**Degree Programme Regulations (Statutes) for Students
of the postgraduate Master's Degree Programme Artificial Intelligence
at the University of Lübeck leading to the Degree „Master of Science"**
from 20 December 2022 (NBl. HS MBWFK Schl.-H. 2023 p. 6)

amended by:
Statute from 21 November 2024 (NBl. HS MBWFK Schl.-H. p. 74)

§ 1
Scope

These degree programme regulations, in conjunction with the examination procedure regulations (*Prüfungsverfahrensordnung*, PVO) of the University of Lübeck for students of the Bachelor's and Master's programmes, govern the postgraduate Master's programme Artificial Intelligence at the University of Lübeck.

§ 2
Aim of the degree programme

(1) The postgraduate Master's degree programme prepares graduates for the application of methods and technologies from the science of artificial intelligence in practice and research.

(2) The aim of the postgraduate Master's degree programme Artificial Intelligence is to enable students to realise practical artificial intelligence (AI) applications by teaching them scientific methods and models as well as practising skills in AI. The study programme is intended to create the prerequisites for lifelong learning in the field of AI as well as for further academic qualification (e.g. doctorate). Furthermore, the students should be able to take on management functions in the economy due to the competences they have acquired.

(3) The postgraduate Master's degree programme Artificial Intelligence is research-oriented. Students are expected as a prerequisite to already possess knowledge, skills and competences in the field of mathematical modelling as taught in a Bachelor's degree programme in Computer Science or a closely related degree programme. Furthermore, practical software development skills in scope and depth are also required, as they are taught in a Bachelor's degree programme related to Computer Science or are acquired in corresponding professional practice.

(4) Upon successful completion of the postgraduate Mater's programme, the University of Lübeck awards the academic degree „Master of Science".

§ 3
Access to the degree programme

(1) The prerequisite for admission to the postgraduate Master's degree programme in Artificial Intelligence is that the applicant provides the following evidence:

1. Bachelor's degree in Computer Science or a related subject, for which the applicant must provide evidence

   a) that he or she has obtained a Bachelor's degree or an equivalent degree in one of the study programmes Computer Science, Business Informatics, Medical Informatics, Media Informatics, Software Technology, IT Security and Data Science or in a closely related degree programme at a German university or at a university belonging to one of the Bologna signatory states or

   b) that he or she has obtained an equivalent degree in a closely related subject at a foreign university.

   The equivalence of a foreign qualification is established in accordance with the assessment proposals of the Central Office for Foreign Education at the Permanent Secretariat of the Standing Conference of the Ministers of Education and Cultural Affairs. The grades of the foreign educational certificates must be converted into the German grading system.

2. Special qualification

   a) Fundamental mathematical concepts from the areas of analysis, lineal algebra, and stochastics/statistics in the Bachelor's degree programme completed by the applicant must have amounted to at least 28 credit points (CP).

   b) The first degree must have been completed with a grade of 2.3 or better.

   c) A qualified Bachelor's thesis must be submitted.

   d) In individual cases, the requirements a) and c) may be waived if the applicant proves his or her professional suitability in another suitable manner.

3. Motivation for postgraduate Master's Degree Programme Artificial Intelligence

   This proof is to be provided in the form of a letter of motivation that covers the following points in detail:

   a) Suitability for this degree programme based on professional training to date

   b) specific skills and interests relevant to this degree programme

   c) abilities relevant to an academic approach based on fundamental aspects and methods and

   d) expectations regarding this degree programme and professional goals.

4. Proof of practical professional experience in the field of software engineering and project management and in systems engineering through a computer science-related professional activity of at least one year.

5. Proof of sufficient knowledge of English according to CEFR B2 (proven by a German Abitur certificate according to which the language has been taken for at least seven years or by corresponding language tests (e.g. TOEFL, IELTS)).

(2) The examination board decides whether the admission requirements stated in paragraph 1 are met.

(3) Applicants who do not completely fulfil the requirements according to paragraph 1 No. 1 or No. 2 may be admitted on the condition that they make up for the missing requirements within a specified period of time. Applicants who lack knowledge in the field of theoretical computer science or mathematics may be admitted on the condition that they make up for the missing prerequisites within a specified period of time in which they complete modules to be determined by the examination board. In deviation from § 23 (1) Sentence 1 PVO, the completion of the modules for fulfilling the requirements can only be repeated once. The date for this shall be set by the chairperson of the examination board. The regulation of § 21 (2) PVO applies accordingly. The number of CPs to be repeated may not exceed 30.

(4) Enrolment shall be refused if the applicant has conclusively failed an examination required by an examination regulation in the Artificial Intelligence degree programme at a German university or if he or she is currently undergoing an examination procedure in such a degree programme.

(5) The degree programme can be started in both the summer and the winter semester.

§ 4
Master Agreement

In the case of applicants whose competences acquired in the Bachelor's degree programme leads the examination board to consider the completion of subject-specific requirements from the Bachelor's degree programme in Computer Science to be objectively sensible, a so-called Master's Agreement can be concluded between the student and the Chairperson of the examination board. In this, it is agreed which modules from the Bachelor's degree programme should be successfully completed by which date. No more than three modules may be agreed. If the agreed module completion is not achieved, the chairperson of the examination board shall invite the student to a student advisory meeting in accordance with § 6 PVO. If use has been made of § 3 (3), a Master's Agreement may not be concluded in addition.

§ 5
Degree programme content

The degree programme is divided into the following sub-areas:
1. Essential topics in AI
2. Practical training to acquire skills in the use of tools (e.g. labs).
3. Seminar-based teaching as part of specialised modules (to strengthen communication skills)
4. Master's thesis with colloquium (acquisition of competences for independent work on a larger coherent task).

§ 6
Structure and scope of the degree programme

(1) The programme is designed as a part-time programme and has a total of 120 credit points (CP) according to the ECTS standard with a standard period of study of three years. The professional practical experience in the field of software engineering and project management and in systems engineering is recognised for the study programme after a successful formal equivalence examination to the extent of up to 30 CP. The scope of the teaching modules in the compulsory area is 90 CP. The Master's thesis is worth 30 CP and is followed by a final colloquium.

(2) Participation in further teaching modules offered by the university according to the module handbook beyond the scope specified in paragraph 1 is possible. Such examination achievements can be listed in the Diploma Supplement on application, provided that they are listed in one of the module handbooks of a degree programme of the University of Lübeck.

(3) The teaching modules are listed in the appendix and described in detail in the module handbook. Modules that are already curricularly provided for in the previous degree programme and have been successfully completed are excluded from being taken in the Master's degree programme. In case of conflict, the examination board decides on possible substitute modules.

(4) The language of instruction and examination is English.

(5) Since the programme is designed as a part-time programme, which is intended to support the optimal compatibility of studying and working, the general lecture and lecture-free periods of the University of Lübeck do not apply. Furthermore, the courses and examinations take place virtually.

§ 7
Master's examination and examination prerequisites

(1) The Master's examination consists of course-related subject examinations for the individual teaching modules and the Master's thesis with a concluding colloquium. For modules of category A and B according to the annex, an examination performance according to § 12 (1) with §§ 13 ff. PVO must be completed. Notwithstanding § 16 (5) Sentence 1 PVO, the duration of the Master's thesis is 12 months.

(2) Application for admission to the Master's thesis must be submitted separately in writing to the chairperson of the examination board in accordance with § 11 (8) PVO.

(3) Admission to the subject examinations during the course of the degree programme is generally granted with enrolment in the postgraduate Master's degree programme Artificial Intelligence in accordance with § 11 PVO. For admission to a subject examination, examination prerequisites can be defined in accordance with § 11 (2) PVO, which must be listed in the module handbook before

the start of the respective module. Examination prerequisites must be completed and proven before the time of the examination and do not count towards the module grade.

§ 8
Subject-specific admission requirements for the Master's thesis

(1) Only those who fulfil the requirements according to § 11 PVO, are at least in the 4th semester and present credit certificates of the degree programme amounting to at least 48 of the 60 credit points to be acquired in the compulsory programme according to § 6 (1) can be admitted to the Master's thesis.

(2) All modules that were a condition of admission according to § 3 (3) must have been successfully completed.

Annex 1 to the degree programme regulations for the
postgraduate Master's programme Artificial Intelligence
at the University of Lübeck

The module catalogues

1. Preamble

The following tables list the teaching modules (TM) for which credit certificates (CC) must be obtained in order to pass the Master's examination, subdivided into the different fields of study. For each teaching module, the number of average attendance hours per week (AHW), the type – lecture (V), tutorial (Ü), practical (P) or seminar (S) – the number of credit points (CP) according to the European Credit Transfer System and the type of credit certificate – category A or B – are indicated. Further details such as learning objectives and contents, the coursework to be taken or the type of examination are provided in the module handbook (MHB).

2. General notes and rules when selecting teaching modules

The students can freely select teaching modules in the compulsory elective areas, taking into account the requirements of the examination regulations. The following rules must be observed:
- Teaching modules cannot be credited more than once.
- Teaching modules that are already listed in the examination certificate or diploma supplement of the qualifying Bachelor's degree programme cannot be selected.
- Further teaching modules or module combinations can be approved by the examination board upon justified application.
- Of the elective courses, only a limited number of teaching modules are offered in each academic year and only if there is sufficient demand.

3. Compulsory teaching modules from the area Artificial Intelligence

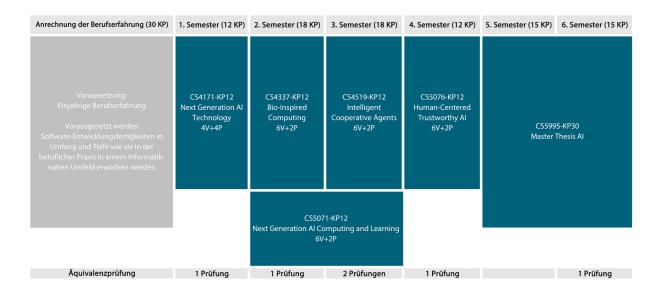| Module no.	Compulsory teaching modules Artificial Intelligence	AHW	CP	CC type
CS4337-KP12	Bio-Inspired Computing	6V+2P	12	A
CS5071-KP12	Next Generation AI Computing and Learning	6V+2P	12	A
CS4519-KP12	Intelligent Cooperative Agents	6V+2P	12	A
CS5076-KP12	Human-Centered Trustworty AI	6V+2P	12	A
CS4171-KP12	Next Generation AI Technology	4V+4P	12	A
	Subtotal		60	
Modules that are part of the equivalence examination				
CS5490-KP06	Lab Software Systems Engineering	4P	6	B
CS4212-KP04	Current Topics Software Systems Engineering	2V+1S	4	B
CS5840-KP04	Seminar in English	2S	4	B
PS4670-KP04	Studium Generale	1V+1S	4	B
CS4520-KP12	Case Study in Professional Product Development	2Ü+6P	12	B
	Total		90	

In addition to the modules that are part of the equivalency examination, the examination board may determine further modules that can be chosen for this purpose, provided that there are still free capacities in these courses.

4. Thesis

Module No.	Thesis	CP
CS5995-KP30	Master's Thesis Artificial Intelligence	30

Annex 2 to the degree programme regulations for the postgraduate Maters's programme Artificial Intelligence at the University of Lübeck

The following table describes the recommended course of study for the start of studies in the winter semester

Anrechnung der Berufserfahrung (30 KP)	1. Semester (12 KP)	2. Semester (18 KP)	3. Semester (18 KP)	4. Semester (12 KP)	5. Semester (15 KP)	6. Semester (15 KP)
Voraussetzung: Einjahrige Berufserfahrung Vorausgesetzt werden Software-Entwicklungsfertigkeiten in Umfang und Tiefe wie sie in der beruflicher Praxis in einem Informatik-nahen Umfeld erworben werden	CS4171-KP12 Next Generation AI Technology 4V+4P	CS4337-KP12 Bio-Inspired Computing 6V+2P	CS4519-KP12 Intelligent Cooperative Agents 6V+2P	CS5076-KP12 Human-Centered Trustworthy AI 6V+2P	CS5995-KP30 Master Thesis AI	
		CS5071-KP12 Next Generation AI Computing and Learning 6V+2P				
Äquivalenzprüfung	1 Prüfung	1 Prüfung	2 Prüfungen	1 Prüfung		1 Prüfung

The following table describes the recommended course of study for the start of studies in the summer semester

Anrechnung der Berufserfahrung (30 KP)	1. Semester (18 KP)	2. Semester (18 KP)	3. Semester (12 KP)	4. Semester (12 KP)	5. Semester (15 KP)	6. Semester (15 KP)
Voraussetzung: Einjahrige Berufserfahrung Vorausgesetzt werden Software-Entwicklungsfertigkeiten in Umfang und Tiefe wie sie in der beruflicher Praxis in einem Informatik-nahen Umfeld erworben werden	CS4337-KP12 Bio-Inspired Computing 6V+2P	CS4519-KP12 Intelligent Cooperative Agents 6V+2P	CS5076-KP12 Human-Centered Trustworthy AI 6V+2P	CS4171-KP12 Next Generation AI Technology 4V+4P	CS5995-KP30 Master Thesis AI	
	CS5071-KP12 Next Generation AI Computing and Learning 6V+2P					
Äquivalenzprüfung	1 Prüfung	2 Prüfungen	1 Prüfung	1 Prüfung		1 Prüfung