The Center for Mind/Brain Sciences - CIeMeC

The Center for Mind/Brain Sciences (CIeMeC) is an international research institute specialized in mind and brain studies. Its strengths are research, training, instrumentation and dissemination of knowledge within the local community. According to the 2016 report of ANVUR (the Italian National Agency for the Evaluation of Universities and Research Institutes), the University of Trento ranks first among Italian State universities for psychology disciplines. CIeMeC researchers study brain organization via the analysis of its functional, structural and physiological characteristics, in both normal and pathological conditions. **Top-of the line instrumentation** includes fMRI, MEG, EEG, NIRS, TMS, tDCS and eye tracking solutions, as well as systems for studying kinematics.

The Center is responsible for **graduate training programs** at both Master’s and Doctorate levels placing a heavy emphasis on professional development and successful placement of graduates. The activities organized by CIeMeC are diverse and numerous, including colloquia, research seminars, international workshops with leading researchers in the mind/brain sciences as invited speakers. The close integration of the Center’s core scientific, educational, and clinical programs fosters a dynamic **multidisciplinary environment** for research in cognitive neuroscience.

Research at CIeMeC is conducted in various areas that range from experimental psychology, to neuroimaging acquisition methods, cognitive neurosciences and animal cognition, as well as computational linguistics. In addition, the Center for Neurorehabilitation (CeRiN) is dedicated to the diagnosis and treatment of pathologies deriving from cerebral damage. CIeMeC maintains strong ties with other groups at the University of Trento, including researchers in the Departments of Psychology and Cognitive Science, Physics, and Information and Communication Technology. Research is conducted in five interdisciplinary labs:

- Animal Cognition and Comparative Neuroscience (ACN)
- Functional Neuroimaging (LNiF)
- Experimental Psychology (EPL)
- Language, Interaction and Computation (CLIC)
- Neuropsychology (NP).

Four other labs have become part of the CIeMeC thanks to collaborations with other Departments of the University of Trento and/or local institutions and research centers:

- Neurophysics (NPhys) in collaboration with the Department of Physics
- Neuroinformatics (NILab) in collaboration with the Bruno Kessler Foundation
- Insect Neurobiology and Neuroecology (INN Lab) in collaboration with the Research and Innovation Centre of the Edmund Mach Foundation
- Ethology, Ecology and Evolution (EEE Lab) in collaboration with the Public Museum of Rovereto.
Living in Rovereto

25 km south of Trento with nearly 40,000 inhabitants, Rovereto is a dynamic and culturally rich town. Depending on the season, many cultural and artistic events take place here, as well as in the surrounding areas, like the Lagarina Jazz Festival, historical reenactments in the city of Ala (a few kilometers south of Rovereto), the Comun Comunale (organized by the villages on the right side of the Adige River) and the autumn Ganzega. Beside the world-wide known Peace Bell, the austere Veneto Castle which hosts the Historical War Museum, and the traces of its Venetian past in its historical center, is the Mart museum, the Museum of Modern and Contemporary Art in Trento and Rovereto, designed by architect Mario Botta, which has placed the city among the art capitals of Europe once again. The Mart and the oldest theater in the region, the Zandonai theater, built in 1782, decorate Corso Bettini amongst other buildings from the 1700s. This is where the academic and research centers of the University of Trento are located, which contribute to highlight the cultural aspects that marked the life of Rovereto in the Eighteenth century. CIMeC teaching and experimental labs are in Rovereto, while the Neuroimaging facilities are near Trento. The University of Trento is constantly working to develop its international dimension, establishing and strengthening networks and partnerships that guarantee the opportunity of cooperation with regard to education, research and relations with industry. International students coming to the University of Trento are supported in all the necessary administrative steps related to their arrival and stay in Trento, such as: pre-arrival information, support in VISA and stay permit application, Italian tax code, health insurance, bank account, local transports, information on accommodation and scholarship opportunities, enrolment procedures, socio-cultural events. Sports activities and facilities as well as special discounts to access gyms, sports centres, swimming pools and ski slopes are available for students who join the University Sports Network (UniSport).

Trento

Trento (117.000 inhabitants, 190 meters altitude) is set at the intersection of important routes leading to Garda Lake, the Dolomites (UNESCO world heritage), Venice, Verona, Bolzano and Innsbruck. With its unique geographical position Trento represents on the one hand a crossroads between the Mediterranean and northern Europe cultures, on the other hand a natural production and technology platform for international business and an ideal trading hub between southern and continental Europe. With a safe urban environment offering many cultural activities, set in an attractive natural landscape, with good employment opportunities, an excellent education system and an efficient health service, Trento is one of the top Italian cities to live in.
Master in Cognitive Science

The Master in Cognitive Science leads to the Master’s degree in Cognitive Science (*Laurea Magistrale*), whose aim is to provide students with advanced theoretical and methodological knowledge in cognitive neuroscience through an interdisciplinary approach to the study of the mind-brain system. Two characteristic features of this program are: a close relationship between teaching and research practices, and a constant interplay between biology-based and technology-based explorations of the human mind and brain and of human ability to communicate through natural language.

The program provides research-focused training with a varied, international group of faculty and researchers. All students are actively involved in developing research projects and have access to the laboratories during the Master, thus gaining invaluable hands-on experience with cutting-edge research technologies. These include functional magnetic resonance imaging (fMRI), transcranial magnetic stimulation (TMS), magnetic encephalography (MEG), transcranial direct current stimulation (tDCS), electroencephalography (EEG), eye tracking, cinematic motion tracking, psychophysics, computational modeling, & comparative cognition (animal models). The knowledge and skills gained during the Master will most of all provide a foundation for advanced scientific research, but also prepare for professional applications in more applied settings.

Programme overview

<table>
<thead>
<tr>
<th>Main application deadline</th>
<th>Non-EU citizens living abroad: January/February each year</th>
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<tbody>
<tr>
<td>Extended application deadline</td>
<td>June each year, only for EU citizens or non-EU citizens living in Italy (check online for the updates)</td>
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<tr>
<td>Intake</td>
<td>September each year</td>
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<td>Duration</td>
<td>2 years, full time</td>
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<td>Minimum requirements</td>
<td>Bachelor’s degree, fluency in English, basic knowledge of programming, mathematics and statistics</td>
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<td>Selection criteria</td>
<td>Curriculum Vitae et Studiorum, English knowledge, professional experience in university or research, references</td>
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<td>Special opportunities</td>
<td>Double Degree with Universität Osnabrück (Germany), Joint educational programme with SISSA International School for Advanced Studies (Trieste), European Master’s Program in Language and Communication Technologies (Erasmus Mundus LCT)</td>
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<td>Further information</td>
<td>international.unitn.it/mcs</td>
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<tr>
<td>Contacts</td>
<td><a href="mailto:mcs@unitn.it">mcs@unitn.it</a></td>
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Career opportunities

The Master in Cognitive Science offers a unique opportunity for students aiming to train as scientists. Its main objective is to prepare talented doctoral candidates who can be competitive and confident in performing research in international settings. Graduates will be able to apply advanced skills in cognitive neuroscience using experimental methodologies in the study of the mind-brain system. They will conduct research activities as part of the analysis and development of systems related to human cognitive performance as well as empirical research and development of neural and computational models of cognition.

The Master in Cognitive Science is international: our students come from all continents and, after graduation, find positions in their home countries and elsewhere. Though the program is relatively young, its strength is already evident in the satisfaction reported by students and in their high and successful placement after graduation. A recent survey conducted on 84 graduates of the program showed that 77% of them are currently employed. The Master’s degree in Cognitive Science provides access to doctoral courses in the disciplines of cognitive neuroscience, both in Italy and in Europe as well as in the United States. CIMeC itself offers a PhD program in Cognitive and Brain Sciences. We are also very proud of the success of those students who choose careers in industry. They have found interesting positions in academic research management (both clinical and non-clinical), software development, communication and consulting.

Requirements

Ideal applicants are highly motivated individuals holding a Bachelor's degree from an accredited university, and fluent in English. Students whose first language is not English, or whose language of instruction in the previous degree was not English, are asked to provide evidence of a good command of English. Candidates will be selected on the basis of their academic achievements, strength of their intellectual and working abilities as described in their CV, their experience in the field, and reference letters. We are open to candidates from any academic background.

Joint Study Programmes

The double degree program with the University of Osnabrück allows students to attend part of their university career at the University of Trento and another at the partner university, thus obtaining both the Italian and the foreign qualifications at the same time.

The course is also part of a joint educational programme, restricted to a small number of highly selected students, with the Scuola Internazionale Superiore di Studi Avanzati di Trieste (SISSA).

Another opportunity is offered by the European Master’s Program in Language and Communication Technologies (EM LCT), a joint international study course recognized by the European Commission under the Erasmus Mundus program.

We also offer students the opportunity to attend courses abroad as part of international exchange programs and numerous collaborations with international universities.
Contacts
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