Master in Cognitive Science

● Studies Overview
The Master’s Course in Cognitive Science offers students an individually tailored programme that covers the broad range of disciplines at the intersection of the biological sciences and the humanities. This Master’s programme consists of modules in ethology, evolutionary biology, philosophy of mind, linguistics, cognitive and developmental psychology. Specific areas of study are belief acquisition and social representation in human development, verbal and nonverbal communication, discourse used to understand and manage the mind, the dissemination of ideas and rumors, the construction of social interactions, the mechanisms that underlie cooperative behavior, and communication and cognition of nonhuman primates and animals in general. Under the guidance of a tutor, students will undertake a research project in a specialised field. Students will also take part in Cognitive Science Seminars, during which they will be exposed to state-of-the-art research from internationally renowned scholars. Through this programme students will develop the conceptual and methodological skills needed to enter into the international arena of cognitive science research.

● Objective
This Master’s Course in Cognitive Science will develop students’ research skills and conceptual tools for the range of disciplines covered. Students will acquire investigative, methodological, and analytical skills necessary for interdisciplinary research. The programme emphasises leadership, critical thinking, organisational skills, and scientific independence with the aim of equipping students for a variety of careers.

● Structure of the programme
The first year of the programme consists of the core module in which, with the help of the tutor, the student selects the interdisciplinary foundation modules. These modules cover neuroscience, philosophy of mind, evolutionary theory, psychology, and linguistics, as well as research methods and scientific writing. Modules are offered at the University of Neuchâtel and, if the student wishes, in partner institutions.

The second year consists of an internship done in one of the partner laboratories, which will result in a small research project. This is followed by a larger research project and thesis in the student’s field of specialisations. These two research projects will allow students to hone their research skills and critical abilities in order to produce a final thesis as exemplar of their scientific independence.
Main Orientations

Psychology of Communication
Communication is a fundamental human activity. The Psychology of Communication group studies communication in the context of everyday conversations. Conversations are coordinated in a moment-by-moment fashion by the participants themselves who construct and maintain a shared representation of the conversation. Our research investigates these coordination processes by analysing signals used, whether linguistic or non-verbal (gestures, gaze), using experimental methods and field studies. Our research also investigates factors affecting transmission of various beliefs (rumors, urban legends, social representations) and processes of content transformation.

Eco-ethology
Cooperation within and between species (mutualism) is the central focus of the Eco-ethology research group. The group primarily focuses on marine species, including cleaning mutualisms and collaborative hunting in schools of fish, but also studies cooperation among vervet monkey groups. Our research aims to structure cooperation on game theory models and to refine them in collaboration with theoreticians. Particular attention is paid to the links between game theory, animal cognition, and behavioural endocrinology. Decision making in the context of social strategies will be an important topic for the future study.

Professional Perspectives
- Research in the private sector
- Research in public institutions
- Academia as doctoral students in research groups of international repute

For further information
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Comparative Cognition
The main objective of the Comparative Cognition group is to explore and understand the biological origins of different mechanisms involved in human communication, cognition and culture. Research focuses primarily on non-human primates in their natural habitats in an effort to explain the evolutionary origins of what it means to be human.

Cognitive and Developmental Psychology
In the Cognitive Science Centre, the Cognitive and Developmental Psychology group concentrates its activity on the cognitive, affective and social processes that underlie the human capability to form, entertain and propagate beliefs and common interests. Research focuses notably on the different factors that influence trust in the testimony of others, on the metacognitive mechanisms that regulate confidence in one’s own mental representations, and on the social ‘arrangements’ that favor individuals’ adherence to social norms, beliefs and values. This group combines therefore different disciplines and methods to highlight the cognitive and social development of children and the diffusion of cultural representations.

Linguistics and Pragmatics
The Linguistics and Pragmatics group is interested in how the mind draws meaning from the linguistic stimuli. The group is composed of linguists who specialise in semantics, pragmatics, and discourse analysis. The group’s research ranges from micro-analysis in linguistics (tenses, modality, evidentiality) to macro issues in discourse analysis through problems like irony and reported speech. In recent years, research has focused on the cognitive foundations of persuasion and manipulation language.