Discipline-Specific Study and Examination Regulations for the Consecutive Master's/Ph.D. Program in *Cognitive Science – Embodied Cognition* at the University of Potsdam

Dated January 20, 2016

in the Third Amended Version of the Discipline-Specific Study and Examination Regulations for the Consecutive Master's/Ph.D. Program in *Cognitive Science – Embodied Cognition (CoSEC)* at the University of Potsdam

- non-official version -[1]

Dated January 15, 2020[2]

The Faculty Council of the Faculty of Human Sciences at the University of Potsdam has approved on January 20, 2020, the following study and examination regulations on the basis of the New Brandenburg Higher Education Act (BbgHG) Sections 19 subsection 1, 22 subsections 1-3, in conjunction with Section 72 subsection 2 no. 1 of the Brandenburg Higher Education Act (BbgHG) of April 28, 2014 (Law and Ordinance Gazette [GVBl.] I/14, [no. 18]), last amended by Section 2 of the Act of July 1, 2015 (GVBl. I/15, [no. 18]) in conjunction with the Ordinance on the Design of Examination Regulations to Guarantee the Equivalency of Studies, Examinations, and Degrees (University Examination Ordinance - HSPV) of March 4, 2015 (GVBl. II/15, [no. 12]), and with Section 14 subsection 1 no. 2 of the Basic Constitution of the University of Potsdam (GrundO) of December 17, 2009 (Bulletin UP no. 4/2010, p. 60) in the Third Amended Version of the Basic Constitution of the University of Potsdam (GrundO) of May 21, 2014 (Bulletin UP no. 6/2015, p. 235) and Section 1 subsection 2 of the new version of the General Study and Examination Regulations for Bachelor and Master's Degree Programs at the University of Potsdam Not Related to Teacher Education (BAMA-O) of January 30, 2013 (Bulletin UP no. 3/2013, p. 35), last amended on February 26, 2014 (Bulletin UP no. 3/2014, p. 35):[3]

[1] This translation is for informational purposes only. In the event of inconsistency or discrepancy between the German and English versions of these regulations, the German-language version shall prevail.

[2] Approved by the President of the University of Potsdam on May 11, 2020.

[3] Approved by the President of the University of Potsdam on March 7, 2016.

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I. General Section

§ 1 Applicability

(1) These regulations apply to the consecutive master's and Ph.D. program in *Cognitive Science – Embodied Cognition* at the University of Potsdam.

(2) In the event that these regulations contradict the BAMA-O with regard to the master's program, then the provisions in the BAMA-O supersede these regulations.

(3) The Regulations for a Doctoral Degree at the Faculty of Human Sciences at the University of Potsdam (Promotionsordnung) also apply to the Ph.D. program.

§ 2 Degree

(1) The Faculty of Human Sciences at the University of Potsdam awards the degree of "Master of Science" ("M.Sc.") to students who have obtained the necessary credit points in the master's program and meet the graduation requirements.

(2) The Faculty of Human Sciences at the University of Potsdam awards the degree of "Doctor of Philosophy" ("Ph.D.") to students who have suc-

cessfully completed the Ph.D. program and who meet the requirements of the Regulations for a Doctoral Degree.

§ 3 Content and Objectives of the Master's/Ph.D. Program

(1) This degree program is divided into two segments: first, a two-year research-oriented master's program that leads students through 120 credit points of coursework and finishes with the "M.Sc." degree; and second, a two-year Ph.D. program with 120 credit points and the "Ph.D." degree under the terms of the Regulations for a Doctoral Degree.

(2) The master's/Ph.D. program in *Cognitive Science – Embodied Cognition* takes the knowledge, skills and methodologies acquired in the bachelor's program and expands them in an interdisciplinary direction in the field of cognitive science. The program qualifies graduates to conduct scientific work as well as private-sector research and management in the field of cognitive analysis and modeling of human behavior. Graduates possess the necessary knowledge of cognitive processes and their biological foundations required to generate hypotheses about human behavior, to perform quantitative measurements to test hypotheses through experiments, and to develop cognitive modeling in the interdisciplinary sub-fields of cognitive sciences and their applications.

(3) Graduates have both the subject-specific and interdisciplinary methodological skills required to describe scientific problems in cognitive process analysis. They can formulate new approaches to problems in this field, perform experimental investigations and modeling, and they can apply and further develop methods used to answer these research questions. Graduates can critically analyze and evaluate existing experimental approaches and mathematical models. They are able to organize collaboration between teams working in experimental and theoretical ways, to define intermediate objectives, to guide the preparation of research results, and to present these results in English.

(4) During the transition to the Ph.D. program, we assess the candidate's capacity for independent scholarly work, the writing of scholarly publications, and the presentation of scientific research results. The Ph.D. program includes guidance for scholarly work in the context of a dissertation project, which is typically a more profound treatment of a scholarly project developed during the student's master's program. The Ph.D. program prepares students for a doctoral degree from the Faculty of Human Sciences.

II. Master's Degree Program

§ 4 canceled

§ 5 canceled

§ 6 canceled

§ 7 Duration and Organization of the First Segment of the Master's/Ph.D. Program - Master's Program

(1) The research-focused, *consecutive* master's program in *Cognitive Sciences – Embodied Cognition* is offered at the University of Potsdam with a standard period of study (full-time program) of 4 semesters and *120* credit points. The master's segment can only start in the winter semester.

(2) The master's program is suitable for part-time study. Part-time study requires advising from the relevant faculty so that an individualized course schedule can be created. Proof of this advising must be attached to an application for part-time study in accordance with Section 3 of the Regulations for Part-Time Study at the University of Potsdam (Part-Time Regulations). In all other respects, the provisions of the Part-Time Regulations shall apply.

§ 8 Modules and Course of Master's Studies

(1) The master's program in *Cognitive Science – Embodied Cognition* is comprised of the following components:

Master's Program		
Module Abbreviation	**Name of module**	**CPs**
I. Obligatory Modules *(Total of 63 CPs)*		
CSE-MA-010	*Cognitive Science and Embodied Cognition*	15
CSE-MA-011	*Mathematical Modeling in Neurocognitive Psychology*	9
CSE-MA-012	*Neuroscience of Embodied Cognition*	9
CSE-MA-013	*Advanced Methods: Experimental Programming*	6
CSE-MA-014	*Advanced Methods: Multivariate Statistics*	9
CSE-MA-015	*Individual Research Module*	15
II. Electives (choice modules) *(Total of 18 CPs)*		
Modules amounting to 18 CPs have to be chosen from the elective modules and completed successfully.		
CSE-MA-020	*Developmental Science and Embodiment*	6
CSE-MA-021	*Language and Development*	6

CSE-MA-022	*Cognitive and Sensorimotor Development*	6
CSE-MA-030	*Neurolinguistic Perspectives*	6
PHI-MA-015	*Philosophy of Neuroscience and Embodied Cognition*	6
CSE-MA-031	*Cognitive Neuroscience, Neuropsychology and the Body*	6
III. Bridge Modules (9 CPs)		
In addition to the electives, there is a so-called bridge module that, depending on the student's prior education, is meant to close gaps in the students' knowledge in the areas of "Experimental Psychological Training" or "Applied Mathematics" (9 CPs). The Examining Board will determine upon admission to the master's program which of the two modules (CSE-MA-001 or CSE-MA-002) must be completed in accordance with the discipline-specific admission regulations for the master's segment of the consecutive master's/Ph.D. program in Cognitive Science – Embodied Cognition (CoSEC) at the University of Potsdam. If the Examining Board finds that the student has sufficient knowledge in both bridge module fields, then 9 CP will be earned in a laboratory course, the content of which shall be determined by the head of the respective laboratory.		
CSE-MA-001	*Bridge Module: "Experimental Psychological Training"*	9
CSE-MA-002	*Bridge Module: "Applied Mathematics"*	9
CSE-MA-003	*Laboratory Course*	9
III. Master's Thesis (30 CP)		30
Total of the obligatory and elective modules to be completed		**120**

(2) The language of instruction in the *Cognitive Science – Embodied Cognition* program is English.

(3) Details on the module descriptions of the modules mentioned in Section 8 are defined in Appendix 1 of these regulations.

(4) A sample degree progress plan for the master's program can be found in Appendix 3 of these regulations.

§ 9 Stay Abroad

A stay abroad during the degree program is possible; a suitable point in time for a semester abroad is, for example, the writing of the master's thesis during the fourth semester.

§ 10 Master's Thesis

(1) As soon as a student has completed at least 75 percent of the total required credit points, minus credit points for the thesis and the oral defense, he or she is entitled to the immediate allocation of a topic for the master's thesis.

(2) The master's thesis will be written in English and have a scope of 30 credit points including the oral defense.

III. Ph.D. Program

§ 11 Admission to the Ph.D. Program

(1) Students or graduates of the master's program in *Cognitive Science – Embodied Cognition* can apply for admission to the Ph.D. program. The application must include the following documents:

- Degree certificate or overview of all coursework completed during the master's program,
- Draft of the English-language master's thesis,
- Project sketch for a research project that was prepared together with at least one of the persons authorized to supervise doctoral students,
- A proposal by the student regarding the dissertation supervisor or, if applicable, supervision agreement.

(2) The application must be submitted by August 15 at the latest. Students or graduates of a program similar to the master's program in *Cognitive Science – Embodied Cognition* are also qualified to apply.

(3) Prerequisites for admission are:

- Successful completion of a master's degree,
- An applicant's distinct research orientation, as exhibited by a positive evaluation by one of the two dissertation supervisors,
- Acceptance as a doctoral candidate according to the Regulations for a Doctoral Degree.

(4) After admission to the Ph.D. program has been granted, the student can apply for enrollment.

(5) Enrollment for the Ph.D. program requires admission as a doctoral candidate under the applicable version of the Regulations for a Doctoral Degree at the Faculty of Human Sciences at the University of Potsdam.

(6) Students who hold a degree comparable to the master's degree in *Cognitive Science - Embodied Cognition* and have been admitted as a doctoral candidate under the applicable version of the Regulations for a Doctoral Degree at the Faculty of Human Sciences at the University of Potsdam can apply for acceptance to the Ph.D. program.

(7) The Examining Board makes decisions about the comparability of master's qualifications; the Doctoral Committee makes decisions regarding the acceptance of the application.

§ 12 Duration and Organization of the second segment of the Master's/Ph.D. Program

(1) In accordance with the Regulations for a Doctoral Degree, the candidate will conclude a supervision agreement with the primary and secondary supervisors.

(2) During the two-year Ph.D. program, the candidate primarily works independently on his/her research project in accordance with the supervision agreement and completes the modules for the Ph.D. program.

(3) Students must complete credit points in the following modules to continue their interdisciplinary education.

Ph.D. Program		
Module Abbreviation	**Name of Module**	**Credits**
FOR	Progress reports	12
DOC	Colloquium for Doctoral Candidates	12
COG	Cognitive Science Colloquium	12
PGS	Potsdam Graduate School Courses	24
Dissertation and Defense		60
Total: 120 CPs		

(4) Upon consultation with both supervisors, candidates can complete part of their dissertation in an external laboratory. The supervisors must ensure that the partner institution names a qualified supervisor.

(5) The research project should typically be completed within 2 years. In exceptional cases, up to two one-semester extensions can be granted. No additional credit points will be earned during these additional semesters. If the FOR, DOC, COG and PGS modules are not completed by the expiration of these extension periods, the supervisory relationship is terminated, the candidate's admission is revoked, and the possibility of completing the dissertation is eliminated. In all other respects, the provisions of Section 11 subsection 3 of the Registration Regulations apply.

§ 13 Doctoral Examination

(1) Upon consultation with the supervisors and after the successful completion of the modules, an application is submitted to initiate the doctoral examination procedure.

(2) The doctoral examination procedure is conducted in accordance with the Regulations for a Doctoral Degree.

§ 14 Entry-into-Force, Expiration and Transitional Provisions

(1) These regulations take effect on the day after their publication in the Official Announcements of the University of Potsdam.

(2) These regulations apply to all students who enroll in the *Cognitive Science - Embodied Cognition* master's/Ph.D. program at the University of Potsdam after these regulations have taken effect.

Appendix 1: Module Catalog for the Master's Program

The descriptions of the program's modules listed in Section 8 and the tables below are governed by the regulations for the module catalog of the Faculty of Economics and Social Sciences for the Bachelor's and Master's Programs at the University of Potsdam (MK HWF) Supplementary regulations and/or deviations from the MK HWF are indicated in the tables that follow.

Module code	**Module title**	**OM/ EM**	**CPs**	**Participation requirements**
CSE-MA-010	*Cognitive Science and Embodied Cognition*	OM	15	see MK HWF
CSE-MA-011	*Mathematical Modeling in Neurocognitive Psychology*	OM	9	see MK HWF
CSE-MA-012	*Neuroscience of Embodied Cognition*	OM	9	see MK HWF
CSE-MA-013	*Advanced Methods: Experimental Programming*	OM	6	see MK HWF
CSE-MA-014	*Advanced Methods: Multi-variate Statistics*	OM	9	see MK HWF
CSE-MA-015	*Individual Research Module*	OM	15	see MK HWF
CSE-MA-020	*Developmental Science and Embodiment*	EM	9	see MK HWF
CSE-MA-021	*Language and Development*	EM	6	see MK HWF
CSE-MA-022	*Cognitive and Sensorimotor Development*	EM	6	see MK HWF
CSE-MA-030	*Neurolinguistic Perspectives*	EM	6	see MK HWF
CSE-MA-031	*Cognitive Neuroscience, Neuropsychology and the Body*	EM	6	see MK HWF
CSE-MA-001	*Bridge Module: "Experimental Psychological Training"*	OM	9	see MK HWF
CSE-MA-002	*Bridge Module: "Applied Mathematics"*	OM	9	see MK HWF
CSE-MA-003	*Laboratory Course*	OM	9	see MK HWF
CP = Credit Points, OM = Obligatory Module, EM = Elective Module				

The descriptions of the program's modules listed in Section 8 and the tables below are governed by the regulations for the module catalog of the Faculty of Arts for the Bachelor's and Master's programs at the University of Potsdam (MK PhilFak) Supplementary regulations and/or deviations from the MK PhilFak are indicated in the tables that follow.

Module code	**Module title**	**OM/ EM**	**CPs**	**Participation requirements**
PHI-MA-015	*Philosophy of Neuroscience and Embodied Cognition*	EM	6	see MK PhilFak
CP = Credit Points, OM = Obligatory Module, EM = Elective Module				

Appendix 2: Module Catalog for the Ph.D. program

<table>
<tr><td colspan="4">FOR “Progress reports”</td><td>Number of credits (CP): 12</td></tr>
<tr><td>Module type (obligatory or elective module):</td><td colspan="4">Obligatory</td></tr>
<tr><td>Content and objectives of the module:</td><td colspan="4">Qualification Objectives:
Students will be able to provide regular progress reports on the status of a complex research project.

Content:
Students will prepare a report on the progress of their dissertation project each semester. The scope and delivery deadline are agreed upon with the supervisors.</td></tr>
<tr><td>(Partial) Module examination (number, form, scope):</td><td colspan="4">Submission of 4 progress reports in one document</td></tr>
<tr><td>Independent study time(in hours (h)):</td><td colspan="4"></td></tr>
<tr><td colspan="5"></td></tr>
<tr><td rowspan="2">Courses (teaching format)</td><td rowspan="2">Contact time:
(in hours per week per semester)</td><td colspan="2">Supplementary examination work (number, form, scope)</td><td rowspan="2">(Partial) module examinations accompanying coursework (number, form, scope)</td></tr>
<tr><td>For completing the module</td><td>For admission to module exam</td></tr>
<tr><td>none</td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="5"></td></tr>
<tr><td colspan="2">Frequency at which the module is offered:</td><td colspan="3">Every semester</td></tr>
<tr><td colspan="2">Prerequisite for taking the module:</td><td colspan="3">None</td></tr>
<tr><td colspan="2">Teaching unit(s):</td><td colspan="3">All teaching units involved in the Ph.D. program</td></tr>
</table>

<table>
<tr><td colspan="4">DOC “Colloquium for Doctoral Candidates”</td><td>Number of credits (CP): 12</td></tr>
<tr><td>Module type (obligatory or elective module):</td><td colspan="4">Obligatory</td></tr>
<tr><td>Content and objectives of the module:</td><td colspan="4">Qualification Objectives:
Students will be able to clearly and concisely present the partial results and research question of their dissertation project, or problems related in terms of content or method; they will also be able to stimulate construction scientific discussion of these topics.

Content:
Students will hold a presentation each semester and actively participate in discussions in the doctoral colloquium.</td></tr>
<tr><td>(Partial) Module examination (number, form, scope):</td><td colspan="4">(Partial) module examinations accompanying coursework: see below</td></tr>
<tr><td>Independent study time(in hours (h)):</td><td colspan="4"></td></tr>
<tr><td colspan="5"></td></tr>
<tr><td rowspan="2">Courses (teaching format)</td><td rowspan="2">Contact time:
(in hours per week per semester)</td><td colspan="2">Supplementary examination work (number, form, scope)</td><td rowspan="2">(Partial) module examinations accompanying coursework (number, form, scope)</td></tr>
<tr><td>For completing the module</td><td>For admission to module exam</td></tr>
<tr><td>Seminar (12 CP)</td><td>2</td><td></td><td></td><td>Presentation (at least 30 min)</td></tr>
<tr><td colspan="5"></td></tr>
<tr><td colspan="2">Frequency at which the module is offered:</td><td colspan="3">Every semester</td></tr>
<tr><td colspan="2">Prerequisite for taking the module:</td><td colspan="3">None</td></tr>
<tr><td colspan="2">Teaching unit(s):</td><td colspan="3">Psychology (Interdisciplinary Cognitive Sciences Chair, 50%; General and Biological Psychology Chair, 50%).</td></tr>
</table>

<table>
<tr><td colspan="3">COG “Cognitive Science Colloquium”</td><td>Number of credits (CP): 12</td></tr>
<tr><td>Module type (obligatory or elective module):</td><td colspan="3">Obligatory</td></tr>
<tr><td>Content and objectives of the module:</td><td colspan="3">Qualification Objectives:
Students will be able to critically evaluate current research in the field of the cognitive sciences, recognize connections between sub-fields, and classify these connections in interdisciplinary contexts.

Content:
Active participation in the colloquium in terms of preparation and, for example, organization of colloquiums, of discussion panels with guests, and laboratory tours.</td></tr>
<tr><td>(Partial) Module examination (number, form, scope):</td><td colspan="3">Report (approx. 5000 words) on the seminar</td></tr>
<tr><td>Independent study time (in hours (h)):</td><td colspan="3"></td></tr>
<tr><td colspan="4"></td></tr>
<tr><td rowspan="2">Courses (teaching format)</td><td rowspan="2">Contact time:
(in hours per week per semester)</td><td colspan="2">Supplementary examination work (number, form, scope)</td><td rowspan="2">(Partial) module examinations accompanying coursework (number, form, scope)</td></tr>
<tr><td>For completing the module</td><td>For admission to module exam</td></tr>
<tr><td>Seminar (12 CP)</td><td>2</td><td></td><td></td><td></td></tr>
<tr><td colspan="5"></td></tr>
<tr><td colspan="2">Frequency at which the module is offered:</td><td colspan="3">Every semester</td></tr>
<tr><td colspan="2">Prerequisite for taking the module:</td><td colspan="3">None</td></tr>
<tr><td colspan="2">Teaching unit(s):</td><td colspan="3">Psychology (Interdisciplinary Cognitive Sciences Chair, 50%; General and Biological Psychology Chair, 50%).</td></tr>
</table>

<table>
<tr><td colspan="4">PGS “Potsdam Graduate School Courses”</td><td>Number of credits (CP): 24</td></tr>
<tr><td>Module type (obligatory or elective module):</td><td colspan="4">Obligatory</td></tr>
<tr><td>Content and objectives of the module:</td><td colspan="4">Qualification Objectives:
Students will enhance their capability for scientific work by actively participating in English-language courses offered by the Potsdam Graduate School.

Content:
Students will complete a total of at least 4 PoGS courses, of which at least two are interdisciplinary courses (for example, “Scientific Writing” or “Career Development”) and one course that is close to their subject (for example, specific statistical methods). Each course earns 6 CP.</td></tr>
<tr><td>(Partial) Module examination (number, form, scope):</td><td colspan="4">PoGS certificate attesting to successful participation</td></tr>
<tr><td>Independent study time (in hours (h)):</td><td colspan="4"></td></tr>
<tr><td colspan="5"></td></tr>
<tr><td rowspan="2">Courses (teaching format)</td><td rowspan="2">Contact time:
(in hours per week per semester)</td><td colspan="2">Supplementary examination work (number, form, scope)</td><td rowspan="2">(Partial) module examinations accompanying coursework (number, form, scope)</td></tr>
<tr><td>For completing the module</td><td>For admission to module exam</td></tr>
<tr><td>4 seminars or block courses (6 CP each)</td><td>2 hours per week per semester each</td><td></td><td></td><td></td></tr>
<tr><td colspan="5"></td></tr>
<tr><td colspan="2">Frequency at which the module is offered:</td><td colspan="3">Every semester</td></tr>
<tr><td colspan="2">Prerequisite for taking the module:</td><td colspan="3">None</td></tr>
<tr><td colspan="2">Teaching unit(s):</td><td colspan="3">Potsdam Graduate School (PoGS)
- Interdisciplinary courses: Offered by PoGS
- Subject-related courses: Staff from all participating teaching units under the umbrella of the PoGS</td></tr>
</table>

Appendix 3: Sample degree progress plan

Ph.D. Program	8th semester (69 CPs)	**FOR (3 CPs)**	**DOC (3 CPs)**	**COG (3 CPs)**	**Dissertation (60 CPs)**
	7th semester (15 CPs)	**FOR (3 CPs)**	**DOC (3 CPs)**	**COG (3 CPs)**	**PGS (6 CPs)**
	6th semester (15 CPs)	**FOR (3 CPs)**	**DOC (3 CPs)**	**COG (3 CPs)**	**PGS (6 CPs)**
	5th semester (21 CPs)	**FOR (3 CPs)**	**DOC (3 CPs)**	**COG (3 CPs)**	**PGS (12 CPs)**
Master's program	4th semester (30 CPs)	**III. Master's Thesis (30 CP)**			
	3rd semester (30 CPs)	**CSE-MA-011 (9 CPs)**	**CSE-MA-015 (15 CPs)**	**CSE-MA-020/ CSE-MA-030 (6 CPs)**	
	2nd semester (32 CPs)	**CSE-MA-014 (5 CPs)**	**CSE-MA-012 (9 CPs)**	**CSE-MA-013 (6 CPs)**	**CSE-MA-021/ PHIL-MA-015 (6 CPs) CSE-MA-022/ CSE-MA-031 (6 CPs)**
	1st semester (28 CPs)	**CSE-MA-014 (4 CPs)**	**CSE-MA-010 (15 CPs)**	**CSE-MA001/002/003 (9 CPs)**	

Ph.D. Modules: FOR: Progress reports, DOC: Colloquium for Doctoral Candidates, COG: Cognitive Science Colloquium, PGS: Potsdam Graduate School Courses (PoGS)

CSE-MA-001 BRIDGE MODULE: Experimental Psychological Training				Number of credit points (CPs): 9
Module type (obligatory or elective module):	Elective module			
Content and objectives of the module:	Qualification Objectives: Students will gain broad background knowledge in experimental-psychological scientific work for an interdisciplinary course of study. Content: Experimental psychological training.			
(Partial) Module examination (number, form, scope):	(Partial) module examinations accompanying coursework can be found below.			
Independent study time (in hours (h)):	135-160			
Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Experimental psychological training (practical course)	4	-	-	Poster presentation (1 hour)
Frequency at which the module is offered:		Winter semester		
Prerequisite for taking the module:		Decision by the Examining Board regarding admission to studies.		
Teaching unit:		Psychology		

CSE-MA-002 Bridge Module: Applied Mathematics				Number of credit points (CPs): 9
Module type (obligatory or elective module):	Elective module			
Content and objectives of the module:	Qualification Objectives: Students will gain broad background knowledge in applied mathematics (linear algebra, analysis) for an interdisciplinary course of study. Contents: A bridge course in Applied/Interdisciplinary Mathematics (analysis and linear algebra).			
(Partial) Module examinations (number, form, scope):	One exam of the following formats: Written exam, 90 min, not graded Oral exam, 30 min, not graded			
Independent study time (in hours (h)):	135-160			
Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Tutorial Mathematics (tutorial)	2	-	-	-
Video lecture: Analysis and Linear Algebra (lecture)	-	-	-	-
Frequency at which the module is offered:		Winter semester		

Prerequisite for taking the module:	Decision by the Examining Board regarding admission to studies.
Teaching unit:	Psychology

CSE-MA-003: Bridge Module: Laboratory Course				Number of credit points (CPs): 9
Module type (obligatory or elective module):	Elective module			
Content and objectives of the module:	Qualification Objectives: Students will learn about the process of project-oriented research, the coordination of scientific workflows, laboratory organization and documentation, and leadership in scientific teams. Content: Laboratory course in one of the working groups run by instructors participating in the program.			
(Partial) Module examination (number, form, scope):	Work report (2000 words), not graded			
Independent study time (in hours (h)):	135-160			
Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Laboratory Course (Practical course)	-	-	-	-
Frequency at which the module is offered:		Winter semester		
Prerequisite for taking the module:		Decision by the Examining Board regarding admission to studies.		
Teaching unit:		Psychology		

CSE-MA-010: Cognitive Science and Embodied Cognition	Number of credit points (CPs): 15
Module type (obligatory or elective module):	Obligatory module
Content and objectives of the module:	Qualification Objectives: Students have a solid knowledge of concepts in the cognitive sciences and *Embodied Cognition*. This forms the foundation that allows students to independently develop and critically assess scientific literature on current issues in the cognitive sciences and the *Embodied Cognition* research field. Students can derive predictions for specific problems by drawing on theories from the cognitive sciences and the theory of Embodied Cognition. They can develop experimental arrangements for theoretically derived hypotheses. Content: This lecture offers a comprehensive overview of the interdisciplinary field of cognitive sciences and *Embodied Cognition* while taking into account selected topics from different perspectives (for example, sensory and motor components in the representation of knowledge). This course also focuses on reading about and discussing current research questions. In the accompanying seminar, students develop central concepts from the lectures, working from original literature, while simultaneously teaching students from various bachelor's programs about the integration of specific sub-fields (for example, psychophysics, motor skills, cognitive psychology) into the cognitive sciences. The completion of research subject hours (meaning participation in experiments as a subject) contributes to learning about the experimental treatment of research questions.
(Partial) Module examination (number, form, scope):	(Partial) module examinations accompanying coursework can be found below.

Independent study time (in hours (h)):	395			
Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Seminar (seminar)	2	2 in-class presentations and a written term paper (5,000 words)	-	-
Participation in experiments (project)	-	10 research subject hours (= 1 hour per week per semester)	-	-
Lecture (lecture)	2	3 written summaries of studies that were discussed in class (1,000 words each)	-	Written exam (90 min) or presentation (30 min) with written report on the same topic (approx. 5,000 words)
Frequency at which the module is offered:		Winter semester		
Prerequisite for taking the module:		none		
Teaching unit:		Psychology		

CSE-MA-011: Mathematical Modeling in Neurocognitive Psychology	Number of credit points (CPs): 9
Module type (obligatory or elective module):	Obligatory module
Content and objectives of the module:	Qualification Objectives: Students will gain broad, well-established skills in mathematical modeling methods for neurocognitive processes and systems. Students will be able to work from this foundation to independently develop and critically assess current literature on neurocognitive models in psychology and the neurosciences. Students will be able to select and implement suitable methods for specific problems in the mathematical description of cognitive systems. Students will be able to derive experimental predictions from neurocognitive models and quantify them by means of mathematical models. Content: This module deals with the most important mathematical modeling approaches in neurocognitive processes and systems in the lecture course, with a focus on stochastic processes (i.e., random walk models) and dynamic systems (i.e., discrete representations or systems of ordinary differential equations). The seminar focuses on working with computers to implement mathematical models and problems associated with this process.
(Partial) Module examination (number, form, scope):	(Partial) module examinations accompanying coursework can be found below.
Independent study time (in hours (h)):	225

Courses (teaching format)	Contact time (in hours per	Supplementary examination work (number, form, scope)	(Partial) module examinations

	week per semester)	For completing the module	For admission to module exam	accompanying coursework (number, form, scope)
Seminar (seminar)	2	-	-	-
Lecture (lecture)	2	-	-	Written exam, 90 min
Frequency at which the module is offered:		Winter semester		
Prerequisite for taking the module:		Completion of the module CSE-MA-002 Applied Mathematics or good knowledge of calculus and linear algebra are strongly recommended.		
Teaching unit:		Psychology		

CSE-MA-012: Neuroscience of Embodied Cognition			Number of credit points (CPs): 9	
Module type (obligatory or elective module):	Obligatory module			
Content and objectives of the module:	Qualification Objectives: Students will gain a solid knowledge of neurocognitive foundations and experimental methods in *Embodied Cognition*. Students will be able to use literature in the cognitive neurosciences to develop current research questions and to critically examine published researched results. Students will be able to choose the appropriate neuroscientific methods for testing theoretically derived hypotheses. Content: This lecture offers a comprehensive overview of the interdisciplinary field of cognitive neurosciences while taking into account selected topics from different perspectives (for example, being able to understand and explain the advantages and disadvantages of various imaging methods; assessing evaluation strategies in a comparative manner). This course also focuses on analyzing and discussing current research questions. In the accompanying seminar, students develop central concepts from the lectures, working from original literature, while simultaneously teaching students from various bachelor's programs about the integration of specific sub-fields into the cognitive sciences.			
(Partial) Module examination (number, form, scope):	(Partial) module examinations accompanying coursework can be found below.			
Independent study time (in hours (h)):	225			
Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Seminar (seminar)	2	1 in-class presentation and a written term paper (5,000 words)	-	-
Lecture (lecture)	2	3 written summaries of studies that were discussed in class (1,000 words each)	-	Written exam, 90 min
Frequency at which the module is offered:		Summer semester		
Prerequisite for taking the module:		none		
Teaching unit:		Psychology		

CSE-MA-013 Advanced Methods: Experimental Programming	Number of credit points (CPs): 6
Module type (obligatory or elective module):	Obligatory module
Content and objectives of the module:	Qualification Objectives: Students will gain broad and well-founded knowledge in experimental-psychological and psycho-physical methods, especially in the computer-aided implementation of experimental designs with programming languages such as Matlab / Psychophysics Toolbox or Python. Students will master time-controlled stimulus presentation, reaction measurement, and the foundations of presenting animated stimuli. Students will be able to work from this basis to independently plan experiments and carry them out in an experimental control. Students will master basic knowledge of a programming language, methods in reaction time and error measurement, as well as classical and adaptive psychophysical processes. Content: Planning and construction of an experimental control system; implementation by means of appropriate programming languages; structuring and evaluation of experimental designs; identification of advantages and disadvantages.
(Partial) Module examination (number, form, scope):	(Partial) module examinations accompanying coursework can be found below.
Independent study time (in hours (h)):	135

Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Seminar or tutorial (seminar or tutorial)	2	-	-	1-hour project presentation

Frequency at which the module is offered:	Summer semester
Prerequisite for taking the module:	none
Teaching unit:	Psychology

CSE-MA-014: Advanced Methods: Multi-variate Statistics	Number of credit points (CPs): 9
Module type (obligatory or elective module):	Obligatory module
Content and objectives of the module:	Qualification Objectives: Students will be able to carry out statistical analysis of experimental data independently and appropriately in order to test scientific hypotheses. They will gain a solid overview of multivariate statistical procedures. Content: Knowledge of the general linear model and processes that are built upon it. Preparation of raw data for visualization and statistical analysis, as well as the statistical evaluation of theoretically derived hypotheses. Communication of relevant knowledge by means of guided evaluation of sample data sets and discussion of case studies, including the integration of current literature.
(Partial) Module examination (number, form, scope):	(Partial) module examinations accompanying coursework can be found below.
Independent study time (in hours (h)):	225

Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Introduction to statistical data analysis (seminar)	2	-	-	-
Advanced data analysis (seminar)	2	-	-	Written exam, 90 min
Frequency at which the module is offered:		Winter semester (seminar) and summer semester (tutorial)		
Prerequisite for taking the module:		none		
Teaching unit:		Linguistics		

CSE-MA-015 Individual Research Module	Number of credit points (CPs): 15
Module type (obligatory or elective module):	Obligatory module
Content and objectives of the module:	Qualification Objectives: Students will be able, with guidance, to solve subproblems in experimental and/or theoretical inquiry for a clearly defined scientific question. The students will be able to carry forward partial results from previous investigations and prepare their own results in a suitable form for teamwork. Content: Students will participate in current research projects, accompanying the planning, execution, and evaluation of a study in the cognitive sciences (including statistical procedures and/or mathematical models). They learn how to structure problems, organize their work time, and work in a team. Content is determined in cooperation with the chosen laboratory and the supervising scientist.
(Partial) Module examination (number, form, scope):	Scientific report, approx. 5,000 words
Independent study time (in hours (h)):	450

Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Frequency at which the module is offered:		Winter and summer semester		
Prerequisite for taking the module:		Completion of the module CSE-MA-001 or good knowledge of experimental design are strongly recommended.		
Teaching unit:		Psychology		

CSE-MA-020: Developmental Science and Embodiment	Number of credit points (CPs): 6
Module type (obligatory or elective module):	Elective module

Content and objectives of the module:	Qualification Objectives: Students will gain enhanced knowledge of current research questions in developmental psychology and concept acquisition, including issues from the perspective of embodied knowledge. Students will be able to see interrelations between relevant theories and to critically examine them. They will be able to identify and solve practice-oriented problems. Content: Seminars on developmental psychology and knowledge acquisition and related topics, as well as the role of the body and activity planning in cognition across the lifespan.			
(Partial) Module examinations (number, form, scope):	One exam of the following formats: Oral exam (30 min) Presentation with written elaboration, 60 minutes and 20 pages			
Independent study time (in hours (h)):	135			
Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Seminar (seminar)	2	-	-	-
Frequency at which the module is offered:		Winter semester		
Prerequisite for taking the module:		none		
Teaching unit:		Psychology		

CSE-MA-021: Language and Development				Number of credit points (CPs): 6
Module type (obligatory or elective module):	Elective module			
Content and objectives of the module:	Qualification Objectives: Students will gain enhanced knowledge of current research questions in language acquisition, including the role of sensory and motor processes in the acquisition of knowledge. Students will be able to see interrelations between relevant theories and to critically examine them. They will be able to identify and solve practice-oriented problems. Content: Seminars on language acquisition and related topics in knowledge acquisition, including sensomotoric aspects.			
(Partial) Module examinations (number, form, scope):	One exam of the following formats: Oral exam (30 min) Presentation with written elaboration, 60 minutes and 20 pages			
Independent study time (in hours (h)):	135			
Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Seminar (seminar)	2	-	-	-
Frequency at which the module is offered:		Summer semester		
Prerequisite for taking the module:		none		
Teaching unit:		Linguistics		

CSE-MA-022: Cognitive and Sensorimotor Development		Number of credit points (CPs): 6
Module type (obligatory or elective module):	Elective module	

Content and objectives of the module:	Qualification Objectives: Students will gain enhanced knowledge of current research questions in developmental psychology and language acquisition. Students will be able to see interrelations between relevant theories and to critically examine them. They will be able to identify and solve practice-oriented problems. Content: Seminars on developmental psychology, language acquisition, and related topics in cognitive development, including sensomotoric components.			
(Partial) Module examinations (number, form, scope):	One exam of the following formats: Oral exam (30 min) Presentation with written elaboration, 60 minutes and 20 pages			
Independent study time (in hours (h)):	135			
Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Seminar (seminar)	2	-	-	-
Frequency at which the module is offered:		Summer semester		
Prerequisite for taking the module:		none		
Teaching units:		Psychology (50%) Linguistics (50%)		

CSE-MA-030 Neurolinguistic Perspectives				Number of credit points (CPs): 6
Module type (obligatory or elective module):	Elective module			
Content and objectives of the module:	Qualification Objectives: Students will gain profound knowledge of current research questions in the neurosciences, neuropsychology, and neurolinguistics. They will be able to compare relevant theories and critically analyze them. Students will be able to apply, adapt, or develop new neuroscientific methods or models for a specific problem in current research. They will recognize the symptoms of brain function disorders and their treatment. Content: Seminars on neurolinguistics and linguistic-psychological aspects of the cognitive neurosciences and related topics			
(Partial) Module examinations (number, form, scope):	One exam of the following formats: Oral exam (30 min) Presentation with written elaboration, 60 minutes and 20 pages			
Independent study time (in hours (h)):	135			
Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Seminar (seminar)	2	-	-	-
Frequency at which the module is offered:		Winter semester		
Prerequisite for taking the module:		none		
Teaching unit:		Linguistics		

CSE-MA-031: Cognitive Neuroscience, Neuropsychology and the Body	Number of credit points (CPs): 6
Module type (obligatory or elective module):	Elective module
Content and objectives of the module:	Qualification Objectives: Students will gain advanced knowledge of theories of neuropsychology, functional perspectives in neuropsychology, and the rehabilitation of human cognition. They will be able to compare relevant theories and critically analyze them. Students will be able to apply, adapt, or develop new therapeutic methods to a specific problem in current neuropsychological research. They will recognize the symptoms of physical and mental disorders and their treatment. Content: Neuroplasticity, visual deficits, right-hemisphere syndromes, emotional disorders, and their treatment; memory disorders, test procedures, and rehabilitation approaches.
(Partial) Module examinations (number, form, scope):	One exam of the following formats: Oral exam (30 min) Presentation with written elaboration, 60 minutes and 20 pages
Independent study time (in hours (h)):	135

Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Seminar (seminar)	2	-	-	-

Frequency at which the module is offered:	Winter and summer semester
Prerequisite for taking the module:	none
Teaching unit:	Sports science/medicine (incl. sports teacher training for primary education)

PHI_MA_015: Philosophy of Neuroscience and Embodied Cognition	Number of credit points (CPs): 6
Module type (obligatory or elective module):	Elective module
Content and objectives of the module:	Students will gain profound knowledge of neurophilosophical theories of human knowledge and cognition, as well as current questions in relevant subfields of philosophy. They will be able to compare relevant theories and critically analyze them. Students will be able to adapt or develop new paradigms or models for a specific problem in current research. Possible content: Epistemology, theories of the representation of knowledge and their relations to sensory and motor activity; agency and free will.
(Partial) Module examination (number, form, scope):	Term paper, 40,000 characters (incl. spaces), 3 CPs
Independent study time (in hours (h)):	135

Courses (teaching format)	Contact time (in hours per week per semester)	Supplementary examination work (number, form, scope)		(Partial) module examinations accompanying coursework (number, form, scope)
		For completing the module	For admission to module exam	
Seminar (seminar)	2	Written exam	-	-

Frequency at which the module is offered:	Summer semester

Prerequisite for taking the module:	none
Teaching unit:	Philosophy/Life Orientation-Ethics-Religion