



Opening Lecture MSc Cognitive Systems

Prof. Dr. Birte Glimm | Dean of Studies

Welcome



Prof. Dr. Birte Glimm
Dean of Studies



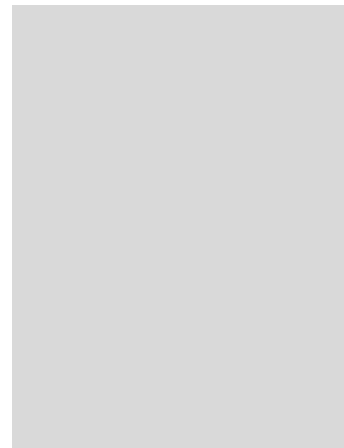
Dr. Jens Kohlmeyer
Study Coordinator



Dr. Markus Maucher
Programme Counsellor



Prof. Dr. Marc Ernst
Head of Exam Board



Dr. Sandra Mann
Programme Coordinator

Dean of Studies

- Responsible for proper and complete course offerings
- First semester introduction
- Contact person if no one else (e.g. programme counsellor and examination board) can help



**Dean of Studies
Prof. Birte Glimm**

<https://www.uni-ulm.de/in/ki/glimm/>



Exam Board

- Advice and decision on recognition of equivalent academic achievements
 - Extension of submission deadlines
 - Approval of semesters off for practical work
 - Compensation for disadvantages
-
- Contact: eb-cogsys@uni-ulm.de with documents according to <https://www.uni-ulm.de/eb-cogsys>



Prof. Dr. Marc Ernst
Head of Exam Board



Service Group Informatik (SGI)

- The SGI operates and maintains all computer facilities used for teaching in the computer science department
 - PC pools with software
 - Laptop workstations
 - SGI accounts with their own printing quota
 - Web services
 - Examination planning system
 - Student assistant exchange
 - Timesheet recording for assistants



Dr. Jens Kohlmeyer
Head of SGI

Ulm University



... after successful completion of a Cognitive Systems Master



Apple Inc.



Jina AI, Berlin

deepsafety.

<https://deepsafety.ai>



Mercedes-Benz AG



ulm university universität
uulm



Universität
Zürich^{UZH}



NYU | ARTS & SCIENCE

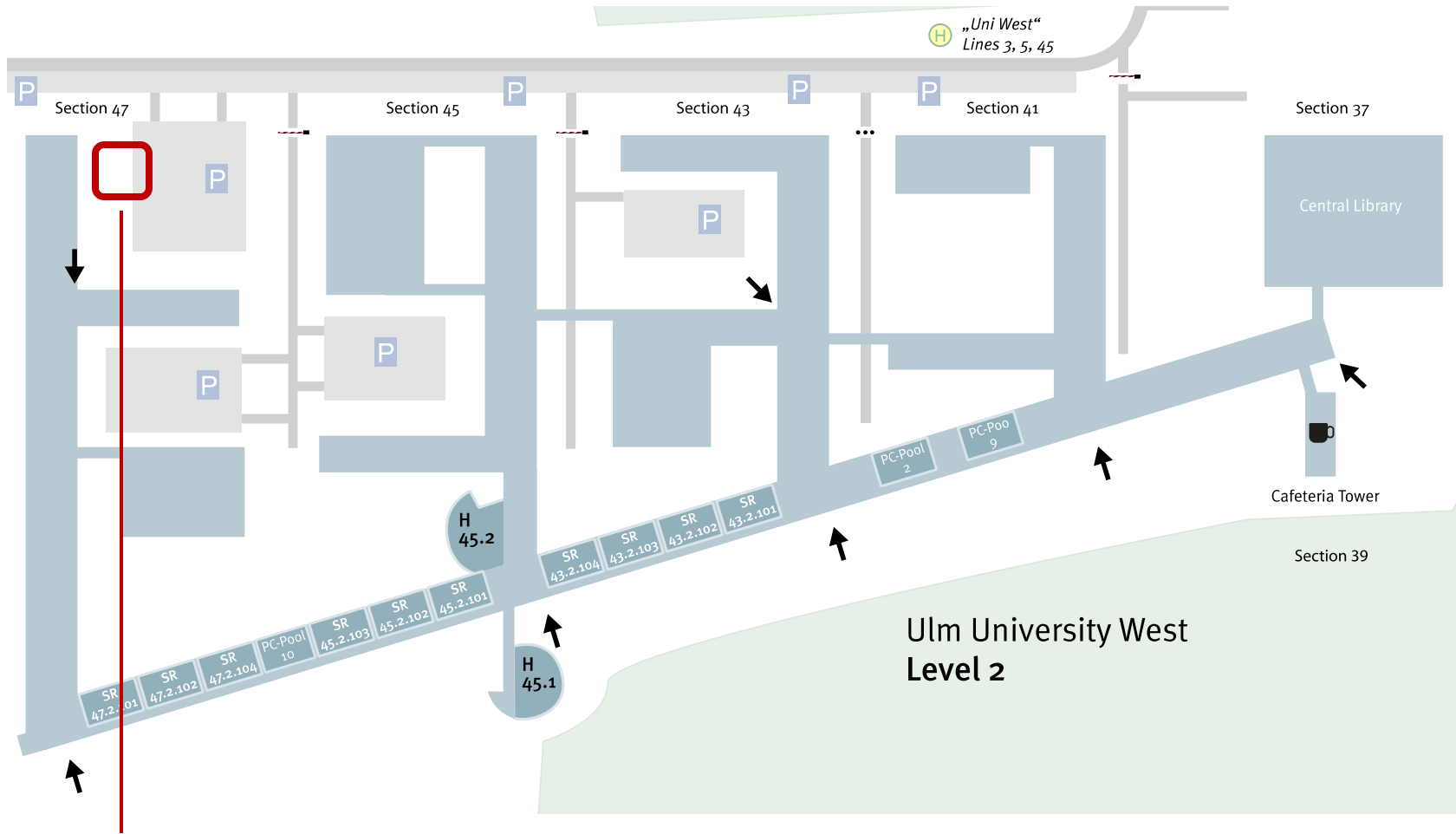


MSc Cognitive Systems

- Interdisciplinary programme from Computer Science and Psychology within one faculty – “under one roof” or on one hill ...

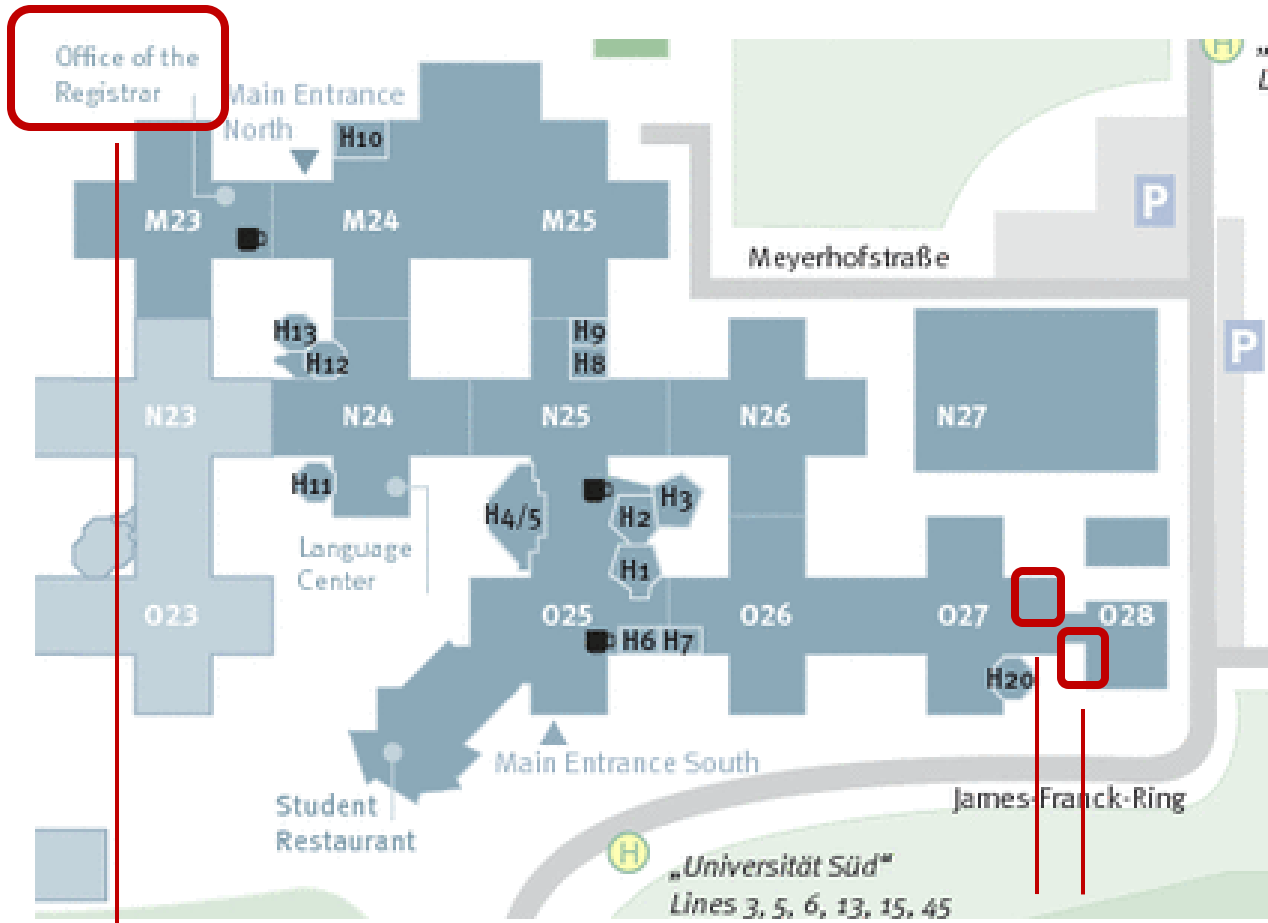


Main Campus Area – University West



Colloquium

Main Campus Area – University East



Studiensekretariat
(office of the registrar)

Welcome &
CogSys I



Cognitive Systems Website

<https://www.uni-ulm.de/cognitive-systems/>

The screenshot displays the homepage of the Cognitive Systems website. At the top, the text "Faculty of Engineering, Computer Science and Psychology" is visible. The university logo "universität uulm" is in the top right corner. A navigation menu includes "Faculty", "Research", "Studies", and "Institutes", with a search icon. A breadcrumb trail shows the path: "Faculty of Engineering, Computer Science and Psychology > Studies > Study Programs > Cognitive Systems (M.Sc.)".

The main content area features a large blue graphic of a human head with various icons representing cognitive functions: Perception (eye), Learning (head with gears), Interaction (hand pointing), and Planning & Reasoning (crossed arrows). Other icons include a microchip, a group of people, a robot arm, a network diagram, a bar chart, a smartphone, and a robot. A sidebar on the right contains social media and utility icons (share, DE, print). At the bottom, there are four menu items: "Program", "Course", "Application", and "Students", each with a vertical red bar and a dropdown arrow.

Generic Structure of the Programme

Cognitive Systems

```
graph TD; CS[Cognitive Systems] --- BS[Basic Subject]; CS --- IS[Interdisciplinary Subject]; CS --- SS[Special Subject]; CS --- AS[Applied Subject]; CS --- MT[MSc thesis];
```

**Basic
Subject**

**Interdisciplinary
Subject**

**Special
Subject**

**Applied
Subject**

MSc thesis

Study Plan Master Cognitive Systems (FSPO 2024)

			Distribution of modules ECTS to subj.-spec. semesters				
Compulsary/Compulsary Elective Modules	WSH	C/CE	1	2	3	4	ECTS
Basic Subject	12						24
Fundamentals of Human-Machine Interaction	2L+2E	C	6				6
Fundamental Approaches to Cognitive Science	2L+2E	C		6			6
Foundations and Concepts of Cognitive Systems Modeling	2L+2E	C	6				6
Either							
Basic Subject Computer Science	4						
Introduction to Computer Science (for non-computer scientists)	3L+1E	C	6				6
or							
Basic Subject Psychology	4						
Introduction to Psychological Methods and Statistics (for non-psychologists)	2L+2E	C	6				6
Interdisciplinary Subject	12						18
Recent Developments in Cognitive Systems Research	2S+1M	C	6				6
Cognitive Systems I	3L+1E	C	6				6
Cognitive Systems II	3L+1E	C		6			6
Special Subject							24
Modules from Special Subject		CE		10	14		24
Applied Subject							24
Modules from Applied Subject		CE		8	16		24
Master's Thesis							30
Master's Thesis		C				30	30
			27	33	30	30	120

C - compulsory (Pflicht)

CE - compulsory elective (Wahlpflicht)

WSH - weekly semester hours (Semesterwochenstunden, SWS)

L - lecture (Vorlesung)

E - exercise (Übung)

M - mentorium

S - colloquium

Short-Arm Y-Model

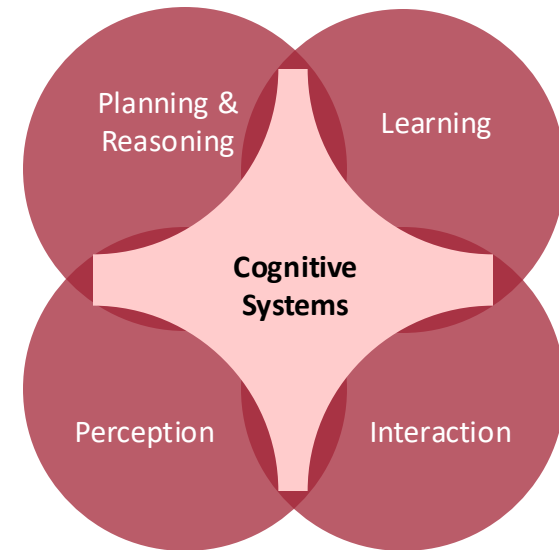
- One introduction module depends on the kind of bachelor's degree students have as entrance qualification
 - with BSc degree in Psychology take module
Introduction to Computer Science (for non-computer scientists)
 - with BSc degree in Computer Science take module
Introduction to Psychological Methods and Statistics (for non-psychologists)

- Note: you sign a “**contract**” which module you are assigned to
- Students with different background decide with Dr. Markus Maucher which selection fits best
 - Office Dr. Markus Maucher: 027/548

Either				
Basic Subject Computer Science		4		
<input type="checkbox"/>	Introduction to Computer Science (for non-computer scientists)	3L+1E	C	6
or				
Basic Subject Psychology		4		
<input type="checkbox"/>	Introduction to Psychological Methods and Statistics (for non-psychologists)	2L+2E	C	6

Basic and Interdisciplinary Subjects

- Modules within the **Basic Subject** introduce to the *foundations* of Cognitive Systems
 - What defines the field?
... as *interdisciplinary* topic
- Specific *functionalities*
 - Perception & Cognition
 - Learning & Memory
 - Planning & Reasoning
 - Interaction
- Modules **Cognitive Systems I & II** (2 semesters)
 - Introduction to topics, history, methods, modeling & technology
 - Cognitive Systems I: perception & cognition, learning & memory
 - Cognitive Systems II: planning & reasoning, interaction & communication (summer)



Colloquium Recent Developments in Cognitive Systems Research

- Colloquium with invited speakers (each semester)
 - every 2nd week (NEW)
- Students actively participate by
 - regularly attending talks (min. 12 talks, participation list) and
 - asking questions (written report of questions and protocol of responses from speaker together with the student's opinion)
min. 5 questions and answers to different speakers are to be submitted and evaluated (graded)
- Integral part of the colloquium is a mentorium

Mentorium

- Supported (and conducted in winter) by mentors
- Introduces incoming students to campus facilities (planning a semester, registering for exams, etc.)
- Searching and analyzing literature
- Literature citation, citation styles, plagiarism
- LaTeX for scientific writing
- Presenting scientific work
- Strategies to preparation for exams; group activities / social life

Special Subject

- Modules within the **Special Subject** are courses that allow students to further specialize in their program (form: lectures, seminars)
- The course program is subdivided in different **areas**
 - Perception
 - Learning & Memory
 - Planning & Reasoning
 - Interaction
 - Methods, General Concepts & Tools
- Students select at least **24 ECTS** out of **at least 2 areas**
- **Some Special and Applied subjects require an email notification to the lecturer to register for the subject**
- **Check: Course list on the Cognitive Systems web page**

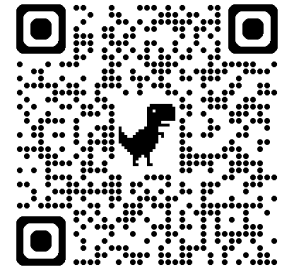
Applied Subject

- Modules within the **Applied Subject** are courses more closely related to applications and experimental work for **further specialization** (form: **projects**)
- The course program is subdivided in different **areas**
 - Perception
 - Learning & Memory
 - Planning & Reasoning
 - Interaction
 - Applied Methods and Concepts in Cognitive Systems
- Students select at least **24 ECTS** out of **at least 2 areas**
- **Some Special and Applied subjects require an email notification to the lecturer to register for the subject – check deadlines**
- **Check: Course list on the Cognitive Systems web page**

Important Links

Cognitive Systems Web Page

<https://www.uni-ulm.de/cognitive-systems/>



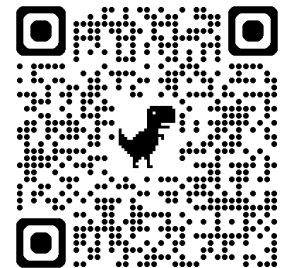
Moodle eLearning System:

<https://moodle.uni-ulm.de/>



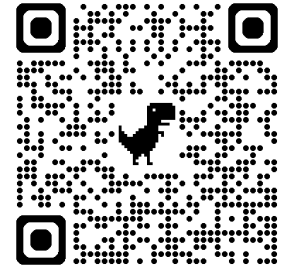
Campus Online

<https://campusonline.uni-ulm.de/>

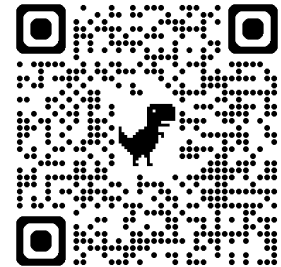


Further Links

Infos regarding studying at Ulm University:
<https://www.uni-ulm.de/en/study/study-at-ulm-university/organisation/>



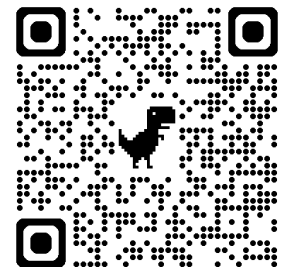
Campus Navigator:
<https://www.uni-ulm.de/einrichtungen/kiz/weiteres/campus-navigation/hoersaalfinder/>



Psychosocial Counselling Service (in German: PBS)
<https://studierendenwerk-ulm.de/en/counselling-and-advice/psychosoziale-beratung/>



Exam Scheduling System (Computer Science)
<https://pps.informatik.uni-ulm.de/>

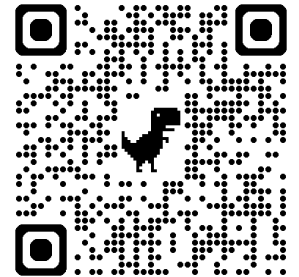


Read and Understand: ASPO

- General study and examination regulations regarding bachelor's and master's programmes at Ulm University (General Framework - ASPO) of 13 July 2022
https://www.uni-ulm.de/fileadmin/website_uni_ulm/zuv/zuv.dezIII.abt2u3/3-2oeffentlich/bekanntmachungen/2022/en_veroeffentlichung_asop_2022-GB_01.pdf
- Subject-specific study and examination regulations for the English-taught master's programme in Cognitive Systems offered by the Faculty of Engineering, Computer Science and Psychology at Ulm University of 29 February 2024
https://www.uni-ulm.de/fileadmin/website_uni_ulm/zuv/zuv.dezIII.abt2u3/3-2oeffentlich/satzungen_ordnungen/studium_promotion_habil/studien_pruefungsordnungen_engl/fspo_Cognitive_Systems_engl_2024_01_29.pdf

Engagement for your Programme

- German universities manage themselves!
- Lecturers, staff and students decide, for example, on
 - the study program (study commission)!
 - exceptions in hardship cases (examination board)!
 - admission criteria (admissions board)
- We all make the university a place worth living in and loving
- In particular: Student Union (Fachschaft Informatik)
<https://stuve.uni-ulm.de/fin/>



Help us to ensure that it stays that way in the future!
Kontakt: cogsys@uni-ulm.de oder fin@uni-ulm.de

Tipps

- If you have any questions or concerns, ask!
 - Central Student Advisory Service
 - Departmental Student Advisory Service
 - Student Council
 - Study Commission
 - Lecturers/Instructors

- Get in touch with your peers!
 - They are also new here and will be happy to make new friends!

Last, but not least ... a great team of academics...



...wishes **you best of luck** with your start into the program!