Amendment of the Examination Regulations for the consecutive Master degree programme Comuptational Modelling Simulation

1. **§8 shall be amended as follows:**

a. §8 paragraph 1 sentence 1 shall be reworded as follows: “Project work shall demonstrate the ability to develop, implement, describe and evaluate concepts and solutions independently or jointly in a realistic practical environment.”

b. §8 para 1 sentence 2 shall be reworded as follows: “In this context, the student shall demonstrate the competence to define objectives for a larger task, to develop, evaluate and assess solutions and concepts according to scientific methodology, and to present the results of a project in a convincing and comprehensible manner in written form.”

c. In the first sentence of §8 para 3 sentence 1, the words “15 weeks” shall be replaced by “200 hours”.

d. In §8 para 4, the last sentence “if parts of the project work are completed orally, § 9 para 4 sentence shall apply accordingly” shall be deleted.

2. In §10 para 1 sentence 1, following the word “prepare”, the words “and present” shall be replaced by the words “present orally and discuss technically”.

3. **§11 shall be amended as follows:**

a. In §11 para 1 sentence 3, the word “colloquia” shall be deleted.

b. §11 para 2 no. 1 shall be repealed.

c. Nos. 2, 3, 4 and 5 shall become nos. 1, 2, 3 and 4.

d. In the new no.1, the words “and document comprehensibly” shall be inserted after the word “set out”.

4. **§25 shall be amended as follows:**

a. In §25 para 1, “the compulsory modules of the chosen track” shall be added to “the compulsory elective modules of the chosen track.”

b. The following nos. shall be added after §25 para 3 no. 6:
“7. Foundations of Artificial Intelligence
8. Knowledge Models
9. Database Management
10. Scientific Software Engineering”

c. Following §25 para 4 no. 5, no. 6 shall be added: “6. Logical Modelling”.

Attachment 1: Compulsory Modules in the Selectable Tracks

Computational Life Science	
CMS-CLS-IBC	Introduction to Biochemistry
CMS-COR-SED*	Statistical Principles and Experimental Design
CMS-CLS-ABI	Applied Bioinformatics
CMS-CLS-MOS	Modeling and Simulation in Biology
CMS-CLS-ELG	Computational Life Science Basics
CMS-CLS-TEA	Computational Life Science Teamproject
CMS-CLS-ELV	Computational Life Science Advanced

Computational Mathematics	
CMS-CMA-ELG	Computational Mathematics Basics
CMS-CMA-FEM	Finite Element Methods
CMS-CMA-MODSEM	Modeling Case Studies
CMS-CMA-PROJ	Computational Mathematics Project
CMS-CMA-ELV1	Computational Mathematics Advanced
CMS-CMA-ELV2	Computational Mathematics Applications
Visual Computing	
CMS-VC-ELG	Visual Computing Basics
CMS-VC-ELV1	Visual Computing Advanced
CMS-VC-ELV2	Visual Computing Applications
CMS-VC-TEA	Visual Computing Teamproject
Computational Modelling in Energy Economics	
CMS-EE-EPM	Electric Power Markets
CMS-EE-EL1	Computational Modelling in Energy Economics Basics
CMS-EE-SCEE	Case Studies in Energy Economics
CMS-EE-LSEE	Literature Studies in Energy Economics
CMS-EE-REEP	Resource Economics and Environmental Policy
CMS-EE-EL2	Computational Modelling in Energy Economics Advanced
Computational Engineering	
CMS-CE-FEM	Engineering Finite Element Methods
CMS-CE-EL1	Computational Engineering Basics
CMS-CE-AT	Advanced Topics in Finite Element Analysis
CMS-CE-MBD	Multibody Dynamics
CMS-CE-MP	Multifield Problems
CMS-CE-CFD	Computational Fluid Dynamics
CMS-CE-EL2	Computational Engineering Advanced
Logical Modeling	
CMS-LM-BAS	Foundations of Logical Modeling
CMS-LM-MOC	Models of Computation
CMS-LM-AI	Artificial Intelligence
Choice of one module from two:	

CMS-LM-ADV	Advanced Logical Modeling
CMS-LM-TEA	Logical Modeling Teamproject

* Accordingly not selectable in the basic education