity is measured in ECTS (European Credit Transfer and Accumulation System) credits. An ECTS credit corresponds to about 25 total hours required of the student, including those dedicated to individual study. For activities that involve classes, each credit typically involves 7 hours of classroom lessons, unless otherwise laid down in the manifesto of studies.

The schedule of courses is structured in semesters, and verification of educational activities is carried out by oral and/or written examination, or by project presentation.

The schedule of examinations involves two types of tests:

- End-of-course tests, supplemented where appropriate with one or more intermediate tests held during the lessons.
- Exams in periods following the end of the lessons (recovery sessions). These can be taken by students who have not taken or passed the end-of-course test.

The maximum number of exams that can be taken per year is 12.

Each year there are at least two recovery sessions held in periods other than those reserved for end-of-course tests. There will be at least three annual calls for each educational activity, (January-February, June-July, and August-September).

Exam scores are expressed in thirtieths with the possibility of *cum laude* or alternatively, a determination of "approved" or "rejected".

The procedure for taking the tests for each class is described in its syllabus.

The educational structure identifies a professor responsible for the evaluation procedure of each exam or test, thus guaranteeing proper implementation.

Art. 6 – Study plans and enrolment in course years

1. Each year, students have the possibility to edit their own study plan online according to the calendar established at the beginning of the academic year. The study plan is automatically approved if it complies with the pre-established rules and compilation procedure. Students may also add free choice courses available in the educational offerings of the university, as long as they are consistent with the level of studies that the student is following. The centre reserves the right to evaluate the adequacy of courses selected.
2. The career progression or eventual revocation of the studies is governed by the rules of the "*Regolamento didattico di Ateneo*".
3. The academic year in which the learning activities and other support activities are offered, is indicated in table 2 (*tabella 2*) published on *Universitaly:* section B: "*Esperienza dello studente - Descrizione del percorso di formazione*".

In accordance with the University Educational Regulations, students who do not acquire at least 30 credits over the entire educational programme within two years, or who do not pass at least one exam within three calendar years, will lose their student status.

Attendance is required for educational internships, which may include:

- Tutorials that prepare the students for work experience.
- Exercises and simulations in which students develop technical and relational skills and methodologies in a protected situation before or during experimentation in the real world.
- Direct experience in the field under supervision.
- Tutorial sessions and constant feedback.

Internship experiences must be designed, evaluated, and documented in the student's programme.

Any additional attendance requirements in specific educational activities will be indicated in the Syllabi.

It is not possible to enrol in the programme as a part-time student.

Art. 7 – Opportunities offered during the course

1. The Master's programme adheres to international mobility initiatives defined annually by a permanent working group comprising the Vice-Rector for International Development and delegates of the respective academic structures. These mobility initiatives govern credit acquisition for incoming and outgoing students, double degree programs, as well as internship and thesis opportunities. The mobility programme allows educational activities carried out abroad to be acknowledged on the student's study plan. These activities are encouraged through scholarships available to all students admitted to an overseas program. All mobility opportunities are published on the international mobility website: http://international.unitn.it/outgoing/programmes

Students participating in these programs benefit from support services managed by the Education Department and Student Services division of their faculty/department. Administrative personnel with specific skills in subject areas, individual programs, and mobility initiatives will be available.

The mobility programs are as follows:

- Bilateral agreement
  A bilateral agreement is signed by two universities that choose to become partners to achieve common specific aims related to student mobility, joint research activities, common activities (such as the organization of seminars or conferences), etc.
- Double degree
  The double degree is an integrated study programme (or joint program), established by two or more universities, that allows students to attend part of their university career at the University of Trento and part at a partner university, thus obtaining both the Italian and the foreign qualifications at the same time. The programme pursues three main aims: diversification of education, quality learning of a foreign language, and deeper understanding of a different nation and culture.
- Erasmus Plus
  The Erasmus Plus programme allows students to spend time abroad at a partner university or another relevant organization in a country member of the Program. The programme is divided into two geographic areas: EU countries (Programme Countries) and extra EU countries (Partner Countries - International Credit Mobility).

These programs anticipate a mobility period for course attendance, thesis elaboration, or internship activities.

- Mobility for internship and thesis elaboration
  The University's initiative allows students to apply for an internship or thesis mobility scholarship throughout the year at EU or extra EU institutions, either for programs that fall within existing agreements, or for programs independently found by the student.

The international mobility opportunities offered to students currently enrolled at the university are published and updated regularly on the Master's programme website under "Study abroad". The updated destinations of the Erasmus Plus programme and FAQs can be found on the University's website, ordered by faculty and area of study: http://offertaformativa.unitn.it/en/lm/cognitive-science/study-abroad

2. The Master's programme promotes and supports job-related orientation and training experiences through its internships to provide an enriching and high quality experience for students.

The following services are offered through the Master's Programme Job Guidance Office:

- Notice board on internship opportunities
  Using this service, students can discover offers from partner companies in Italy or abroad. They can then view online presentations based on their own interests, and contact partner companies independently.
- Internship programs
  A variety of internship programs, some offering financial aid, are published in combination with organisations and institutions of interest.
- Support for the application
  Training sessions on how to write a CV, how prepare for a job interview, and how to navigate the application process are organised by the University.
- Launching, monitoring, and evaluation of the internship programs

The Master's programme plays an active role in defining the contents and educational objectives related to the internship experience. It also works closely with the Job Guidance Office in drafting internship programs, while taking into account the specific regulations of the department or centre. Internships are monitored continuously by specific internal staff in association with the Job Guidance Office. These bodies are also responsible for the collection of final evaluations.

The Centre names a faculty delegate for students interested in doing their internship outside of the University of Trento, either in Italy or abroad. The delegate's task is to give support and help the student during the completion of the internship. Once completion of the internship has been verified and approved by the tutor or the delegate assigned by the Centre, the respective university credits (CFU) will be acknowledged on the student's academic records.

More information about the specific internship opportunities and university credit acquisition can be found on the Master's website under the "Internship" section: http://offertaformativa.unitn.it/en/lm/cognitive-science/internship

3. Tutoring activities are available for those interested in enrolling in the Master's degree, and for students already enrolled.

   The Educational Office, Student Care Office, and Educational Care Office at the administrative hub in Rovereto are responsible for providing the technical and administrative information related to the courses of study and organization of the Master's course. Professors with tutoring tasks are mandated to provide them with scientific and educational information, support for the choice of curriculum, and information regarding educational opportunities offered to students. Students enrolled in the first year are also offered information and support by senior students/tutors regarding the organisation, effectiveness, and efficiency of individual study, as well as other activities, including those outside the university that may complement student life. The names and addresses of professors and students with tutoring assignments will be listed annually on the study course website.

Art. 8 – Obtaining the degree

1. To obtain their Master's degree, students must have completed 120 credits, including those obtained in the final examination. The final examination represents a formative moment in a student's education for two principle reasons: first, it demonstrates their capacity to reflect on the knowledge they have acquired and to apply it within the greater context of empirical research; second, it makes it possible to assess their level of autonomy in analysing, presenting, and discussing scientific data. The examination comprises presentation and discussion of a thesis written in English and prepared under the supervision of an advisor in accordance with the "Regulations for obtaining the degree".
2. The criteria for composing the Final Examination Committee, defining the procedures for submitting applications, and determining the final score (expressed in hundred-tenths, with the possibility of *cum laude*), are described in the Educational Regulations of the University, and are available on the Master's programme website under "Rules and Regulations": http://offertaformativa.unitn.it/en/lm/cognitive-science/rules-and-regulations
3. The procedures for conducting the final examination and obtaining the degree are governed by special regulations explained on *Universitaly*, in the specific section *Quadro A5*.

Art. 9 – Quality assurance initiatives

1. The quality of the Master's programme is assured in accordance with the policies defined by the University and promoted by the Centre. In accordance with the Centre's rules, the course is represented in the Joint Education Committee directly by its faculty members and students, as well as indirectly through activities promoted by the Commission.
2. A self-assessment group monitors the initiatives implemented within the course, and their results. This is achieved by completion of an Annual Monitoring Form and preparation of a Cyclic Review Report.

Art. 10 – Final and transitional rules

1. These Regulations apply to new careers starting from the academic year 2018/2019, and are valid until the issuance of subsequent regulations.
2. Table 1 and/or Table 2 in this document may be modified by the academic structure responsible for the course of study as part of the annual educational planning process. The aforementioned tables are also published on the *Universitaly* website, section B: "*Esperienza dello studente*" in "*Descrizione del percorso di formazione*".
3. Issues not addressed by these Regulations shall be governed by the University Educational Regulations.

Table 1: objectives of educational activities

Master's programme in Cognitive Science: planned educational objectives subsequent to 2018/2019

Curriculum CN - Cognitive Neuroscience

Course name	Educational objectives
Clinical Neuropsychology	The aim of this course is to provide an introduction to clinical neuropsychology. The student will be introduced to methods of clinical neuropsychological assessment and rehabilitation. A range of neuropsychological test procedures will be introduced. The student will also be introduced to the neuropsychological profile of a range of neurological disorders assessment and rehabilitation of neuropsychological disorders. At the end of the course, students should be able to describe the main neuropsychological disorders and to know the main assessment and rehabilitation procedure.
Current Issues in Neuroscience: Animal Models	The course would provide the theoretical and empirical foundations of comparative research on animal cognition. It will cover all the traditional topics in animal cognition - perception, learning and memory, categorization, thinking and reasoning, and communication/language. Practical in the animal cognition lab will be part of the course.
Current Topics in Brain Connectivity	In this seminar course, we will read and discuss up-to-date scientific contributions in the field of general brain connectivity, focusing on both functional and anatomical connectivity measures. The goal of this introductory course is to provide a basic knowledge of the state-of-the-art methods and concepts of accessing brain connectivity measures. The course is based on active learning and participation. At the end of the course, students will acquire a good overview of the current debates on brain connectivity and they will learn the appropriate terminology and computational concepts. They will familiarize with the concepts of experimental connectivity measures and they will be able to critically access new publications on the topic.
Developmental Neuroscience	This course will address molecular, cellular, anatomical and functional aspects of central nervous system development. Specific topics will include embryonic development, postnatal critical periods of visual, auditory and language areas, neurodevelopmental disorders and neural basis of adolescent behaviour. At the end of the course, the students should be able to acquire an updated view of our understanding of human brain development and its impact on brain pathologies.
Foundations of Brain Imaging	This course will cover the foundations of neuroimaging techniques commonly used in cognitive neuroscience. Students will obtain a basic understanding (i.e., methodological foundation) of non-invasive brain imaging and neurostimulation techniques used in cognitive neuroscience research. The programme contains specialized modules on the theory and methods of functional and structural magnetic resonance imaging; electro- and magneto-encephalography; transcranial electric and magnetic stimulation, as well as multimodal approaches. At the end of the course, students should be able to describe the basic principles, advantages, limitations and cognitive neuroscience application examples of the neuroimaging methods discussed.
Foundations of Cognitive Neuroscience	This course will examine the neural basis of higher mental functions, including brain systems supporting perception, object recognition, attention, memory, spatial functions, language, and decision-making. We will explore the neuroanatomical and neurophysiological basis of cognitive functions, considering evidence form functional neuroimaging and clinical studies. Cognitive neuroscience approaches to disorders such as autism, schizophrenia, and Alzheimer's disease will also be explored. The teaching methods will include lectures, demonstrations, patient videos, class discussion and practical sessions in different neuroimaging labs. This first part of the course will concentrate on language, memory, perception and attentional mechanisms. At the end of the course, the students should be able to know basic topics in cognitive neuroscience and describe appropriate cognitive neuroscience methods.
Foundations of Cognitive Psychology	Cognitive psychology is the study of the mental processes underlying our ability to perceive, pay attention, think, categorize, use language and remember. Historically, cognitive psychology began with the information processing approach but we will also explore recent research on topics such as emotions and numerical cognition, and will include insights from neuropsychology, neuroimaging and lifespan development. The teaching methods will include demonstrations, class discussion and lectures and will emphasize the critical link between theory and experimentation. At the end of the course, students should be able to analyse critically the scientific literature on cognitive psychology topics and summarize content of a scientific article with a proper lexicon.
Hands on Methods	The first part of the class focuses on fMRI data analysis, i.e. the statistics of fMRI data analysis and how that should influence your design decisions and conclusions. By understanding the statistical concepts of fMRI data analysis, students will understand the rationale of the pre-processing pipeline in fMRI and the types of choices fMRI researchers have to make when designing their experiments. By actually modelling and analysing fMRI data students will get a deeper understanding of fMRI data analysis and at the same time gain experience that will make it easier for them to read fMRI papers and to perform their own imaging studies in the future. The second part of the course involves the hand on analysis of MEG data.

Internship	The internship is a period of training done by the student within the degree program, in order to achieve moments of alternation between study and work and to facilitate future career developments.
Introduction to Human Language	This module is an introduction to language science (linguistics) covering phonetics and phonology, morphology and lexical knowledge, syntax, phrase semantics, discourse, and anaphora. No previous knowledge of linguistics is required. Students attending this module will become familiar with the main current issues and methodologies in the field, and will be able to read the relevant technical literature.
Introduction to Computer Programming	The course introduces computer programming, focusing on those aspects that are most relevant to behavioural and neuroimaging studies in cognitive neuroscience. At the end of the course, the students should be able to master the computer language proposed.
Master's Degree Thesis	The final examination is an important moment in the pathway of study for two primary reasons. First, it allows for verification of the student's capacity to integrate content from the programme and apply this knowledge to his/her own empirical research. Second, it allows for assessment of the student's skills in formulating, writing and discussing a scientific argument.
Neural Foundations of Human Behaviour	This course has been designed to cover basic anatomical and functional aspects of the central nervous system. Specific topics covered include neuronal function, synaptic transmission, sensory processing, movement, sleep and neural plasticity. At the end of the course, the students should be able to summarize our understanding of the functional organization of the human brain.
Neuroscience	This course will look at a number of the major neural systems in detail, examining their structure and function. Contemporary studies will provide much of the teaching material and a strong emphasis will be placed on the latest developments in each field. Subjects to be covered will include the visual system, the auditory system, motor pathways, attention mechanisms, eye movements and memory.
Research Design	This course will cover some fundamentals of algebra, probability theory, and statistics. Furthermore, the course will cover all aspects of a research project, such as, sample sizes, measures, and type of experimental designs. Students will present and comment research on cognitive science topics. Discussions also include presentations of research to various audiences, abstracts, reviews, grant process, and scientific ethics.

Curriculum LMI - Language and Multimodal Interaction

Course name	Educational objectives
Foundations of Cognitive Psychology	Cognitive psychology is the study of the mental processes underlying our ability to perceive, pay attention, think, categorize, use language and remember. Historically, cognitive psychology began with the information processing approach but we will also explore recent research on topics such as emotions and numerical cognition, and will include insights from neuropsychology, neuroimaging and lifespan development. The teaching methods will include demonstrations, class discussion and lectures and will emphasize the critical link between theory and experimentation. At the end of the course, students should be able to analyse critically the scientific literature on cognitive psychology topics and summarize content of a scientific article with a proper lexicon.
Computational Linguistics	The course introduces the basics of computational linguistics by giving an overview of the field. It then focuses on the syntax and semantics of natural language familiarizing students with lexicalized formal grammars and computational semantics models. The second part of the course introduces students to multimodal models by considering in particular language and vision modalities. Students will hence gain a good overview of the field, its methods and main long-term goals.
Computational Skills for Text Analysis	The course introduces computer programming, focusing on those aspects that are most relevant to text processing: regular expressions, text segmentation, and extraction of lexical and linguistic information from text.
Current Topics in Language and Brain	In the first part of the course, we will address how different data sources have been used in the past to draw inferences on the relationships between language and the brain, and if/how the same sources can be used to complement current neuroimaging techniques. In the second part of the course, we will focus on three topics: the functional neuroanatomy of reading/writing, and how the brain adapted to the development of written language; the neural underpinnings of (morpho) syntactic skills; the neural correlates of phonological working memory.
Foundations of Cognitive Neuroscience	This course will examine the neural basis of higher mental functions, including brain systems supporting perception, object recognition, attention, memory, spatial functions, language, and decision-making. We will explore the neuroanatomical and neurophysiological basis of cognitive functions, considering evidence form functional neuroimaging and clinical studies. Cognitive neuroscience approaches to disorders such as autism, schizophrenia, and Alzheimer's disease will also be explored. The teaching methods will include lectures, demonstrations, patient videos, class discussion and practical sessions in different neuroimaging labs. This first part of the course will concentrate on language, memory, perception and attentional mechanisms. At the end of the course, the students should be able to know basic topics in cognitive neuroscience and describe appropriate cognitive neuroscience methods

Functional Anatomy of Language	This course provides information about the organization of the brain and its networks, focusing on the neural correlates of language and how, during the years, this knowledge has evolved. It provides also some basic information on the effects of brain lesions.
Human Language Technologies	The course introduces how to computationally approach and manage human language technologies. The topics covered are creation of annotated corpora, syntax (e.g. parsing), semantics (e.g. similarity, word sense disambiguation), until more advanced issues of pragmatics such as affective and emotion recognition, computational treatment of persuasive and creative language. Particular attention will be given to the use of out-of-the-shelf NLP tools, so that the students can gain hands on experience.
Internship	The internship is a period of training done by the student within the degree programme, in order to achieve moments of alternation between study and work and to facilitate future career developments.
Introduction to Human Language	This module is an introduction to language science (linguistics) covering phonetics and phonology, morphology and lexical knowledge, syntax, phrase semantics, discourse, and anaphora. No previous knowledge of linguistics is required.
Introduction to Machine Learning for Natural Language Processing	This class presents a survey of methods from the fields of statistics and machine learning aimed at extracting generalizations from example data, and use them to automatically analyse new data. The class focuses on case studies in the analysis of different components of natural language.
Logical Structures in Natural Language	A general introduction to the study of meaning in natural language using the tools of formal semantics. Topics include the relation of predicate logic with natural language operators; lexical semantics, compositional semantics, nominal and verbal quantifications; modification; event semantics; genericity, and the semantics of grammatical features.
Master Thesis	The final examination is an important moment in the pathway of study for two primary reasons. First, it allows for verification of the student's capacity to integrate content from the programme and apply this knowledge to his/her own empirical research. Second, it allows for assessment of the student's skills in formulating, writing and discussing a scientific argument.
Research Design	This course will cover some fundamentals of algebra, probability theory, and statistics. Furthermore, the course will cover all aspects of a research project, such as sample sizes, measures, and type of experimental designs. Students will present and comment on their own research projects in progress. At the end of the course, the students should be able to design an experiment.

Table 2: curriculum of the Cognitive Neuroscience (CN) track

Master's programme in Cognitive Science: planned educational objectives subsequent to 2018/2019

First year

Compulsory courses

Course Name	CFU	SSD	Type of Activity	Prerequisites
Foundations of Brain Imaging	9	M-PSI/02	characterising	---
Foundations of Cognitive Neuroscience	9	M-PSI/02	characterising	---
Foundations of Cognitive Psychology	9	M-PSI/01	characterising	---
Intro to Human Language	6	L-LIN/01	characterising	---
Introduction to Computer Programming	6	ING-INF/05	characterising	---
Neural Foundations of Human Behaviour	6	BIO/09	characterising	--
Research Design	6	M-PSI/02	characterising	---

Courses of choice - 2 from:

Course Name	CFU	SSD	Type of Activity	Prerequisites
Clinical Neuropsychology	6	M-PSI/02	similar	---
Current Issues in Neuroscience: Animal Models	6	M-PSI/02	similar	---
Current Topics in Brain Connectivity	6	M-PSI/02	similar	---
Developmental Neuroscience	6	M-PSI/02	similar	---
Hands on Methods Course	6	M-PSI/08	similar	---
Neuroscience	6	M-PSI/02	similar	---

Second year

Compulsory courses

Course Name	CFU	SSD	Type of Activity	Prerequisites
Internship	15		other activities	Having already acquired at least 45 ECTS
Master Thesis	30		other activities	---

Free choice courses

The curriculum provides for the acquisition of 12 ECTS credits without scientific disciplinary sector constraints chosen from the teaching activities that are specifically activated by degree course and published annually in the manifesto of studies or among those activated by the University.

Table 3: curriculum of the Language and Multimodal Interaction (LMI) track

Master's programme in Cognitive Science: planned educational objectives subsequent to 2018/2019

First year

Compulsory courses

Course Name	CFU	SSD	Type of Activity	Prerequisites
Computational Linguistics	9	ING-INF/05	characterising	---
Current Topics in Language and Brain	6	MPSI/02	characterising	
Foundations of Cognitive Psychology	9	M-PSI/01	characterising	---
Functional Anatomy of Language	6	M-PSI/02	characterising	
Intro to Human Language	6	L-LIN/01	characterising	---
Introduction to Machine Learning for Natural Language Processing	6	ING-INF/05	characterising	
Research Design	6	M-PSI/02	characterising	---

Courses of choice - 2 from:

Course Name	CFU	SSD	Type of Activity	Prerequisites
Computational Skills for Text Analysis	6	ING-INF/05	similar	---
Foundations of Cognitive Neuroscience	6	M-PSI/02	similar	---
Human Language Technologies	6	ING-INF/05	similar	---
Logical Structures in Natural Language	6	M-FIL/05	similar	---

Second year

Compulsory courses

Course Name	CFU	SSD	Type of Activity	Prerequisites
Internship	15		other activities	Having already acquired at least 45 ECTS
Master Thesis	30		other activities	---

Free choice courses

The curriculum provides for the acquisition of 12 ECTS credits without scientific disciplinary sector constraints chosen from the teachings that are specifically activated by degree course and published annually in the manifesto of studies or among those activated by the University.