MEi:CogSci
Middle European Interdisciplinary Master's Programme in Cognitive Science

Martyna Meyer
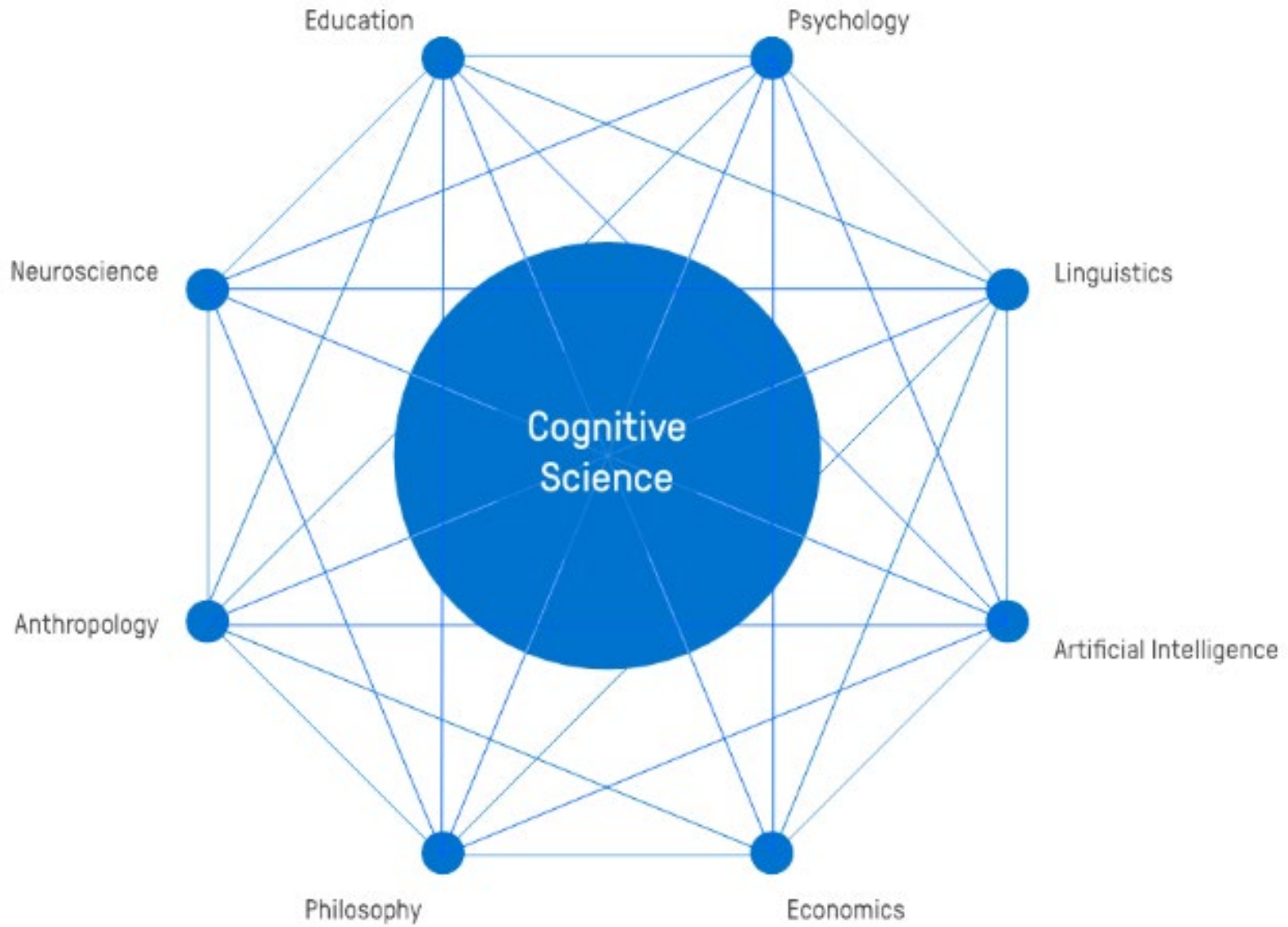
Markus Peschl

Elisabeth Zimmermann

What is Cognitive Science?

- Cognitive Science is an emerging scientific field studying cognitive phenomena such as perception, reasoning, thinking, action/behaviour, etc.

- It integrates research from different disciplines in the natural sciences, humanities, and technology in an interdisciplinary manner.
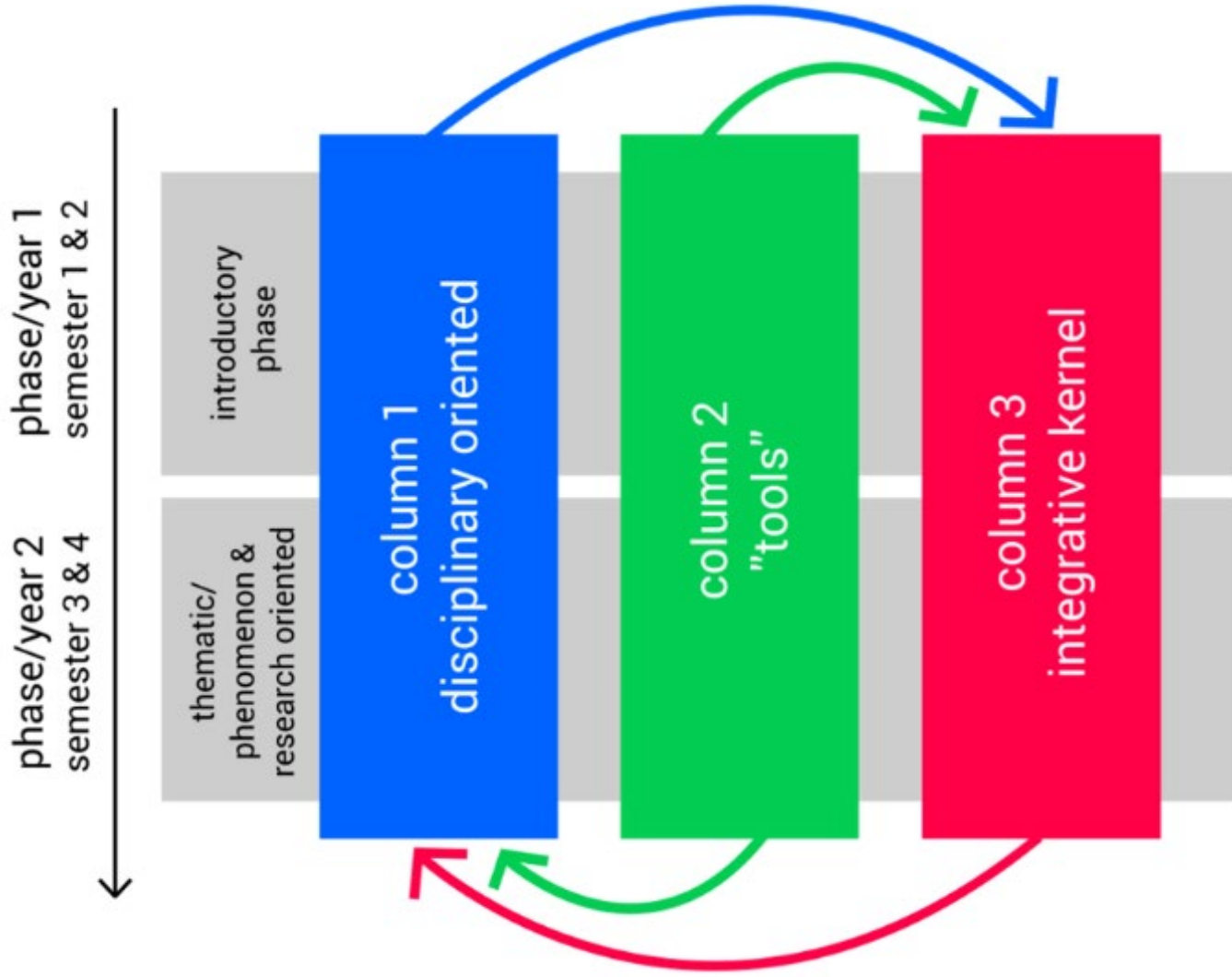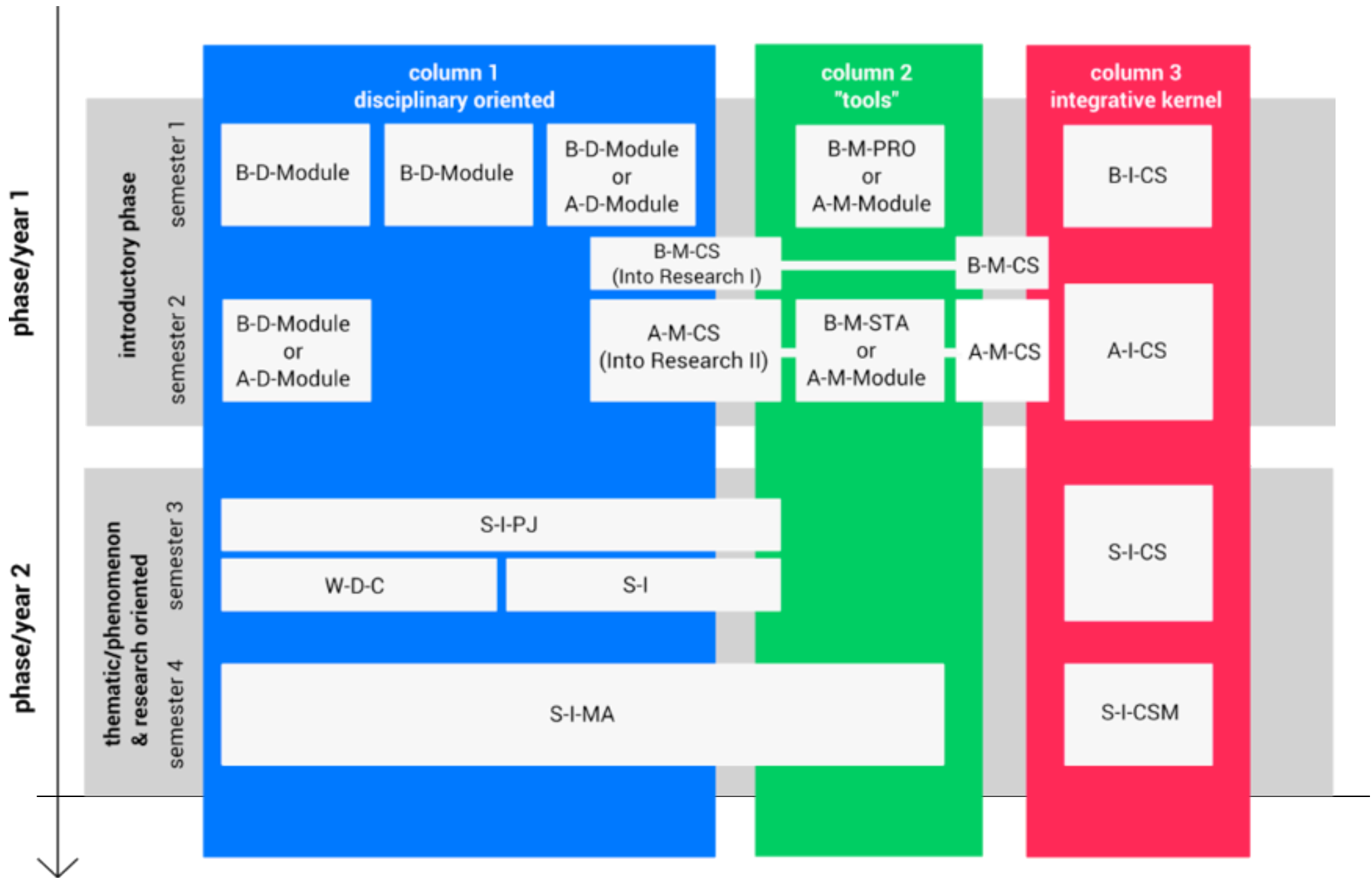
MEi:CogSci

- **Joint Degree** (running since 2006)
  Partner Institutions:
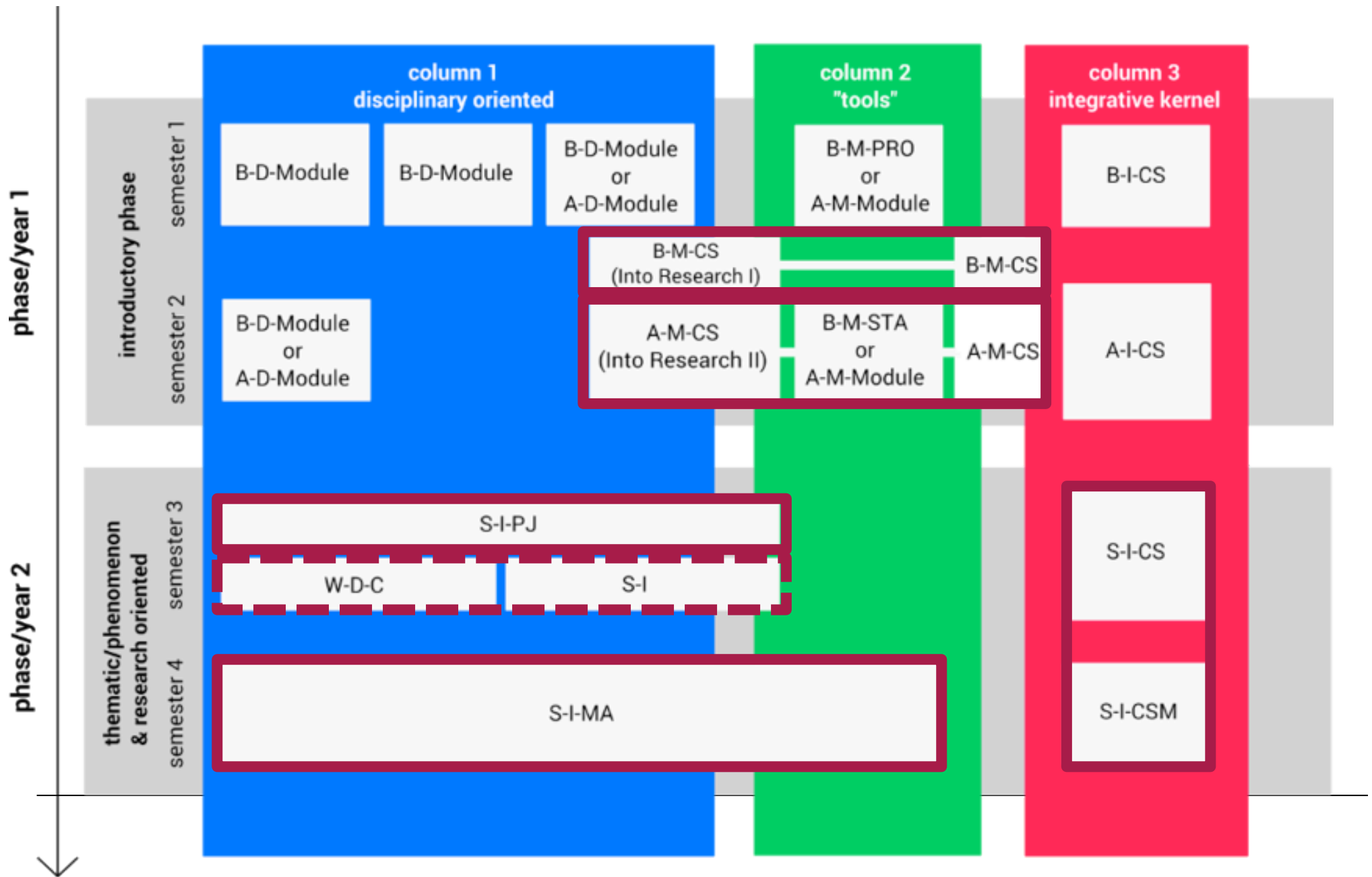 - University of Vienna (local partner: Medical University of Vienna)
  - Eötvös Loránd University in Budapest
  - Comenius University in Bratislava
  - University of Ljubljana

- **4 Semesters** (120 ECTS)
- **3rd** (and possibly 4th) **semester**: **Mobility** (30 ECTS compulsory!)

Research-based Curriculum

MEi: Cog Sci — Middle European interdisciplinary master's programme in Cognitive Science, Vienna

Basic Disciplinary Modules – Choices

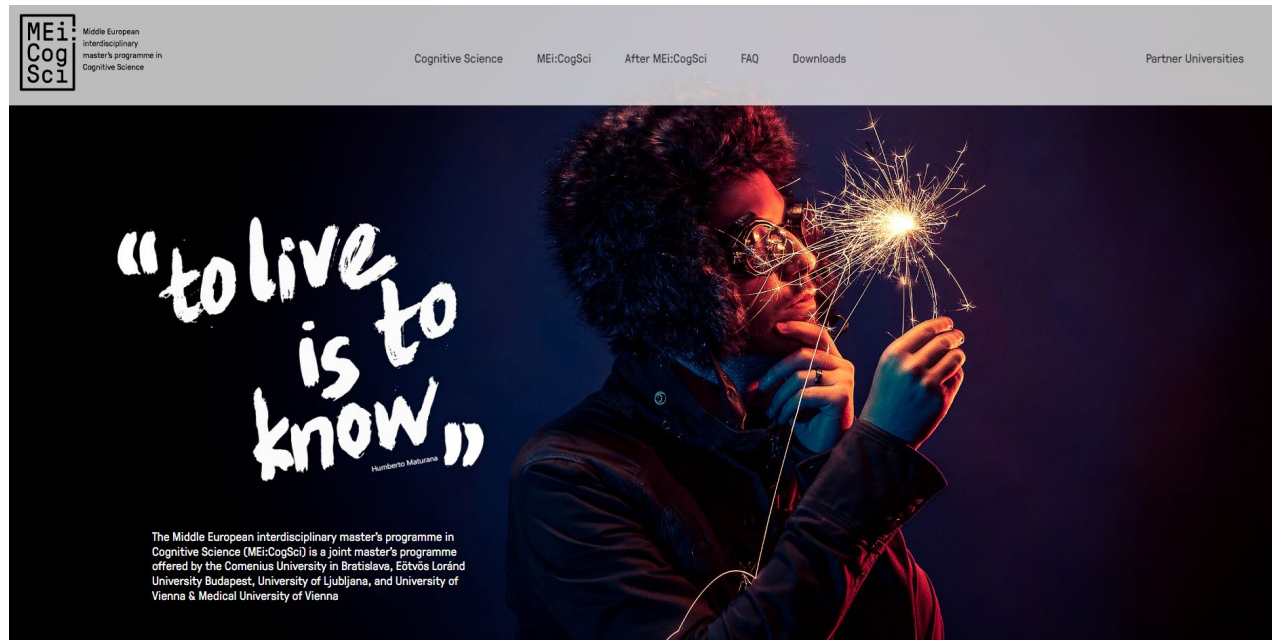| Student has to choose: Degree in:	Basic Disc.: - Philosophy - Linguistics	Basic Disc.: - Biology - Psychology - Neuroscience	Basic Disc.: - AI
Arts - **Philosophy** - **Linguistics**		X	X
Science - **Biology** - **Psychology** - **Neuroscience/ Medicine** - **(Physics)**	X		X
Social Science - **Cultural/Social Anthropology**		X	X
Formal/theoretical science - **Computer Science** - **(Mathematics)** - **(Computational Logic)** - **Etc.**	X	X	
Interdisciplinary - **Cognitive Science**			

Didactical Concepts

- Learning Contracts

- Lab reports & Lab journals

- Student Conference

- Mentoring

- Peer-teaching

- Focus on interdisciplinary cooperation
  - Developing your own voice

Information Online

[The International MEi:CogSci website](#)

[The University of Vienna MEi:CogSci website](#)
- Possible to apply at different partner universities in parallel

Admission at University of Vienna

- Bachelor or Master/Diploma studies in Cognitive Science or one of its core disciplines: Anthropology, Biology, Computer Science, Linguistics, Medicine/Neuroscience, Philosophy or Psychology
  ◦ Or other backgrounds (up to 30 extra ECTS points can be stipulated)

- Places will be distributed depending on the background discipline (up to 5 places from each: natural sciences, humanities, social sciences, formal sciences and cognitive science)

Application and Admission Procedure

1. Application Phase:

- Register via u:space

- For detailed information see the MEi:CogSci Admission page.

- Upload all required documents

   Deadline: April 17!

Middle European interdisciplinary master's programme in Cognitive Science (MEi:CogSci)

Your steps in the admission procedure depend on whether you have completed your previous degree programme at the University of Vienna or another post-secondary educational institution.

In the study profile of the master programme Middle European master's programme in Cognitive Science (MEi:CogSci) you can find out which previous degree programmes are eligible.

🔒 Degree programme with selection procedure

A selection procedure is conducted for admission to this master programme.

- You can only submit your application for admission to the degree programme once per year, within the application period.
- The admission letter is only valid for the winter semester you have applied for and the following summer semester.
- 30 study places are available per academic year. The allocation of available study places ensues during the selection procedure.

Application period academic year 2023/24: from 1 March to 17 April 2023

Admission

- Bachelor/diploma programmes
- **Master programmes**
- Teacher education programmes
- Change of degree programme
- Additional degree programmes
- Discontinuation of degree programmes
- Resumption of studies
- Deadlines for studies without entrance exam procedure
- German language proficiency
- English language proficiency
- Leave of absence
- Co-registration
- Non-degree programme
- Studying without secondary-school leaving certificate
- Information for asylum seekers
- Additional exams

English Requirements

Applicants who are not native speakers of English must demonstrate English proficiency (on B2 level or higher).

The details are available on the Proof of English Language Proficiency website of the University of Vienna.

Recognised proofs of English language proficiency at level B2

A proof of English language proficiency at level B2 is required for admission to the bachelor programme in International Legal Studies as well as to multiple master programmes taught in English and multilingual master programmes.

■ Required English proficiency for admission to master programmes taught in foreign languages

Proofs B2

■ Secondary-school leaving certificate with successful graduation exam in the subject English. If the level of English proficiency is not clearly evident in the certificate, a confirmation by the school administration may be claimed.

■ IB diploma according to the regulations of the "International Baccalaureate Organization" with the subject English.

■ Certificate of the supplementary examination in the subject English from the University Preparation Programme of an Austrian University.

■ "Studienberechtigungszeugnis" from an Austrian university with a successfully completed examination in the subject English.

■ Degree diploma and transcript of records/diploma supplement from a completed bachelor or master programme taught entirely in English at a recognised post-secondary educational institution.

■ Transcript of records/diploma supplement from a recognised post-secondary educational institution with proof of successfully completed English language specific courses with at least 6 ECTS or 150 hours. Thereby, the language of instruction must be English and the language level must be B2. If the extent or level of the courses is not explicitly stated in the transcripts, a confirmation of the

Certificates B2

■ TOEFL: 87 points or higher

■ IELTS Academic: Overall Band Score: 6.5 points

■ Cambridge English First Certificate (FCE): result level B2

■ Cambridge Certificate in Advanced English (CAE): result level B2

■ Language Competency Examination by a University Language Center: level B2

These certificates may not be older than three years at the time of application.

Any of the above mentioned certificates at a higher level than B2, can also be accepted as proof of English language proficiency at level B2 (see FAQ).

Questions Regarding the Formal Admission Criteria

If you have questions regarding this stage of the admission process, contact the Admission Office using the [Contact Form](#).

Contact form

Required fields are marked with a red square

Topic	--Please choose--
E-Mail	
Name	
Student ID number	
User ID	
Subject	
Message	
Attachment	SELECT FILE No file selected

SEND ▶

Application and Admission Procedure

2. Evaluation procedure and evaluation criteria

- Check of formal requirements (Admission Office) and assessment of your qualification (Admission Committee)
- Candidates are chosen on the basis of their letter of motivation (your motivation to study cognitive science and your research question) and the discipline of their bachelor degree.
    - →Use the **Letter of Motivation-form**!
- As the didactical design of the curriculum requires an equal distribution of representatives of the core disciplines of cognitive science, rankings will be made for the different areas (natural science, humanities, formal science, social science, cognitive science).

The admission committee consists of:

- Univ.-Prof. Dr. Ulrich Ansorge
- Univ.-Prof. Mag. Dr. Thomas Bugnyar
- Univ.-Prof. Dipl.-Ing. Dr. Franz-Markus Peschl
- Mag. Dr. Sabine Tebbich, Privatdoz

Nomination: mid June

After Admission

3. Registration at the University of Vienna
   & Co-registration at MUW

4. Start: **Thu, Sep 28 or Fri, Sep 29, 2023** afternoon & Heuriger in the evening
   ◦ Obligatory participation in the first meeting
   ◦ Getting to know each other, mentoring on the choice of modules

5. Introduction to Courses: **Mon, Oct 2, 2023**

Specializations

MEi:CogSci Project Database

MEi:CogSci Project Database ☆ 🖿 ☁
File Edit View Insert Format Data Tools Extensions Help

	Partner University	Project title	Supervisor	Faculty/ Affiliation	Project Description	Required Qualifications	Places (max.)	Level	Additional Information
2	Comenius University in Bratislava	Grounding abstractness	Igor Farkas, prof.	Dept. of Applied Informatics, Faculty of Math, Physics and Informatics, Comenius Uni	Abstract concepts lie at the core of human cognition, providing it with an immense potential for thinking. Yet, understanding abstractness remains an open challenge in cognitive science, despite an outburst of recent papers published on the topic. The goal of the project is to propose a conceptual framework for concrete and abstract concepts that could be implemented in a neural network and simulated in a smaller domain.	An ideal candidate would have solid knowledge in linguistics and experience with machine learning (neural networks) and/or programming. Purely theoretical project is also possible.	1	S-I-PJ	
3	Comenius University in Bratislava	Connectionist modeling in cognitive robotics	Igor Farkas, prof.	Dept. of Applied Informatics, Faculty of Math, Physics and Informatics, Comenius Uni	The goal will be to implement and test a neural network model of a chosen agent's component in a simulated or physical environment (NICO robot). The robot is supposed to learn a concrete task. Various foci are possible: intuitive physics, i.e. understanding causality in the physical world, intuitive psychology (theory of mind), i.e. understanding the other's goals, spatial cognition, etc. Concrete focus of the project will be negotiated.	At least basic programming skills (e.g. Python). Experience with artificial neural networks is an advantage.	1	S-I-PJ	
4	Comenius University in Bratislava	Towards humanizing human-robot interaction	Igor Farkas, prof.	Dept. of Applied Informatics, Faculty of Math, Physics and Informatics, Comenius Uni	The project can be for two students. Successful HRI in the future will be facilitated if certain expectations about interacting robots are met by the humans. The purpose of the theoretical part of the project is to investigate pros and cons of humanizing robots and analyze (some of) them on the level of design features (be referring to an existing literature). The computational part will be based on implementing and testing a selected aspect of humanized HRI.	The student doing the implementation part should have a programming experience (Python preferred) and experience with artificial neural networks is an advantage.	2	S-I-PJ	
5	Comenius University in Bratislava	Computational psychiatry	Martin Takac, assoc. prof.	Dept. of Applied Informatics, Faculty of Math, Physics and Informatics, CUB	Project for two students: One student gathers the relevant neuroscientific literature about altered states of consciousness and proposes a formal theory/model of the functional changes in an altered mind (e.g. based on entropic brain theory of Carhart-Harris, 2014). The other student co-designs and implements the computational model, runs and analyses its simulations.	The student doing the implementation part should have a previous experience in programming (in any language).	2	S-I-PJ	
6	Comenius University in Bratislava	Social multi-agent simulation	Martin Takac, assoc. prof.	Dept. of Applied Informatics, Faculty of Math, Physics and Informatics, CUB	The student will create a computational model of a social phenomenon of their choice (e.g. belief spreading, covid spreading in a population, etc.). The work includes reviewing the relevant theories in literature, designing and implementing a computational model (in Netlogo), running the simulations and interpreting the results.	Previous programming experience (in any language) on a moderate level required, so that the student is able to formalize the ideas into a code (Netlogo is easy to learn).	1	S-I-PJ	
7	Comenius University in Bratislava	Mindfulness meditation, electroencephalography and brain stimulation	Barbora Cimrová, PhD.	Barbora Cimrová, PhD. Dept of Applied Informatics, Faculty of Math, Physics and Informatics, Comenius Uni	Mindfulness meditation (MM) is a well-known practice with a positive impact on well-being, cognitive functions (attention, working memory, executive functions), immunity, and other aspects of practitioners' life. The effects of MM include structural and functional changes of the brain. The goal of the project is to make a theoretical overview of the state-of-the-art research on mindfulness meditation and potential combination of this method with brain electrical stimulation; to design and eventually perform an experiment regarding this topic.	Experience with an EEG is an advantage.	1	S-I-PJ	
	Comenius University in Bratislava	Human-robot interaction in virtual reality	Kristína Malinovská, PhD.	Dept of Applied Informatics, Faculty of Math,	HRI becomes one of the most popular interdisciplinary topics highly related to cognitive science. The domain of cognitive robotics studies and offers natural ways of building humanlike robots in the way they will understand and alignwith their	This project is a good opportunity for joint work. One student should have a background in psychology, or linguistics, and the other one	1	S-I-PJ	

Next Steps

1. Application
   - Submitting all relevant documents
   - Deadline: April 17th
   - Nomination: mid June

2. Registration at the University of Vienna

3. First meeting (end of September)
   - compulsory (!)

Contact

[The International MEi:CogSci website](#)

[The University of Vienna MEi:CogSci website](#)

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University of Vienna MEi:CogSci Team:

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- Martyna Meyer
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