Technische Universität Dresden
Faculty of Computer Science

The present English version of the study regulations is a non-official version. It has no legal binding effect. Only the German version is legally binding.

Study regulations for the consecutive master program
Computational Logic

as per (date after being signed by the rector)

Pursuant to § 36 of the 'Law Governing the Universities in the Free State of Saxony' (Sächsisches Hochschulfreiheitsgesetz – SächsHSFG) of December 10, 2008, last amended on January 1, 2013, the Technische Universität Dresden enacts the following study regulations as a statute.

Summary

§ 1
Area of applicability

(1) Based on the Sächsisches Hochschulfreiheitsgesetz and the examination regulations, these study regulations define the objectives, the contents, the structure and the order of events during studies within the consecutive master program *Computational Logic* at the Technische Universität Dresden.

§ 2
Aims of the program

(1) Graduates of the master program *Computational Logic* have been trained to analyze problems in the subject area of Computational Logic and to develop sustainable solutions on the basis of such an analysis. On the one hand, they have acquired a sound fundamental knowledge of the various technical directions involved in the program and, on the other hand, they are able to apply this knowledge in real-world scenarios. They master the design, development, operation and maintenance of knowledge-based systems, are familiar with formal methods and techniques, and are able to specify and implement complex systems, as well as to analyze and to reason about their behavior by means of mathematical methods.

(2) Thanks to their broad technical knowledge in the area of Computational Logic the graduates will be able to master in their professional life – after a suitable period of initiation – a large variety of complex tasks in the fields of computer science and artificial intelligence.

§ 3
Admission requirements

(1) The admission requirements of the master program *Computational Logic* are defined in the admission regulations (EFO).

(2) Whether the conditions required in section (1) are satisfied with be decided by the admission committee responsible for the master program.

(3) Students will be immatriculated at the Technische Universität Dresden according to the rules in vigour.

§ 4
Beginning and duration of studies

(1) Students can commence studies in the winter semester.

(2) During the standard period of study, students are required to accomplish face-to-face studies, private study and the Master examination.

§ 5
Types of teaching and learning

(1) The academic material is organized in a modular structure. In the individual modules, the academic contents is communicated, consolidated and deepened in lectures, tutorials, seminars, language courses, projects and also in private study.

(2) Lectures shall introduce to the subject matter of the modules. Tutorials allow for the application of the lectures' contents in exemplary subareas. Seminars are designed to develop the students' skills to gather information about a selected task field from literature and other sources, to orally present their findings, to discuss them within a group and/or to elaborate them in written form. Language courses convey and train knowledge, skills and competences of the respective language; they develop communicative and inter-cultural competence in academic and professional context as well as in every-day situations. In projects the students analyze easy scientific tasks, relate them to the state of the art in the respective scientific area, solve the tasks, and present the tasks, the state of the art as well as the discovered solutions in a talk followed by a discussion. In private study the students repeat and deepen the lectures' contents.

§ 6
Structure and organisation of the program

(1) The program has a modular structure. The courses are distributed over three semesters. During the fourth semester, students work on the Master thesis and its defense.

(2) The program comprises 6 mandatory (basic) modules and 3 elective (advanced) modules, which allow for the choice of a specialization according to the student's interest. The student has the choice between the following specializations:

- Knowledge Representation

- Principles of Inference

- Theoretical Computer Science and Logic

- Computer Science Engineering

(3) The description of the modules (Appendix 1) contains contents and qualification aims, the types of teaching and learning used, prerequisites, usability, frequency, amount of work involved and duration of the various modules.

(4) Classes are held in English.

(5) The appropriate distribution of the modules across the semesters, the observance of which allows the completion of studies within the standard period of study are listed in the curriculum plan attached (Appendix 2).

(6) The elective (advanced) modules offered and the curriculum plan can be modified by the faculty council on suggestion of the academic committee. The currently offered elective (advanced) modules shall be communicated by the faculty in the known manner as the semester starts. The modified curriculum plan is binding for those students to whom the faculty communicates it in the known manner when they begin their studies. On application the examination committee may decide on exceptions to sentence 3.

§ 7
Course contents

(1) The major focus of the master program *Computational Logic* is on research.

(2) The mandatory (basic) modules comprise topics such as:

- propositional and predicate logic as well as basic techniques of logic-based systems

- logic programming and programming with constraints

- analysis of logic-based systems in view of aspects relevant for computer science,

- theory and applications of integrated logic-based systems

- selected current and special subjects of logic-based systems

(3) The elective (advanced) modules offered comprise modules on topics in knowledge processing, theoretical computer science and logic, inference and system-oriented computer science.

§ 8
Credits

(1) ECTS credits document the average student workload and assess a student's individual progress. One credit is equivalent to a workload of 30 hours. As a rule, students can earn 60 credits per academic year, i.e. 30 credits per semester. A total of 120 credits can be earned through lectures and other types of courses, type and number of hours of which are described in the module descriptions, academic achievements and assessments, and also through the Master thesis and its defense.

(2) The module descriptions (Appendix 1a-b) tell how many credits can be obtained with a module. Credits are obtained if the module examination has been passed. § 26 of the examination regulations remains unaffected.

§ 9
Student advisory service

(1) The general student advisory service is carried out by the central student advisory service of the TU Dresden, and covers all questions concerning study possibilities, terms of enrolement

and general student affairs. The subject-related advisory service throughout a student's studies is the responsibility of the Faculty of Computer Science. In particular, this subject-related advisory service helps students to tailor and plan their studies.

(2) As the third semester starts, students who are not showing a proof of performance by that time, are obliged to contact the subject-related advisory service.

§ 10
Adaptation of module descriptions

(1) A simplified procedure is used to adapt module descriptions to changed conditions to ensure the organizational conditions for the program. The fields "module name", "contents and qualification aims", "types of teaching and learning", "prerequisites for earning credits" and also "credit and grades" cannot be modified.

(2) In the simplified procedure, on suggestion of the Academic Committee the Faculty Council decides upon the modification of the module description. The modifications shall be communicated by the faculty in the known manner.

§ 11
Coming into force and public notice

These study regulations become effective as of October 1, 2013, and are publicly announced in the Official Notifications of the Technische Universität Dresden.

Issued on the basis of the decision of the Faculty Council of the Faculty of Computer Science made on July 27, 2013, and the approval of the Rectorial Board of #date#.

Dresden, #date of issue#

The Rector
of the Technische Universität Dresden

Prof. Dr.-Ing. habil. DEng/Auckland Hans Müller-Steinhagen

Appendix 1a

Descriptions of the mandatory (basic) modules

See http://www.computational-logic.org/content/study/master/modules13.php?id=43

Appendix 1b

Descriptions of the elective (advanced) modules

See http://www.computational-logic.org/content/study/master/modules13.php?id=43

Appendix 2

Curriculum plan

Module no.	Name of module/ Master Thesis	1. Sem. L/T/P/S	2. Sem. L/T/P/S	3. Sem. L/T/P/S	4. Sem. L/T/P/S	Cr
MCL-F	Foundations	4/4/0/0, 2E				9
MCL-LCP	Logic and Constraint Programming	3/4/0/0, 1E				9
MCL-AL	Advanced Logics		4/2/0/0, 1E			8
MCL-ILS	Integrated Logic Systems		3/3/0/0, 1E			8
MCL-PCS	Presentation and Communication Skills		0/0/0/2, 1E	1/1/0/2, 1E		4
MCL-P	Project			0/0/4/0, 1E		16
1)	Elective module 1	2) 1E				12
1)	Elective module 2		2) 1E			12
1)	Elective module 3			2) 1E		12
	Master Thesis (M.T.)				M.T.	30
Cr		**30**	**30**	**30**	**30**	**120**

Explanations:

L Lecture

T Tutorial

P Practical

S Seminar or language course

E Examination

Cr Credits

1) The advanced modules 1-3 must be selected from the ones described in Appendix 1b.

2) The courses, their type, size and design are either specified in the description of the modules in Appendix 1b or will be announced in the known manner at the beginning of every academic year via the course offer of the Faculty of Computer Science.

Translations of German concepts used in the original document.

Absatz	section
Antrag	application
Eignungsfeststellungsordnung	admission regulations
Fakultaetsrat	faculty council
Leistungsnachweis	proof of performance
Leistungspunkt	credit
Master-Studiengang	master program
Modulpruefung	module examination
Pflichtmodul	mandatory (basic) module
Pruefungsausschuss	examination committee
Pruefungsordnung	examination regulations
Regelstudienzeit	standard period of study
Selbststudium	private study
Studienablaufplan	curriculum plan
Studienberatung	student advisory service
Studienkommission	academic committee
Studienordnung	study regulations
Wahlpflichtmodul	Elective module
Zentrale Studienberatung	central student advisory service
Zugangsvoraussetzung	admission requirement
Zulassungsausschuss	admission committee