



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

Based on § 32 (3) sentence 1 of the Baden-Württemberg Higher Education Act (Landeshochschulgesetz - LHG) in the version of 1 January 2005, amended several times and most recently by Article 8 of the Act of 7 February 2023 (Law Gazette p. 26, 43), the Senate of Ulm University adopted the following subject-specific study and examination regulations (FSPO) for the English-taught master's programme in Cognitive Systems at its meeting on 21 February 2024, following approval by the Faculty of Engineering, Computer Science and Psychology.

The President of Ulm University gave his consent on 29 February 2024 in accordance with § 32 (3) sentence 1 of the *LHG*.

Content

I. General	1
§ 1 Scope of application (§ 1 ASPO)	1
§ 2 Study objectives (§ 2 ASPO).....	2
§ 3 Start of the programme (§ 3 ASPO).....	2
II. Study organisation	2
§ 4 Organisation and content of the master's programme in Cognitive Systems (§ 4 ASPO)	2
§ 5 Multiple use of modules	4
§ 6 Types of courses (§ 6 ASPO)	4
§ 7 Compulsory attendance at courses (§ 7 ASPO)	4
III. Exams	4
§ 8 Practical examinations (§ 14 ASPO).....	4
§ 9 Thesis (§ 18 ASPO)	4
IV. Final provisions	5
§ 10 Effective date.....	5

I. General

§ 1 Scope of application (§ 1 ASPO)

These Subject-specific study and examination regulations for the English-taught master's degree programme in Cognitive Systems supplement and specify the provisions of the General Study and

Examination Regulations of Ulm University (Allgemeine Studien- und Prüfungsordnung der Universität Ulm, ASPO).

§ 2 Study objectives (§ 2 ASPO)

- (1) The master's examination in the Cognitive Systems programme is a professional academic degree in the fields of psychology, computer science and cognitive science. By passing the master's examination students show that they have in-depth subject knowledge, are able to work independently following scientific principles and contribute to the development of cognitive systems while applying scientific methods and findings.
- (2) Successful completion of a master's programme enables graduates
 - a) to design cognitive systems based on theoretical knowledge
 - b) to implement and assess methods and procedures used in the planning, development and realisation of cognitive systems
 - c) to assess fundamental cognitive mechanisms in the subject complementary to the respective bachelor's programme (psychology for computer science and computer science for psychology)
 - d) to co-operate in interdisciplinary teams.

§ 3 Start of the programme (§ 3 ASPO)

Studies in the master's programme in Cognitive Systems begin in the winter semester.

II. Study organisation

§ 4 Organisation and content of the master's programme in Cognitive Systems (§ 4 ASPO)

- (1) The following compulsory, compulsory elective and complementary modules must be completed in the master's programme in Cognitive Systems:

No.	Area/module	CP
A	Compulsory	72
A1	Basic Subject for non-psychologists	24
1	Introduction to Psychological Methods and Statistics (for non-psychologists)	6
2	Fundamentals of Human-Machine Interaction	6
3	Fundamental Approaches to Cognitive Science	6
4	Foundations and Concepts of Cognitive Systems Modelling	6
A2	Basic Subject for non-computer scientists	24
5	Introduction to Computer Science (for non-computer scientists)	6
6	Fundamentals of Human-Machine Interaction	6
7	Fundamental Approaches to Cognitive Science	6
8	Foundations and Concepts of Cognitive Systems Modelling	6
A3	Interdisciplinary Subject	18

No.	Area/module	CP
9	Cognitive Systems I	6
10	Cognitive Systems II	6
11	Recent Developments in Cognitive Systems Research	6
A4	Master's thesis	30
12	Master's thesis	30
B	Compulsory Elective	min. 48
B1	Special Subject	min. 24
B1.1	Perception	
B1.2	Learning and Memory	
B1.3	Planning and Reasoning	
B1.4	Interaction	
B1.5	Methods, General Concepts & Tools	
B2	Applied Subject	min. 24
B2.1	Perception	
B2.2	Learning and Memory	
B2.3	Planning and Reasoning	
B2.4	Interaction	
B2.5	Applied Methods and Concepts in Cognitive Systems	

- (2) The Basic Subject for non-psychologists (A1) must be completed by students with an undergraduate degree in Computer Science in accordance with paragraph 1; students with an undergraduate degree in Psychology must complete the Basic Subject for non-computer scientists (A2) in accordance with paragraph 1. Students who have completed another undergraduate degree programme (e.g. Cognitive Sciences) or who have skills in both subject areas can take either the Basic Subject for non-psychologists (A1) or the Basic Subject for non-computer scientists (A2) in consultation with the course advisor, depending on their subject expertise. In total, this programme part corresponds to 24 CP. All students must complete the Interdisciplinary Subject area (A3) with all modules listed in paragraph 1.
- (3) In the compulsory elective area Special Subject (B1), students must complete modules totalling at least 24 CP from the respective module catalogues (B1.1 - B1.5); at least two areas must be selected from the areas B1.1 - B1.5.
- (4) In the compulsory elective area Applied Subject (B2), students must complete modules totalling at least 24 CP from the respective module catalogues (B2.1 - B2.5); at least two areas must be selected from the areas B2.1 - B2.5.
- (5) The mobility window is intended for the compulsory elective area.

§ 5 Multiple use of modules

If modules are assigned to several areas, these modules can only be completed in one of the areas. Multiple use of modules within the master's programme is not permitted.

§ 6 Types of courses (§ 6 ASPO)

Lectures and exercises can be supplemented by tutorials; project courses, project seminars, laboratory courses and mentoring sessions can be scheduled.

§ 7 Compulsory attendance at courses (§ 7 ASPO)

In the case of seminars, laboratory courses, colloquia, exercises with practical components, project courses and project seminars, attendance may be required as a study achievement. At the beginning of the respective course, the person responsible for teaching will announce publicly within the Faculty (learning platform) on which dates compulsory attendance is essential to achieve learning success. Students who are not 100% present on these dates will not be admitted to the corresponding module examination or will not have completed the module prerequisite. If there are reasons for the absences for which the student is not responsible, then

- a) the absence can be compensated by a competency-based substitute performance,
- b) individual classes can be made up for,
- c) parts already completed from previous courses can be credited.

The teaching responsible will check whether compensation is possible in accordance with sentence 4. If no substitute performance is offered/individual class is made up for or not fulfilled or if crediting is excluded, the study achievement is not completed.

III. Exams

§ 8 Practical examinations (§ 14 ASPO)

A practical examination is an examination in which the task is announced at the beginning of the examination. Each examination lasts a minimum of 10 minutes and a maximum of 180 minutes per student.

§ 9 Thesis (§ 18 ASPO)

- (1) The master's thesis corresponds to 30 CP. The time from the admission to the submission of the master's thesis is six months.
- (2) The master's thesis comprises an ungraded presentation of the project followed by a discussion. This accounts for one of the credit points corresponding to the master's thesis.
- (3) As a rule, the master's thesis is written in English. § 12 (2) of the General study and examination regulations apply accordingly.
- (4) Admission to the master's thesis can only be granted to students who have passed the subjects in accordance with § 4 (1) A1 or A2 and A3 and have completed a total of at least 60 CP.

IV. Final provisions

§ 10 Effective date

- (1) These Study and examination regulations apply with effect from the winter semester 2024/25. At the same time, the Subject-specific study and examination regulations of Ulm University for the master's programme in Cognitive Systems offered by the Faculty of Engineering and Computer Science at Ulm University of 25 July 2017, published in the Official Bulletin of Ulm University No. 28 of 2 August 2017, pages 420-426 cease to have effect.

Ulm, 29 February 2024

signed

Prof. Dr.-Ing. Michael Weber

-President-

courtesy translation