WELCOME TO THE

COGNITIVE SCIENCE MASTERS

Department of Cognitive Science
Admissions to the Cognitive Science Masters Program
BME Department of Cognitive Science

Students who have completed a Bachelors degree in any of the following areas can apply with no special conditions:

Psychology  
Computer engineer  
Computer Program Designer  
Biology  
Liberal Arts BA - with a specialization in Philosophy

Students who have completed a Bachelors degree in any of the following areas can apply with special conditions. They have to have 10-12 credits recognizable based on their earlier studies in at least 3 of the following areas: mathematics, statistics, information technology, epistemology, logic, linguistics or physiology:

Liberal Arts with a specialization in Communication and Media Sciences  
Communication and Media Sciences  
Computer Economist  
Applied Economics  
Economic Analysis  
Hungarian Language and Literature with a specialization in language technology or theoretical linguistics  
Education  
Bioengineering  
Chemical engineer  
Architect  
Civil Engineer  
Mechanical Engineer  
Mechatronical Engineer  
Electrical Engineer  
Management and Business Administration  
Engineering Manager  
Mathematics
Admissions will be based on a written exam and an oral interview. The interview and the written test assess the student's capability for carrying out independent research and a flair for studying cognition. The written exam will cover readings available on the website. Applicants can get access with a password that they get by registering through the website. Applicants from abroad will take the written exam via the internet. The oral interviews will be through a web-camera. The interview is both technical and motivational.

Admission is based on the student's performance in the written test, interview and the bachelor degree.

Bachelor degree: max. 45 points
Entrance Test: max 45 points

(Written test: max. 25 points, Oral interview: max 20 points.)

Extra points: max 10 points

Extra points can be earned by the following:

- a degree in higher education (other than the degree necessary for admission): College/BSc/BA degree: 3 points; University/MSc/Ma degree: 4 points; PhD degree: 6 points; degree obtained in continuing vocational training: 2 points

- practical traineeship: max. 4 points

- research and publication activity (presentation at a conference, paper, project work, etc.): max 6 points

- Certificate of Proficiency in a Foreign Language (other than the one requires for the issuing of the degree): Intermediate: C: 1 point; Advanced A or B: 2 points; Advanced C: 3 points

- Sports results: max. 3 points
Duration of the written test: 90 minutes

The Test will consists of essay questions and short answer type questions in the areas of perception, memory, language, learning, categorization, consciousness, problem solving, representation, theory of mind and cognitive development.

Sample Questions

Essay Questions:
- What is the relation between perceptual learning theories and the modularity claim?
- The differences between dorsal and ventral stream processing.
- The role of frequency in language.

Multiple choice:

Rule base organization in language is related to
a. parietal lobe in the brain
b. Broca's area
c. Wernicke's area
d. the hippocampus

Retrograde amnesia is:

a. forgetting your intentions
b. inability to learn new information
c. emotional block
d. problems to recell earlier events
Important Dates

Date of Written Test: June 10, 2010
Oral Interview: June 11, 2010
Classes start in September 2010.

Register for the readings obligatory for preparation!

All available informations for registration is here:

http://www.felvi.hu/felveteli/szakok_kepzesek/szakkereso/!Szakkereso/talalatok.php?int_id=7&szer_id=316&nev=Kognit%C3%ADv&Keres=Keres
Master’s program in Cognitive Science at the Budapest University of Technology and Economics

The Department of Cognitive Science at the Budapest University of Technology and Economics launches its master’s program in Cognitive Science in September, 2010. The language of the program is English; upon completion students obtain a Master’s diploma in Cognitive Science.

Take the BME advantage

The Budapest University of Technology and Economics (BUTE or BME – acronym of the Hungarian name Budapesti Műszaki Egyetem) offers you a fully integrated Cognitive Science program. At BME, you will build a solid foundation of knowledge of the various disciplines that are concerned with how minds of different kinds work. You will also be able to specialize in an area of your choice. Our department has forged strong links to resources in Budapest, and universities in neighboring countries. You will benefit from access to our on-site laboratories as well as other facilities such as different research groups of the Hungarian Academy of Sciences including the Institute of Psychology, and cooperating departments from two other universities (Loránd Eötvös University and Semmelweis University).

An international gang of cognitive scientists

Our department is part of the Middle European International Master of Cognitive Science, (MEI CogSci), a joint organization for research and education centers in Cognitive Science in Central-Eastern Europe. MEI CogSci includes the Universities of Vienna, Bratislava, Zagreb and Ljubljana, and two institutions in Budapest (Budapest University of Technology and Economics, and Loránd Eötvös University). That is, by enrolling in our university, you become a member of an international community of cognitive scientists, and you will also have the chance to spend some time at another participating university.
Our program and environment

At BME’s Cognitive Science Department you will be able to pick and choose from a number of study areas to find the one of genuine involvement for you. In our work, we take seriously the cooperation between different areas and approaches that defines Cognitive Science. You will be able to learn about the neuronal processes underlying perception and language, computational modelling of cognitive abilities, the role of evolution in the development of problem solving, or different approaches to the nature of consciousness.

Our interdisciplinary strengths include:

- cognitive neuroscience
- psycholinguistics
- natural language processing
- visual and auditory perception
- cognitive ethology
- philosophy of mind
- philosophy of science from a cognitive perspective

Our department has two on-site laboratories: an EEG lab, and a vision lab. In the EEG lab, research focuses on recording, and to some extent influencing, electric activity of the brain during solving different tasks like perceptual recognition, understanding language, or recalling certain memories. To put this in now-esoteric terms that you will learn while with us, we do event-related potential (ERP), eye-movement-tracking, and transcranial direct current stimulation (tDCS) studies. In the visual lab we study visual learning and development (comparing, for instance, visual abilities in young children and adults).
Students will also have opportunities to study in cooperating institutions – including, for instance, fMRI courses at Semmelweis University, research on auditory perception in the Institute of Psychology of the Hungarian Academy of Sciences (HAS), and cognitive ethology in the Comparative Ethology Research group of the HAS. A key element of our programme is intensive research involvement, which may lead to publications depending on student activity and diligence. Our aim is that you graduate with valuable research experience and develop expertise in an area of special interest to you.

Our university is an interesting intellectual environment for students in Cognitive Science. Full-time degree programs in English are available in engineering (Architecture, Civil engineering, chemical technology and Biotechnology, Electrical Engineering and Informatics, Mechanical Engineering, Transportation Engineering), Economic and Social Sciences, and Natural Sciences. You will be able to enroll for courses in these programs, and work in some area of applied cognitive science.

The curriculum – your professional experience

The first year’s curriculum consists of core courses covering the main disciplines of Cognitive Science and research methodology. The core courses include Introduction to Cognitive Science, Cognitive Psychology, Statistics and Methodology, Neurobiology, Linguistics, Computer Programming, Evolutionary Psychology, Philosophy of Mind, and a free elective course. After the core courses, three areas of specialization are available in the third semester:

- Psycholinguistics and Language Processing
- Cognitive Neuroscience
- Cognitive Models of Science

Specializations involve coursework and hands-on research.
The broader environment

If you come to our department, you come to Budapest. Living in Budapest is an adventure in several respects. You will encounter a brisk and breezy cultural life in an environment which may not be quite as neatly organized as many western cities, still its shortcomings are mild enough to make life more fun instead of outright frustration. Come and attend rock concerts on the boat A38 (reincarnation of a former Ukrainian freighter now permanently moored on the Buda side of the Danube about 200 meters from campus) – or check out some of the many museums, if you prefer quiet to noisy places. And there is a lot more here to discover, believe us!