Cognitive Science course list for winter term 2024/2025

Note: This list is for the examination regulations from 2019/20, not for the new regulations that start in the winter term 2024/25.

(27.08.2024)

Cognitive (Neuro-)Psychology (Responsibility / Modulbeauftragte: Hohenberger)

Mandatory Modules Bachelor (Pflichtbereich Bachelor; CS-BP-CNP)

The mandatory course “Introduction to Cognitive (Neuro-)Psychology” is offered in the summer term.

Mandatory Elective Modules Bachelor (Wahlpflichtbereich Bachelor; CS-BWP-CNP)

Course	Lecturers	Mode	LP	SWS	Time
Cognitive Development	Hohenberger	präsenz	6	3	Wed. 09:00 - 12:00 (weekly)
Introduction to Animal Cognition	Pika	präsenz	4	2	Tue. 14:00 - 15:30 (weekly)
Introduction to sleep and dreams [Blockseminar]	Pipa, Lüth	präsenz	4	2	Dates on Monday, 17.03.2025 - Friday, 21.03.2025 10:00 - 17:00
Modeling in Cognitive Neuroscience	Musslick	not specified	8	4	Mon. 18:00 - 20:00 (weekly) - Expert Talk, Thu. 12:00 - 14:00 (weekly) - Lecture
Optimizing Experiment Design	Weinhardt	präsenz	4	2	Dates on Friday, 10.01.2025 - Saturday, 11.01.2025, Saturday, 25.01.2025 08:45 - 16:15
Primate Communications	Pika	präsenz	4	2	Thu. 14:30 - 16:00 (weekly) - Proseminar, Raum 68/E04
Time and Cognition	Hohenberger	präsenz	6	3	Mon. 14:00 - 17:00 (weekly)

Mandatory Elective Modules Master (Wahlpflichtbereich Master; CS-MWP-CNP)

Course	Lecturers	Mode	LP	SWS	Time
Cognitive Development	Hohenberger	präsenz	6	3	Wed. 09:00 - 12:00 (weekly)
Introduction to sleep and dreams [Blockseminar]	Pipa, Lüth	präsenz	4	2	Dates on Monday, 17.03.2025 - Friday, 21.03.2025 10:00 - 17:00
Modeling in Cognitive Neuroscience	Musslick	not specified	8	4	Mon. 18:00 - 20:00 (weekly) - Expert Talk, Thu. 12:00 - 14:00 (weekly) - Lecture
Optimizing Experiment Design	Weinhardt	präsenz	4	2	Dates on Friday, 10.01.2025 - Saturday, 11.01.2025, Saturday, 25.01.2025 08:45 - 16:15
Primate Communications	Pika	präsenz	4	2	Thu. 14:30 - 16:00 (weekly) - Proseminar, Raum 68/E04
Projects at the intersection of neuroscience and machine learning	Sulewski, Thorat, Kietzmann	präsenz	8	4	Wed. 10:00 - 12:00 (weekly), Wed. 14:00 - 16:00 (weekly)
Time and Cognition	Hohenberger	präsenz	6	3	Mon. 14:00 - 17:00 (weekly)

Neuroscience (Responsibility / Modulbeauftragte: Brandt (CS-BP-NS), König (CS-BWP-NS and CS-MWP-NS)

Mandatory Modules Bachelor (Pflichtbereich Bachelor; CS-BP-NS)

Course	Lecturers	Mode	LP	SWS	Time
Functional Neuroanatomy	Bakota, Brandt	not specified	4	2	Fri. 14:00 – 16:00 (weekly)
Introduction to Neurobiology	Bakota, Brandt	not specified	4	2	Fri. 10:00 – 12:00 (weekly)

Mandatory Elective Modules Bachelor (Wahlpflichtbereich Bachelor; CS-BWP-NS)

Course	Lecturers	Mode	LP	SWS	Time
Action & Cognition (Motor System)	König	präsenz	4	2	Wed. 16:00 - 18:00 (weekly)
Action & Cognition (Visual System)	König	präsenz+	4	2	Mon. 18:00 - 20:00 (weekly)
Journal Club "Spatial Cognition"	Schmidt	not specified	4	2	Mon. 10:00 - 12:00 (weekly)
Modeling in Cognitive Neuroscience	Musslick	not specified	8	4	Mon. 18:00 - 20:00 (weekly) - Expert Talk, Thu. 12:00 - 14:00 (weekly) - Lecture
Quest	König, Schmidt	not specified	4	2	Mon. 08:00 - 18:00 (weekly)

Mandatory Elective Modules Master (Wahlpflichtbereich Master; CS-MWP-NS)

Course	Lecturers	Mode	LP	SWS	Time
Action & Cognition (Motor System)	König	präsenz	4	2	Wed. 16:00 - 18:00 (weekly)
Action & Cognition (Visual System)	König	präsenz+	4	2	Mon. 18:00 - 20:00 (weekly)
Journal Club "Spatial Cognition"	Schmidt	not specified	4	2	Mon. 10:00 - 12:00 (weekly)
Modeling in Cognitive Neuroscience	Musslick	not specified	8	4	Mon. 18:00 - 20:00 (weekly) - Expert Talk, Thu. 12:00 - 14:00 (weekly) - Lecture
Projects at the intersection of neuroscience and machine learning	Sulewski, Thorat, Kietzmann	präsenz	8	4	Wed. 10:00 - 12:00 (weekly), Wed. 14:00 - 16:00 (weekly)
Quest	König, Schmidt	not specified	4	2	Block course

Neuroinformatics (Responsibility / Modulbeauftragte: Pipa, Heidemann (CS-BWP-NI and CS-MWP-NI))

Mandatory Modules Bachelor (Pflichtbereich Bachelor; CS-BP-NI)

Course	Lecturers	Mode	LP	SWS	Time
Neuroinformatics	Pipa	hybrid+	12	6	Thu. 12:00 – 14:00 (weekly) – Fri 12:00 – 14:00 (weekly)

Mandatory Elective Modules Bachelor (Wahlpflichtbereich Bachelor; CS-BWP-NI)

Course	Lecturers	Mode	LP	SWS	Time
Advanced NLP	Bruni	präsenz	4	2	No dates fixed yet
Computer Vision (Lecture + Practice)	Krumack, Niehaus	präsenz	~~12~~ 8	~~6~~ 4	Tue. 12:00 - 14:00 (weekly) - Practice, Wed. 10:00 - 12:00 (weekly) - Lecture, Thu. 10:00 - 12:00 (weekly) - Lecture
Concepts in Deep Learning	Niehaus	präsenz	4	2	Fri. 10:00 - 12:00 (weekly)
Introduction to Deep Learning (with an NLP angle)	Bruni	präsenz+	8	4	Tue. 12:00 - 14:00 (weekly), Wed. 10:00 - 12:00 (weekly)
Introduction to sleep and dreams [Blockseminar]	Pipa, Lüth	präsenz	4	2	Dates on Monday, 17.03.2025 - Friday, 21.03.2025 10:00 - 17:00
Machine learning for cognitive computational neuroscience	Kietzmann, Sulewski	hybrid+	8	4	Tue. 10:00 - 12:00 (weekly) - Lecture, Thu. 14:00 - 16:00 (weekly) - Workgroup Session, Thu. 14:00 - 16:00 (weekly) - Workgroup 3, Thu. 14:00 - 16:00 (weekly) - Workgroup 2
Modeling in Cognitive Neuroscience	Musslick	not specified	8	4	Mon. 18:00 - 20:00 (weekly) - Expert Talk, Thu. 12:00 - 14:00 (weekly) - Lecture

Mandatory Elective Modules Master (Wahlpflichtbereich Master; CS-MWP-NI)

Course	Lecturers	Mode	LP	SWS	Time
Advanced NLP	Bruni	präsenz	4	2	No dates fixed yet
Computer Vision (Lecture + Practice)	Krumack, Niehaus	präsenz	~~12~~ 8	~~6~~ 4	Tue. 12:00 - 14:00 (weekly) - Practice, Wed. 10:00 - 12:00 (weekly) - Lecture, Thu. 10:00 - 12:00 (weekly) - Lecture
Concepts in Deep Learning	Niehaus	präsenz	4	2	Fri. 10:00 - 12:00 (weekly)
Introduction to Deep Learning (with an NLP angle)	Bruni	präsenz+	8	4	Tue. 12:00 - 14:00 (weekly), Wed. 10:00 - 12:00 (weekly)
Introduction to sleep and dreams [Blockseminar]	Pipa, Lüth	präsenz	4	2	Dates on Monday, 17.03.2025 - Friday, 21.03.2025 10:00 - 17:00
Machine learning for cognitive computational neuroscience	Kietzmann, Sulewski	hybrid+	8	4	Tue. 10:00 - 12:00 (weekly) - Lecture, Thu. 14:00 - 16:00 (weekly) - Workgroup Session, Thu. 14:00 - 16:00 (weekly) - Workgroup 3, Thu. 14:00 - 16:00 (weekly) - Workgroup 2
Modeling in Cognitive Neuroscience	Musslick	not specified	8	4	Mon. 18:00 - 20:00 (weekly) - Expert Talk, Thu. 12:00 - 14:00 (weekly) - Lecture
Projects at the intersection of neuroscience and machine learning	Sulewski, Thorat, Kietzmann	präsenz	8	4	Wed. 10:00 - 12:00 (weekly), Wed. 14:00 - 16:00 (weekly)

(Computational) Linguistics (Responsibility / Modulbeauftragte: Bruni, Gotzner)

Mandatory Modules Bachelor (Pflichtbereich Bachelor; CS-BP-CL)

The mandatory course “Introduction to Computational Lingustics” is offered in the summer term.

Mandatory Elective Modules Bachelor (Wahlpflichtbereich Bachelor; CS-BWP-CL)

Course	Lecturers	Mode	LP	SWS	Time
Advanced NLP	Bruni	präsenz	4	2	No dates fixed yet
Conceptual abstraction and categorization (Conference training crash course)	Kobrock	präsenz	4	2	Dates on Monday, 24.02.2025 - Friday, 28.02.2025 10:00 - 16:00
Introduction to Deep Learning (with an NLP angle)	Bruni	präsenz+	8	4	Tue. 12:00 - 14:00 (weekly), Wed. 10:00 - 12:00 (weekly)
Introduction to Theoretical Linguistics (Lecture)	Hoeks	präsenz	4	2	Thu. 14:00 - 16:00 (weekly)
Introduction to Theoretical Linguistics (Practice)	Hoeks	präsenz	4	2	Thu. 16:00 - 18:00 (weekly)
Linguistics Circle: Current Research in Psycholinguistics and Pragmatics	Gotzner	hybrid	4	2	Wed. 09:00 - 10:30 (weekly)
Neuropragmatics	Tourtouri	präsenz	8	4	Tue. 14:00 - 18:00 (weekly)
Explainability of Large Language Models	Abdelmoneim	hybrid+	4	2	Thu. 14:00 - 16:00 (weekly)

Mandatory Elective Modules Master (Wahlpflichtbereich Master; CS-MWP-CL)

Course	Lecturers	Mode	LP	SWS	Time
Advanced NLP	Bruni	präsenz	4	2	No dates fixed yet
Conceptual abstraction and categorization (Conference training crash course)	Kobrock	präsenz	4	2	Dates on Monday, 24.02.2025 - Friday, 28.02.2025 10:00 - 16:00
Introduction to Deep Learning (with an NLP angle)	Bruni	präsenz+	8	4	Tue. 12:00 - 14:00 (weekly), Wed. 10:00 - 12:00 (weekly)
Linguistics Circle: Current Research in Psycholinguistics and Pragmatics	Gotzner	hybrid	4	2	Wed. 09:00 - 10:30 (weekly)
Neuropragmatics	Tourtouri	präsenz	8	4	Tue. 14:00 - 18:00 (weekly)
Explainability of Large Language Models	Abdelmoneim	hybrid+	4	2	Thu. 14:00 - 16:00 (weekly)

Artificial Intelligence (Responsibility / Modulbeauftragter: Kühnberger)

Mandatory Modules Bachelor (Pflichtbereich Bachelor; CS-BP-AI)

The mandatory course “Introduction to AI and Logic Programming” is offered in the summer term.

Mandatory Elective Modules Bachelor (Wahlpflichtbereich Bachelor; CS-BWP-AI)

Course	Lecturers	Mode	LP	SWS	Time
Advanced NLP	Bruni	präsenz	4	2	No dates fixed yet
Animal Communication meets Machine Learning	Kietzmann, Anthes	not specified	4	2	Tue. 12:00 - 14:00 (weekly)
Artificial Intelligence and the Web	Thelen	hybrid+	4	None	Fri. 12:00 - 14:00 (weekly)
Computer Vision (Lecture + Practice)	Krumack, Niehaus	präsenz	~~12~~ 8	~~6~~ 4	Tue. 12:00 - 14:00 (weekly) - Practice, Wed. 10:00 - 12:00 (weekly) - Lecture, Thu. 10:00 - 12:00 (weekly) - Lecture
Explainability of Large Language Models	Abdelmoneim	hybrid+	4	2	Thu. 14:00 - 16:00 (weekly)
Introduction to Deep Learning (with an NLP angle)	Bruni	präsenz+	8	4	Tue. 12:00 - 14:00 (weekly), Wed. 10:00 - 12:00 (weekly)
Machine learning for cognitive computational neuroscience	Kietzmann, Sulewski	hybrid+	8	4	Tue. 10:00 - 12:00 (weekly) - Lecture, Thu. 14:00 - 16:00 (weekly) - Workgroup Session, Thu. 14:00 - 16:00 (weekly) - Workgroup 3, Thu. 14:00 - 16:00 (weekly) - Workgroup 2
Methods of AI (Lecture)	Krumnack	hybrid+	4	2	Mon. 10:00 – 12:00 (weekly)
Methods of AI (Seminar)	Abdelmoneim	hybrid+	4	2	Thu. 10:00 - 12:00 (weekly)
Reading group on cognitive abilities in artificial systems	Thorat, Sommers, Kietzmann	präsenz	4	2	Thu. 16:00 - 18:00 (weekly)
Cognitive Human-Computer Interaction	Kühnberger	not specified	4	2	Thu. 18:00 – 20:00 (weekly)
Concepts in Deep Learning	Niehaus	präsenz	4	2	Fri. 10:00 - 12:00 (weekly)

Mandatory Elective Modules Master (Wahlpflichtbereich Master; CS-MWP-AI)

Course	Lecturers	Mode	LP	SWS	Time
Advanced NLP	Bruni	präsenz	4	2	No dates fixed yet
Animal Communication meets Machine Learning	Kietzmann, Anthes	not specified	4		Tue. 12:00 - 14:00 (weekly)
Artificial Intelligence and the Web	Thelen	hybrid+	4	None	Fri. 12:00 - 14:00 (weekly)
Computer Vision (Lecture + Practice)	Krumack, Niehaus	präsenz	~~12~~ 8	~~6~~ 4	Tue. 12:00 - 14:00 (weekly) - Practice, Wed. 10:00 - 12:00 (weekly) - Lecture, Thu. 10:00 - 12:00 (weekly) - Lecture
Explainability of Large Language Models	Abdelmoneim	hybrid+	4	2	Thu. 14:00 - 16:00 (weekly)
Introduction to Deep Learning (with an NLP angle)	Bruni	präsenz+	8	4	Tue. 12:00 - 14:00 (weekly), Wed. 10:00 - 12:00 (weekly)
Machine learning for cognitive computational neuroscience	Kietzmann, Sulewski	hybrid+	8	4	Tue. 10:00 - 12:00 (weekly) - Lecture, Thu. 14:00 - 16:00 (weekly) - Workgroup Session, Thu. 14:00 - 16:00 (weekly) - Workgroup 3, Thu. 14:00 - 16:00 (weekly) - Workgroup 2
Methods of AI (Lecture)	Krumnack	hybrid+	4	2	Mon. 10:00 – 12:00 (weekly)
Methods of AI (Seminar)	Abdelmoneim	hybrid+	4	2	Thu. 10:00 - 12:00 (weekly)
Projects at the intersection of neuroscience and machine learning	Sulewski, Thorat, Kietzmann	präsenz	8	4	Wed. 10:00 - 12:00 (weekly), Wed. 14:00 - 16:00 (weekly)
Reading group on cognitive abilities in artificial systems	Thorat, Sommers, Kietzmann	präsenz	4	2	Thu. 16:00 - 18:00 (weekly)
Cognitive Human-Computer Interaction	Kühnberger	not specified	4	2	Thu. 18:00 – 20:00 (weekly)
Concepts in Deep Learning	Niehaus	präsenz	4	2	Fri. 10:00 - 12:00 (weekly)

Philosophy (Responsibility / Modulbeauftragte: Walter)

Mandatory Modules Bachelor (Pflichtbereich Bachelor; CS-BP-PHIL)

Course	Lecturers	Mode	LP	SWS	Time
Introduction to Logic and Critical Thinking	Hörzer	präsenz+	6	4	Wed. 08:00 - 12:00 (weekly)

Mandatory Elective Modules Bachelor (Wahlpflichtbereich Bachelor; CS-BWP-PHIL)

Course	Lecturers	Mode	LP	SWS	Time
Cognitivism, Functionalism, and Computationalism	Loock	präsenz	4	2	Mon. 16:00 - 18:00 (weekly)
Begleitseminar zum Study Project: Emotional Experience in Asexuality: Interdisciplinary Perspectives	Walter	not specified	4	2	Tue. 09:00 - 12:00 (weekly)
Ethics in Theory and Practice for Cognitive Science Students (Intensive course)	Meyer	präsenz	6	2	Thu. 10:00 - 12:00 (weekly)
Language and Politics	Meyer, Kompa	präsenz	4	2	Wed. 10:00 - 12:00 (weekly)
Situated Affectivity: From Individuals' Emotions to Collective Harm	Walter	not specified	4		Mon. 18:00 - 20:00 (weekly)
The Philosophy of Free Will (Intensive Course)	Walter	not specified	6	2	Wed. 10:00 - 12:00 (weekly)
Universale Moral und Würde für alle? Kants Ethik und ihre Probleme	Meyer	not specified	4	2	Fri. 10:00 - 12:00 (weekly)
Einführung in die Ethik	Boshammer	präsenz	4	2	Wed. 10:00 – 12:00 (weekly)
Sarah Conly – Against autonomy: justifying coercive paternalism	Boshammer	Präsenz	4	2	Tue. 14:00 – 16:00 (weekly)

Mandatory Elective Modules Master (Wahlpflichtbereich Master; CS-MWP-PHIL)

Course	Lecturers	Mode	LP	SWS	Time
Cognitivism, Functionalism, and Computationalism	Loock	präsenz	4	2	Mon. 16:00 - 18:00 (weekly)
Colloquium Ethics and Critical Theories of Artificial Intelligence	Mühlhoff, Lindemann	hybrid	4	3	Wed. 15:00 - 18:00 (weekly)
Begleitseminar zum Study Project: Emotional Experience in Asexuality: Interdisciplinary Perspectives	Walter	not specified	4	2	Tue. 09:00 - 12:00 (weekly)
Language and Politics	Meyer, Kompa	präsenz	4	2	Wed. 10:00 - 12:00 (weekly)
Situated Affectivity: From Individuals' Emotions to Collective Harm	Walter	not specified	4		Mon. 18:00 - 20:00 (weekly)
Universale Moral und Würde für alle? Kants Ethik und ihre Probleme	Meyer	not specified	4	2	Fri. 10:00 - 12:00 (weekly)
Sarah Conly – Against autonomy: justifying coercive paternalism	Boshammer	Präsenz	4	2	Tue. 14:00 – 16:00 (weekly)

Methods of Cognitive Science (Responsibility / Modulbeauftragter: Hörzer (temporarily))

Mandatory Modules Bachelor (Pflichtbereich Bachelor; CS-BP-MCS)

Course	Lecturers	Mode	LP	SWS	Time
Introduction to Statistics and Data Analysis	N.N.	NA	8	6	No dates fixed yet

Mandatory Elective Modules Bachelor (Wahlpflichtbereich Bachelor; CS-BWP-MCS)

Course	Lecturers	Mode	LP	SWS	Time
Academic Writing in the Empirical Domains of Cognitive Science	Hohenberger, Gerdes	hybrid	4	2	Thu. 14:00 - 16:00 (weekly)
Advanced NLP	Bruni	präsenz	4	2	No dates fixed yet
Anleitung zum wissenschaftlichen Arbeiten	Meyer	präsenz	6	3	Wed. 14:00 - 18:00 (weekly)
From Zero to Data Analysis: Eye-Tracking and LMM in R	Pacheco, Nolte	not specified	4	2	Dates on Monday, 24.02.2025 - Friday, 28.02.2025 09:00 - 17:00
Machine learning for cognitive computational neuroscience	Kietzmann, Sulewski	hybrid+	8	4	Tue. 10:00 - 12:00 (weekly) - Lecture, Thu. 14:00 - 16:00 (weekly) - Workgroup Session, Thu. 14:00 - 16:00 (weekly) - Workgroup 3, Thu. 14:00 - 16:00 (weekly) - Workgroup 2
Modeling in Cognitive Neuroscience	Musslick	not specified	8	4	No dates fixed yet
Optimizing Experiment Design	Weinhardt	präsenz	4	2	No dates fixed yet
Reading group on cognitive abilities in artificial systems	Thorat, Sommers, Kietzmann	präsenz	4	2	Thu. 16:00 - 18:00 (weekly)
Scientific Programming in Python	Krumnack	hybrid	4	2	No dates fixed yet

Communicate Outward: Convey scientific knowledge to non-scientists (Block course)	Frohn	not specified	4	2	Mon., 03.03.2025, Thu., 06.03.2025, Mon., 10.03.2025, Thu., 13.03.2025, Mon., 17.03.2025, Thu., 20.03.2025 10:00 - 15:00

Informatik (Modulbeauftragter: Heidemann)

Mandatory Modules Bachelor (Pflichtbereich Bachelor; CS-BP-INF)

Course	Lecturers	Mode	LP	SWS	Time
Informatik für Anwendende	Brinkmeyer	not specified	9	6	Mon. 14:00 - 16:00 (weekly) – Lecture, Tue. 14:00 - 16:00 (weekly) - Lecture
Einführung in die Programmierung	Bökler	not specified	9	6	Mon. 14:00 - 16:00, (weekly) – Lecture, Tue. 14:00 - 16:00 (weekly) - Lecture

Mandatory Elective Modules Bachelor (Wahlpflichtbereich Bachelor; CS-BWP-INF)

Course	Lecturers	Mode	LP	SWS	Time
Computer Vision (Lecture + Practice)	Krumack, Niehaus	präsenz	~~12~~ 8	~~6~~ 4	Tue. 12:00 - 14:00 (weekly) - Practice, Wed. 10:00 - 12:00 (weekly) - Lecture, Thu. 10:00 - 12:00 (weekly) - Lecture

Further options for the mandatory electives CS-BWP-INF (both winter and summer term) after taking “Informatik für Anwendende”:
"Einführung in die ..." courses (9LP each):

- … Algorithmik (summer term; recommended option after taking “Informatik für Anwendende”, only available option after taking “Einführung in die Programmierung”, which is required to be taken together with “Einführung in die Algorithmik”)
- … Theoretische Informatik (summer term; further recommended option after taking “Informatik für Anwendende”)
- … Technische Informatik (winter term)

further options (6 LP each):

- INF-INF-ALG-CG6 Computergrafik (summer term; further recommended option after taking “Informatik für Anwendende”)
- INF-INF-SK-DBS6 Datenbanksysteme (further recommended option after taking “Informatik für Anwendende”)
- INF-INF-SK-SWE6 Software Engineering (winter term; further recommended option after taking “Informatik für Anwendende”)
- INF-GI-DBV Digitale Bildverarbeitung (summer term)
- INF-INF-SYS-BS6 Betriebssysteme (winter term)
- INF-INF-SYS-RN6 Rechnernetze (winter term)
- INF-INF-ALG-KO6 Kombinatorische Optimierung (winter term)
- INF-INF-KI-KI6 Künstliche Intelligenz (summer term; not recommended due to overlap in content with the “Intro to AI” and “Methods of AI” courses)

Mathematik (Modulbeauftragter: Kunis)

Mandatory Modules Bachelor (Pflichtbereich Bachelor; CS-BP-MAT)

Course	Lecturers	Mode	LP	SWS	Time
Mathematik für Anwender I	Wnuk, Brenner	not specified	9	6	Mon. 08:00 - 10:00 (weekly), Thu. 14:00 - 16:00 (weekly); Fri. 08:00 – 10:00 (weekly), Fri., 12:00 – 14:00 (weekly)
Lineare Algebra und analytische Geometrie I	Brenner	not specified	9	6	Mon. 10:00 - 12:00 (weekly), Wed. 10:00 - 12:00 (weekly)
Analysis I	Röndigs	not specified	9	6	Tue. 10:00 - 12:00 (weekly), Thu. 10:00 - 12:00 (weekly), Thu. 12:00 – 14:00 (weekly), Fri. 10:00 – 12:00 (weekly)

Mandatory Elective Modules Bachelor (Wahlpflichtbereich Bachelor; CS-BWP-MAT)

Course	Lecturers	Mode	LP	SWS	Time
Lineare Algebra und analytische Geometrie I	Brenner	not specified	9	6	Mon. 10:00 - 12:00 (weekly), Wed. 10:00 - 12:00 (weekly)
Analysis I	Röndigs	not specified	9	6	Tue. 10:00 - 12:00 (weekly), Thu. 10:00 - 12:00 (weekly), Thu. 12:00 – 14:00 (weekly), Fri. 10:00 – 12:00 (weekly)

If *“Lineare Algebra und Analytische Geometrie I”* is taken for the mandatory module, *“Analysis I”* can be taken for the mandatory elective.
If *“Analysis I”* is taken for the mandatory module, *“Lineare Algebra und Analytische Geometrie I”* can be taken for the mandatory elective.

Further courses for the mandatory elective module are offered in the summer term.

Study Project (Responsibility / Modulbeauftragter: Hörzer)

Mandatory Modules Master (CS-MP-SP)

Course	Lecturers	Mode	LP	SWS	Time
Study Project: Data Ethics Outreach Lab	Mühlhoff	präsenz	12	6	Tue. 14:00 - 17:00 (weekly)
Study Project: Affectivity in Political Language (Part II)	Stephan, Meyer, Maur	präsenz	12	6	Tue. 09:00 - 12:00 (weekly)
Study Project: Computing with Spikes (Part II)	Nieters, Nezami	not specified	12	6	Mon. 14:00 - 16:00 (weekly), Thu. 10:00 - 12:00 (weekly)
Study Project: Dialog (Part I)	Gotzner	präsenz	12	6	Tue. 14:00 - 16:00 (weekly), Tue. 16:00 - 18:00 (weekly)
Study Project: Digital Realities: Its Vices and Virtues (Part I)	Walter	not specified	12	6	Tue. 15:00 - 18:00 (weekly)
Study Project: Emotional Experience in Asexuality: Interdisciplinary Perspectives (Part I)	Walter	not specified	12	6	Tue. 09:00 - 12:00 (weekly)
Study Project: DreamGuard: A Web Application for restful Nights (Part 2)	Pipa, Lüth	not specified	12	6	No dates fixed yet
Study Project: Emergent behaviors in a multi-agent system with reinforcement learning (Part V)	Bruni, Mayer	präsenz	12	6	Tue. 16:00 - 18:00 (weekly), Wed. 16:30 - 18:30 (weekly)
Study Project: Exploring Physical Understanding in LLMs (Part I)	Bruni, Jassim	präsenz	12	6	No dates fixed yet
Study Project: Dyadic eye tracking in virtual reality to investigate visual interaction (Part III)	Pacheco, Nolte, J. Walter	präsenz	12	6	Tue. 14:00 - 16:00 (weekly)
Study Project: Spatial Navigation supported by AI (Part II)	König	not specified	12	6	Mon. 10:00 - 12:00 (weekly)
Study Project: Automatic Music Transcription (Part II)	Krumnack, Kühnberger, Brima	not specified	12	6	No dates fixed yet

Interdisciplinary Courses (Responsibility / Modulbeauftragter: Hörzer)

Mandatory Modules Master (CS-MP-IC)

Course	Lecturers	Mode	LP	SWS	Time
Begleitseminar zum Study Project: Data Ethics Outreach Lab	Mühlhoff	präsenz	6	3	Tue. 14:00 - 17:00 (weekly)
Begleitseminar zum Studienprojekt: Computing with Spikes (Part II)	Nieters, Nezami	not specified	6	3	No dates fixed yet
Begleitseminar zum Study Project: Spatial Navigation supported by AI (Part II)	König	hybrid	6	3	No dates fixed yet
Begleitseminar zum Study Project: Exploring Physical Understanding in LLMs (Part I)	Bruni, Jassim	präsenz	6	4	Tue. 14:00 - 16:00 (weekly)
Begleitseminar zum Studienprojekt: Emergent behaviors in a multi-agent system with reinforcement learning (Part V)	Bruni, Mayer	präsenz	6	4	Wed. 16:30 - 18:30 (weekly)
Begleitseminar zum Studienprojekt: Automatic Music Transcription (Part II)	Krumnack, Kühnberger, Brima	not specified	6	3	No dates fixed yet
Begleitseminar zum Study Project: Dyadic eye tracking in virtual reality to investigate visual interaction (Part III)	Pacheco, Nolte, J. Walter	präsenz	6	3	Tue. 14:00 - 16:00 (weekly)
Reading group on cognitive abilities in artificial systems	Thorat, Sommers, Kietzmann	präsenz	4	2	Thu. 16:00 - 18:00 (weekly)
From Zero to Data Analysis: Eye-Tracking and LMM in R	Pacheco, Nolte	not specified	4	2	Dates on Monday, 24.02.2025 - Friday, 28.02.2025 09:00 - 17:00

Begleitseminar zum Study Project: Emotional Experience in Asexuality: Interdisciplinary Perspectives	Walter	not specified	4	2	Tue. 09:00 - 12:00 (weekly)
Cognitive Science Student Journal - A deep dive	Frohn	hybrid	4	2	Dates on Monday, 14.10.2024 - Friday, 18.10.2024 10:00 - 17:00
Machine learning for cognitive computational neuroscience	Kietzmann, Sulewski	hybrid+	8	4	Tue. 10:00 - 12:00 (weekly) - Lecture, Thu. 14:00 - 16:00 (weekly) - Workgroup Session, Thu. 14:00 - 16:00 (weekly) - Workgroup 3, Thu. 14:00 - 16:00 (weekly) - Workgroup 2
Projects at the intersection of neuroscience and machine learning	Sulewski, Thorat, Kietzmann	präsenz	8	4	Wed. 10:00 - 12:00 (weekly), Wed. 14:00 - 16:00 (weekly)
Communicate Outward: Convey scientific knowledge to non-scientists (Block course)	Frohn	not specified	4	2	Mon., 03.03.2025, Thu., 06.03.2025, Mon., 10.03.2025, Thu., 13.03.2025, Mon., 17.03.2025, Thu., 20.03.2025 10:00 - 15:00

Electives (Responsibility / Modulbeauftragte: Hörzer; Walter (CS-BW-IWS only)

Electives Bachelor (Wahlbereich Bachelor; CS-BW)

Course	Lecturers	Mode	LP	SWS	Time
Academic Writing in the Empirical Domains of Cognitive Science	Hohenberger, Gerdes	hybrid	4	2	Thu. 14:00 - 16:00 (weekly)
Language and Communication Colloquium	Gotzner, Hohenberger, Pika	hybrid	2	1	Wed. 14:00 - 15:00 (fortnightly, from 06/11/24)
Meet the locals	Thelen	hybrid+	2	2	Thu. 16:00 - 18:00 (weekly)
Sex and the Digital	Mühlhoff	präsenz	4	2	Dates on Thursday, 05.12.2024 18:00 - 20:00, Friday, 06.12.2024 09:00 - 18:00, Thursday, 09.01.2025 18:00 - 20:00, Friday, 10.01.2025 09:00 - 18:00, Thursday, 23.01.2025 18:00 - 20:00, Friday, 24.01.2025 09:00 - 18:00
Scientific Programming in Python	Krumnack	hybrid	4	2	No dates fixed yet
AI in Practice: How to get away from Jupyter notebooks? (Block course)	Krumnack, Busche	not specified	4	2	No dates fixed yet

Electives Master (Wahlbereich Master; CS-MW)

Course	Lecturers	Mode	LP	SWS	Time
Academic Writing in the Empirical Domains of Cognitive Science	Hohenberger, Gerdes	hybrid	4	2	Thu. 14:00 - 16:00 (weekly)
Foundations of Cognitive Science	Hohenberger	not specified	3	2	Fri. 10:00 - 12:00 (weekly)
Introduction to Theoretical Linguistics (Lecture)	Hoeks	präsenz	4	2	Thu. 14:00 - 16:00 (weekly)
Introduction to Theoretical Linguistics (Practice)	Hoeks	präsenz	4	2	Thu. 16:00 - 18:00 (weekly)
Language and Communication Colloquium	Gotzner, Hohenberger, Pika	hybrid	2	1	Wed. 14:00 - 15:00 (fortnightly, from 06/11/24)
Meet the locals	Thelen	hybrid+	2	2	Thu. 16:00 - 18:00 (weekly)
Sex and the Digital	Mühlhoff	präsenz	4	2	Dates on Thursday, 05.12.2024 18:00 - 20:00, Friday, 06.12.2024 09:00 - 18:00, Thursday, 09.01.2025 18:00 - 20:00, Friday, 10.01.2025 09:00 - 18:00, Thursday, 23.01.2025 18:00 - 20:00, Friday, 24.01.2025 09:00 - 18:00
Scientific Programming in Python	Krumnack	hybrid	4	2	No dates fixed yet
AI in Practice: How to get away from Jupyter notebooks? (Block course)	Krumnack, Busche	not specified	4	2	No dates fixed yet

Integrative Mandatory Element in the Electives Bachelor (Integratives Pflichtelement im Wahlbereich Bachelor; CS-BW-IP)

Mandatory Element Bachelor (CS-BW-IP)

Course	Lecturers	Mode	LP	SWS	Time
Foundations of Cognitive Science	Hohenberger	not specified	3	2	Fri. 12:00 - 14:00 (weekly)

Integrative Optional Element in the Electives Bachelor (Integratives Wahlelement „Anleitung zum wissenschaftlichen Arbeiten“ im Wahlbereich Bachelor; CS-BW-IWS)

Integrative Optional Element in the Electives Bachelor (Integratives Wahlelement „Anleitung zum wissenschaftlichen Arbeiten“ im Wahlbereich Bachelor; CS-BW-IWS

Course	Lecturers	Mode	LP	SWS	Time
Anleitung zum wissenschaftlichen Arbeiten	Meyer	präsenz	6	3	Wed. 14:00 - 18:00 (weekly)