

## MA IN COGNITIVE SCIENCE (TAUGHT IN ENGLISH)

### Short presentation of the program:

The program trains specialists in the interdisciplinary field of Cognitive Science. Courses such as: Cognitive Psychology, Cognitive Modeling, Constructive Memory, Psychophysiological Studies and Cognitive Processes, Information Processing in the Human Brain, Psychophysics, Psycholinguistics are included in the program.

All courses in the program are taught in English. Courses COGM101 "Foundations of Cognitive Science", COGM001 "Experimental Methods" and Summer Schools in Cognitive Science are obligatory.

### Major and Professional Qualification:

**Major:** Cognitive Science

**Professional Qualification:** Master in Cognitive Science

**Practical Courses** are held in the following experimental laboratories:

- Experimental Psychology Laboratory
- Neuroscience Laboratory
- HiLab – Usability Research Laboratory
- Cognitive Development Laboratory
- Cognitive Robotics Laboratory
- Bulgarian Academy of Sciences Laboratories

### International Mobility Programs

The Department of Cognitive Science and psychology collaborates with universities in Italy, Germany, the Netherlands, Greece, France, Poland, Hungary, Austria.

- Lifelong Learning Program
- Erasmus
- CEEPUS

### Graduating students will have:

- basic knowledge in the fields of cognitive psychology, philosophy of science, cognitive modelling, linguistics, neuropsychology, and research methodology
- specialized interdisciplinary training in one of the following areas: perception, memory, learning and education, thinking, language, and cognitive development
- skills for critical analysis of scientific literature and for practical application of the methods and theories of cognitive science
- experience in and abilities to conduct experimental research in cognitive science independently

## **Graduation:**

The program is completed by the defense of a Master's thesis which is written in English and in compliance with international standards. The defense is carried out before a Thesis Committee during the Summer Schools. The Thesis Committee includes at least one external examiner (a member of the International Advisory Board or a professor recommended by the Board).

## **Professional qualification and career opportunities:**

Graduates can work as experts in cognitive science in research institutions; advertising agencies; IT companies; educational organizations,.

## **Department:**

Cognitive Science and Psychology

## **PPROGRAM**

### **First Semester Courses**

#### **COGM001 Experimental Methods**

Prof. Stefan Mateeff, D.Sc.  
30 academic hours, 3 credits

#### **COGM002 Cognitive Psychology**

Prof. Stefan Mateeff, D.Sc., Prof. Encho Gerganov, Ph.D., Assist. Prof. Penka Hristova, Ph.D.  
30 academic hours, 3 credits

#### **COGM004 Cognitive Modeling**

Assoc. Prof. Maurice Grinberg, Ph.D.  
30 academic hours, 3 credits

#### **COGM007 Information Processing in the Human Brain**

Prof. Ivaylo Turnev, D.Sc., Assist. Armine Janyan, Ph.D. 30  
academic hours, 3 credits

#### **COGM008 Statistics**

Prof. Krasimir Kalinov, Ph.D., Assist. Prof. Georgi Petkov Ph.D., Assist. Armine Janyan, Ph.D.  
30 academic hours, 3 credits

#### **COGM101 Foundations of Cognitive Science**

Assoc. Prof. Lilia Gurova, Ph.D.  
30 academic hours, 3 credits

#### **COGM313 Concepts and Categorization**

Assoc. Prof. Lilia Gurova, Ph.D.  
30 academic hours, 3 credits

#### **COGM009 Practicum in Experimental Design**

Assist. Prof. Penka Hristova, Ph.D., Assist. Prof. Evgenia Hristova, Ph.D.  
30 academic hours, 3 credits

**COGM011 Practicum in Statistics**

Assist. Prof. Georgi Petkov Ph.D., Assist. Armine Janyan, Ph.D.

30 academic hours, 3 credits

**COGM013 Practicum in Simulation Modeling**

Assoc. Prof. Maurice Grinberg, Ph.D.

30 academic hours, 3 credits

**COGM014 Individually Directed Studies: Cognitive Psychology**

Prof. Encho Gerganov, Ph.D., Assist. Prof. Penka Hristova, Ph.D.

30 academic hours, 3 credits

**COGM902 Individually Directed Studies: Philosophy of Cognitive Science**

Assoc. Prof. Lilia Gurova, Ph.D.

30 academic hours, 3 credits

**COGM905 Individually Directed Studies: Psychophysics**

Prof. Stefan Mateeff, D.Sc.

30 academic hours, 3 credits

**COGM909 Individually Directed Studies: Concepts and Categorization**

Assoc. Prof. Lilia Gurova, Ph.D.

30 academic hours, 3 credits

### Second Semester Courses

**COGM109 Analogy**

Assist. Prof. Georgi Petkov Ph.D., Assist. Prof. Penka Hristova, Ph.D., Assist. Prof. Milena Mutafchieva, Ph.D.

30 academic hours, 3 credits

**COGM113 Psychophysiological Studies and Cognitive Processes**

Assist. Prof. Evgenia Hristova, Ph.D., Assist. Armine Janyan, Ph.D.

30 academic hours, 3 credits

**COGM207 Judgment and Decision Making**

Assoc. Prof. Maurice Grinberg, Ph.D., Assist. Prof. Evgenia Hristova, Ph.D., Assist. Prof. Penka Hristova, Ph.D.

**COGM213 Psycholinguistics**

Assoc. Prof. Elena Andonova, Ph.D., Assist. Prof. Armine Janyan,

Ph.D. 30 academic hours, 3 credits

**COGM306 High-Level Vision**

Prof. Stefan Mateeff, D.Sc.

30 academic hours, 3 credits

**COGM904 Attention, Perception, Action**

Prof. Stefan Mateeff, D.Sc.

30 academic hours, 3 credits

**COGM911 Spatial Cognition and Communication**

Assoc. Prof. Elena Andonova, Ph.D.

30 academic hours, 3 credits

**COGM012 Practicum in Reaction Time Experiments (E-Prime software)**

Assist. Armine Janyan, Ph.D.

30 academic hours, 3 credits

**COGM120 Seminar: Memory and analogies**

Assist. Prof. Penka Hristova, Ph.D., Assist. Prof. Georgi Petkov Ph.D.

30 academic hours, 3 credits

**COGM130 Seminar: Psycholinguistics**

Assoc. Prof. Elena Andonova, Ph.D., Assist. Armine Janyan, Ph.D. 30

academic hours, 3 credits

**COGM145 Seminar: Summer School in Cognitive Science Part I**

Assoc. Prof. Elena Andonova, Ph.D.

30 academic hours, 3 credits

**COGM215 Individually Directed Studies: Visual Perception**

Prof. Stefan Mateeff, D.Sc.

30 academic hours, 3 credits

**COGM216 Practicum in Psychophysiological Studies**

Assist. Prof. Evgenia Hristova, Ph.D., Assist. Armine Janyan, Ph.D. 30

academic hours, 3 credits

**COGM231 Seminar: Contemporary Approaches to Study Human Cognition Part I**

Assoc. Prof. Maurice Grinberg, Ph.D., Assoc. Prof. Elena Andonova, Ph.D., Assist. Armine Janyan, Ph.D.

30 academic hours, 3 credits

**Third Semester Courses**

**COGM015 Social Dilemmas and Game Theory**

Assoc. Prof. Maurice Grinberg, Ph.D., Assist. Prof. Evgenia Hristova, Ph.D.

30 academic hours, 3 credits

**COGM016 Language, Thought, Culture**

Assoc. Prof. Elena Andonova, Ph.D., Assist. Armine Janyan, Ph.D. 30

academic hours, 3 credits

**COGM111 Constructive Memory**

Assist. Prof. Georgi Petkov Ph.D., Assist. Prof. Penka Hristova, Ph.D. 30

academic hours, 3 credits

**COGM204 Cognitive Development**

Assist. Prof. Maria Trifonova, Ph.D. 30

academic hours, 3 credits

**COGM305 Social Cognition**

Assoc. Prof. Elena Paspalanova, Ph.D., Assist. Prof. Penka Hristova, Ph.D. 30

academic hours, 3 credits

**COGM903 Grounding Cognition**

Prof. Encho Gerganov, Ph.D., Assist. Armine Janyan, Ph.D. 30

academic hours, 3 credits

**COGM906 Genes, Brain, Behavior**

Prof. Ivaylo Turnev, D.Sc.

30 academic hours, 3 credits

**COGM017 Individually Directed Studies: Language, Thought, Culture**

Assoc. Prof. Elena Andonova, Ph.D., Assist. Armine Janyan, Ph.D. 30

academic hours, 3 credits

**COGM018 Individually Directed Studies: Hemispheric Specialization of the Human Brain**

Prof. Ivaylo Turnev, D.Sc., Assist. Armine Janyan, Ph.D.

30 academic hours, 3 credits

**COGM225 Individually Directed Studies: Cognitive Models and Experiments in the Field of Game Theory**

Assoc. Prof. Maurice Grinberg, Ph.D., Assist. Prof. Evgenia Hristova, Ph.D.

30 academic hours, 3 credits

**COGM230 Seminar: Contemporary Approaches to Study Human Cognition – part I**

Prof. Ivaylo Turnev, D.Sc., Assoc. Prof. Maurice Grinberg, Ph.D., Assist. Prof. Evgenia Hristova, Ph.D. 30

academic hours, 3 credits

**COGM317 Seminar: Contemporary Approaches to Study Human Cognition – part II**

Assoc. Prof. Lilia Gurova, Ph.D., Assist. Prof. Penka Hristova, Ph.D., Assist. Prof. Georgi Petkov Ph.D. 30

academic hours, 3 credits

**COGM340 Seminar: Summer School in Cognitive Science Part II**

Assoc. Prof. Elena Andonova, Ph.D. 30

academic hours, 3 credits

**COGM908 Individually Directed Studies: Perception and High-Level Vision**

Prof. Stefan Mateeff, D.Sc.

30 academic hours, 3 credits

**Fourth Semester Courses****COGM100 Internship**

Assoc. Prof. Maurice Grinberg, Ph.D., Assist. Prof. Evgenia Hristova, Ph.D., Assist. Prof. Penka Hristova, Ph.D., Assist. Armine Janyan, Ph.D.

30 academic hours, 3 credits