# **Examination Regulations** for the Consecutive Master's Degree in Computer Science

of

In accordance with Section 34 Paragraph 1 Sentence 1 of the Law on the Autonomy of Higher Education Institutions in the Free State of Saxony (Saxon Higher Education Autonomy Act – SächsHSFG), as published on page 3 of the Saxon Gazette of Laws and Ordinances (SächsGVBI) on 15 January 2013 and last amended through Article 11 on 29 April 2015 (SächsGVBI p. 349, 354), the Technische Universität Dresden hereby decrees the following Examination Regulations.

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#### **Section 1: General Regulations**

# § 1 Standard Period of Study

The standard period of study for the Master's in Computer Science comprises contact hours, private study and the master's examination.

# § 2 Examination Structure

The master's examination consists of module examinations, and a master's thesis and defence. A module examination is taken at the end of a module and generally consists of an examination. Examinations are taken during the course of study.

#### § 3 Deadlines and Dates

(1) The master's examination should be taken within the standard period of study. If a master's examination has not been taken within four semesters following the end of the standard period of study, it will be marked as a fail. A failed master's examination may be reattempted once within a period of one year. After this period, it will be marked as a fail once again. A second resit must be taken on the next possible examination date; otherwise, the master's examination will be definitively marked as a fail.

(2) Module examinations should have been taken by the end of the semester indicated in the study schedule.

(3) The Technische Universität Dresden will arrange its Study Regulations and teaching to ensure all students are able to complete their coursework, examinations, master's thesis and defence within the set deadlines. Students will be informed in good time about the nature and quantity of the coursework and examinations to be completed, as well as the dates and deadlines of the same; they will also be notified in good time about the date on which they will receive the topic of their master's thesis, the submission deadline for this work, and the date on which they will have to defend it. Students will also be informed of the resit opportunity available for each module examination.

(4) Current and future deadlines cease to apply during periods of maternity and parental leave.

# § 4 General Admission Requirements and Procedures

(1) The master's examination can only be taken by students who:

- 1. are enrolled on the Master's Degree in Computer Science at the Technische Universität Dresden; and
- 2. meet the academic requirements (§ 26); and
- 3. have submitted a handwritten or word-processed declaration regarding the information contained in § 4 (4) No. 3.

(2) Students must register for examinations; they may then deregister without stating their reasons. Registration will close two weeks before oral examinations and three working days before all other types of examination. The manner and deadline of registration and deregistration will be determined by the Examination Board (*Prüfungsausschuss*) and announced at the beginning of each semester through the Faculty's usual channels. The same applies to any prerequisites for admission to examinations.

(3) Admission will be granted for students

- 1. to take an examination once they have registered for the same;
- 2. to write a master's thesis once they have requested a topic or, in the case of § 21 (3) Sentence 5, once a topic has been issued; and
- 3. to defend a master's thesis once they have achieved a mark of at least "sufficient" (4.0) in the same.

(4) Admission will be rejected if

- 1. the requirements indicated in § 4 (1) have not been met, or the procedural regulations described in § 4 (2) have not been observed; or
- 2. a student submits incomplete documentation; or
- 3. a student has definitively failed an examination required to successfully complete the Master's in Computer Science.

(5) Admission will be granted by the Examination Board. The announcement may be made publicly. The provisions set forth in § 18 (4) remain unaffected.

### § 5 Types of Examination

(1) The following types of examination may be taken:

- 1. Written examinations (§ 6);
- 2. Term papers (§ 7);
- 3. Project work (§ 8);
- 4. Oral examinations (§ 9);
- 5. Presentations (§ 10); and/or
- 6. Other examinations (§ 11).

No written examinations are held under multiple choice conditions.

(2) Depending on each module description, coursework and examinations must be completed in either German or English. In the cases mentioned in the corresponding module descriptions, students may submit an application to the Examination Board to complete coursework and examinations in English. Such applications must be made in writing up to two weeks before the examination date.

(3) If students can credibly prove they are unable to take all or part of the examinations in their intended form due to a prolonged or permanent physical disability and/or chronic illness, they may submit an application to the Chair of the Examination Board to complete examinations within an extended time frame or in an equivalent manner. A medical certificate may be requested in such cases and, in case of doubt, an official medical certificate. The same applies to any prerequisites for admission to examinations.

(4) If students can credibly prove they are unable to take examinations in their intended form due to the care they owe to their own children up to the age of 14 or their close rela-

tives, they may submit an application to the Chair of the Examination Board to complete examinations in an equivalent manner. Close relatives are children, parents, grandparents, spouses and partners. In such cases, the Chair of the Examination Board will consult with the responsible examiner and, after due consideration, decide how the examinations are to be taken. The following are considered suitable compensation measures: extended or postponed deadlines; the use of other media; the use of other examination rooms within the university; and alternative examination dates. The same applies to any prerequisites for admission to examinations.

## § 6 Written Examinations

(1) In written examinations, students should demonstrate their ability to use their necessary basic knowledge and the common methods of the subject to solve tasks and deal with topics within a limited time frame and with a limited amount of resources.

(2) If students have to pass certain written examinations to continue their studies, these will generally be marked by two examiners, especially in the case of final resits. The final grade will be calculated as the average of both individual marks, as described in § 12 (1). The marking process should not take longer than four weeks.

(3) The duration of each written examination is specified in the corresponding module description; written examinations must not last under 90 minutes or over 180 minutes.

# § 7 Term Papers

(1) By writing term papers, students should demonstrate their ability to use specialist literature and other resources to work on selected questions within a limited time frame. Students should also prove they possess the basic techniques for scientific work.

(2) The provisions set forth in § 6 (2) also apply to term papers.

(3) The amount of time granted for term papers must not exceed 120 hours. The specific time frame is indicated in the corresponding module description.

#### § 8 Project Work

(1) During project work, students can usually demonstrate their ability to work in a team, and especially to develop, implement and present their ideas. They should also demonstrate their ability to define goals for a larger task while developing interdisciplinary approaches and ideas.

(2) The provisions set forth in § 6 (2) also apply to project work.

(3) The amount of time granted for project work is indicated in the corresponding module description and must not exceed 24 weeks.

(4) If project work is carried out in groups, the individual contributions of each member must be clearly visible and assessable in accordance with the requirements indicated in § 8 (1).

# § 9 Oral Examinations

(1) In oral examinations, students should demonstrate their familiarity with the assessed topic by understanding and responding to specific questions within this context. Students should also prove they have the basic knowledge expected at this level of study.

(2) Oral examinations are generally taken as individual assessments before a panel of at least two examiners, or before one examiner in the presence of an observer who has knowledge of the subject area (§ 19).

(3) Oral examinations last between 15 and 60 minutes. The specific time frame is indicated in the corresponding module description.

(4) The essential subjects and results of oral examinations must be detailed in a log. Students must be given their results at the end of the oral examination.

(5) If students wish to take an examination at a later date, they should be allowed to sit in on another candidate's examination, provided there is enough room and the candidate does not object. However, they are not allowed to listen to feedback or the announcement of examination results.

#### § 10 Presentations

(1) By delivering presentations, students should demonstrate their ability to prepare and present specific issues. The scope and structure of presentations are determined for each assignment.

(2) The provisions set forth in § 6 (2) Sentence 1 and 2 apply accordingly. One of the examiners should be the teacher responsible for the course in which the presentation is assigned and delivered.

(3) The provisions set forth in § 9 (4) apply accordingly.

#### § 11 Other Examinations

(1) Students may have to take other types of controlled examination that demand the same levels of performance, in which case they will be assessed according to the same standards; such examinations are detailed in each module description, including their requirements and duration. Other types of examination include simulations, presentations with follow-up discussions, and multimedia presentations.

(2) Simulations allow students to demonstrate their linguistic and social skills in various situations, such as negotiations, conferences and job interviews. Presentations with follow-

up discussions allow students to summarise the results of their independent research before partaking in a follow-up discussion with specialists. Multimedia presentations allow students to display the results of their independent work with the help of multimedia resources.

(3) The provisions set forth in § 6 (2) also apply to other written examinations. The provisions set forth in § 9 (2) and (4) also apply to other non-written examinations.

# § 12 Evaluation of Examinations, Calculation and Weighting of Grades, Announcement of Examination Results

(1) The grading of individual examinations is determined by the responsible examiners. The following grades must be used:

1 = very good	<ul> <li>an outstanding performance;</li> </ul>
2 = good	<ul> <li>a performance that significantly exceeds the average</li> </ul>
	requirements;
3 = satisfactory	<ul> <li>a performance that meets the average requirements;</li> </ul>
4 = sufficient	<ul> <li>a performance that meets the requirements despite its shortcom-</li> </ul>
	ings;
5 = insufficient	<ul> <li>a performance that fails to meet the requirements due to signifi- cant shortcomings.</li> </ul>

In order to differentiate further between individual grades, they may be raised or lowered by 0.3 to intermediate values; however, grades of 0.7, 4.3, 4.7 and 5.3 cannot be awarded. Certain individual examinations may be exceptionally marked as a mere "pass" or "fail" (ungraded examinations) if this is indicated in the corresponding module description. Ungraded examinations marked as a "pass" do not count towards further grade calculations; ungraded examinations marked as a "fail" count as a grade of 5.0 ("insufficient").

(2) Module grades are calculated as the weighted average of grades achieved in module examinations; the weighting is indicated in each module description. Only the first decimal place is taken into account; all other decimal places are deleted without rounding. Module grades are awarded according to the following averages:

1.5 and below	= very good
from 1.6 to 2.5	= good
from 2.6 to 3.5	<ul> <li>satisfactory</li> </ul>
from 3.6 to 4.0	= sufficient
4.1 and above	= insufficient

(3) If the only examination taken throughout a module is ungraded, the module will be marked as a mere "pass" or "fail" depending on the mark achieved in the examination (ungraded module examination). Ungraded module examinations do not count towards further grade calculations.

(4) An overall grade is calculated for the master's examination. The overall grade of the master's examination is calculated based on the final grade achieved in the master's thesis (with 60% weighting) and the grades achieved in the modules described in § 27 (1), which are weighted according to their credits. The final grade of the master's thesis is made up of the grade awarded for the master's thesis itself (with 75% weighting) and the grade awarded for the master's thesis (with 25% weighting). The provisions set forth in § 12 (2) Sentence 2 and 3 also apply to the calculation of the overall and final grades.

(5) The overall grade of the master's examination is also indicated as a relative grade ac-

cording to the ECTS assessment scale.

(6) The arrangements for the announcement of examination results will be communicated to students through the faculty's typical channels.

# § 13 Absence, Withdrawal, Cheating and Breach of Regulations

(1) Examinations will be marked as "insufficient" (5.0) or "failed" if students fail to attend a compulsory examination or withdraw from the same without a valid reason. The same applies if an examination is not completed within the specified time frame.

(2) The alleged reason for the absence or withdrawal must be communicated to the Examination Office in a credible written statement. If students claim illness, they must usually substantiate their claim with a medical certificate and, in case of doubt, an official medical certificate. Whenever illness prevents a student from punctually registering for their first attempt at a particular examination, taking resits, attending examinations or meeting examination deadlines, the illness of a child under their sole custody will be considered equivalent to their own illness. If such grounds are acknowledged, a new examination date will be scheduled. In such cases, any existing examination results should be credited. The Examination Board grants withdrawals and acknowledges grounds for absence.

(3) If students attempt to influence the result of an examination by cheating or using unauthorised aids, the examination will be marked as "insufficient" (5.0). Ungraded examinations will be marked as "failed". If students disrupt orderly examination proceedings, the examiner or invigilator present may prevent such students from continuing the examination; in such cases, the examination will be marked as "insufficient" (5.0) or "failed". In serious cases, the Examination Board may even prevent such students from taking any further examinations.

(4) The provisions set forth in § 13 (1 - 3) also apply to any prerequisites for admission to examinations, as well as to the master's thesis and defence.

# § 14 Passes and Fails

(1) A module examination will be considered passed if the module grade is at least "sufficient" (4.0) or the ungraded module examination is marked as a "pass". Once a module examination has been passed, the credits indicated in the module description will be awarded.

(2) The master's examination will be considered passed if passes have been awarded in the module examinations, master's thesis and thesis defence. The master's thesis and its defence will be considered passed if they have been awarded a grade of at least "sufficient" (4.0).

(3) A module examination will be considered failed if the module grade is below "sufficient" (4.0) or the ungraded module examination is marked as a "fail".

(4) A module examination will be considered definitively failed if the module grade is below "sufficient" (4.0) or the ungraded module examination is marked as a "fail" and cannot be retaken. The master's thesis and its defence will be considered definitively failed if they have been awarded a grade below "sufficient" (4.0) and cannot be retaken.

(5) The master's examination will be considered (definitively) failed if either a module examination, the master's thesis or its defence has been (definitively) failed. The provisions set forth in § 3 (1) remain unaffected.

(6) If students have failed a module examination, or if their master's thesis or defence has been awarded a grade below "sufficient" (4.0), they will be informed whether, how and when the work concerned can be reattempted.

(7) If students fail their master's examination, they may submit the necessary evidence and proof of de-registration alongside an application to receive a certificate detailing the examinations they have taken and the corresponding grades – and any missing examinations – and indicating that the master's examination has not been passed.

#### § 15 Free Attempts

(1) If the admission requirements are met, module examinations may also be taken before the semesters specified in the study schedule (free attempts).

(2) If students pass a module examination or achieve a grade of at least "sufficient" (4.0) in a free attempt, they may submit one resit application for the next regular examination date. In such cases, the best grade will count. The form and deadline of such applications will be determined by the Examination Board and announced through the Faculty's usual channels. Once the next regular examination date or application deadline has passed, students may no longer improve their grade. If students resit a module examination to improve their grade, examinations that have been awarded a grade of at least "sufficient" (4.0) in a free trial may be credited upon request. If an examination is marked as a "pass" in a free attempt, it will be officially recognised.

(3) If a module examination is failed in a free attempt, it will not be considered taken. Examinations that have been awarded a grade of at least "sufficient" (4.0) or a "pass" will be taken into account during the following round of examinations. If students take the opportunity to improve their grades, as described in § 15 (2), the better of the two grades will be taken into account.

(4) In addition to the provisions set forth in § 3 (4), if students have to interrupt their studies due to a prolonged period of illness suffered by themselves or a child under their sole custody, these periods will not be taken into account when setting the deadlines for free attempts.

# § 16 Module Examination Resits

(1) Failed module examinations may be retaken once within a year of the first attempt. This period will begin once the module examination has been announced as failed. After this period, module examinations will be marked as a fail once again.

(2) Second resits must be taken on the next possible examination date. After this date, module examinations will be marked as a definitive fail. Further resits will not be permitted.

(3) If a failed module examination consists of several assessments, the only assessments to be retaken will be those awarded a grade below "sufficient" (4.0) or marked as a "fail".

(4) Passed module examinations may only be retaken in the case described in § 15 (2), in which case all assessments will be retaken.

(5) Failed attempts to pass a module examination from the same degree programme or other courses of study will be taken into account.

#### § 17

# Recognition of Coursework and Examinations, Study Periods and Qualifications Achieved Outside Higher Education

(1) Coursework and examinations completed at a higher education institution will be recognised upon request, unless there are significant differences with regard to the acquired skills. Consideration will also be given to any further agreements concluded by the Technische Universität Dresden, the German Rectors' Conference (HRK) and the Standing Conference of the Ministers of Education and Cultural Affairs (KMK), as well as any agreements ratified by the Federal Republic of Germany.

(2) Qualifications obtained outside higher education will be recognised upon request, provided they are of an equivalent standard. They will be deemed equivalent if their content, scope and requirements are essentially the same as parts of the Master's Degree in Computer Science at the Technische Universität Dresden. No schematic comparison will be made; the courses will be considered and evaluated as a whole. Qualifications obtained outside higher education may only replace 50% of the degree programme at most.

(3) Coursework and examinations completed on the same degree programme in the Federal Republic of Germany will be officially recognised.

(4) Coursework and examinations completed at a higher education institution may be recognised despite considerable differences if their content and qualification objectives have the same overall sense and purpose as an optional module on this degree programme and thereby constitute a structural equivalent. A student's transcript will display the actual credits and examinations that have been taken.

(5) If coursework and examinations completed at a higher education institution are recognised or recorded as described in § 17 (1), (3) and (4), or if qualifications obtained outside of higher education are recognised as described in § 17 (2), the corresponding study periods will also be officially recognised. If the grading systems are comparable, grades will be transferred and included in the overall grade calculation. If the grading systems are incomparable, the marks will be recorded as a "pass" but excluded from the overall grade calculation. The recognition of credits and examinations may be indicated in transcripts.

(6) The recognition of credits and examinations will be determined by the Examination Board. Students must submit the necessary documentation. Once this has been submitted, the recognition process must not last over one month. If credits or examinations are not recognised, the provisions set forth in § 18 (4) Sentence 1 will apply.

### § 18 Examination Board

(1) An Examination Board will be formed for the Master's Degree in Computer Science; this will be responsible for organising and holding examinations and performing the tasks specified in these Examination Regulations. The Examination Board will be made up of three university lecturers, a research associate and a student. With the exception of the student, the members will serve on the Board for a period of three years. The student member will serve for one year.

(2) The Chair, deputy chair, and the other members and their deputies will be appointed by the Faculty Board (*Fakultätsrat*) in the Faculty of Computer Science; the student member will be nominated by the Student Representative Council. The Chair will generally direct the activities of the Examination Board.

(3) The Examination Board will ensure that the provisions set forth in these Examination Regulations are observed. It will regularly report to the Faculty on the development of examination and study periods, including the actual time spent working on master's theses and the distribution of grades in modules and overall. This report will be published by the Technische Universität Dresden in a suitable format. The Examination Board will make suggestions for the improvement of the Examination Regulations, Study Regulations, module descriptions and study schedule.

(4) Negative decisions must be communicated to the student concerned in writing, stating the reasons for the decision and detailing the appeals procedure. The Examination Board will act as the examining authority when determining the validity of appeals within a reasonable time frame and issuing notifications of appeal.

(5) The members of the Examination Board will be entitled to attend examinations and the thesis defence.

(6) The members of the Examination Board and their deputies will be subject to official secrecy. If they are not employed as civil servants, the Chair will commit them to secrecy.

(7) On the basis of the decisions made by the Examination Board, the Examination Office (*Prüfungsamt*) will organise examinations and manage examination records.

## § 19 Examiners and Observers

(1) The Examination Board will appoint examiners; these will be university lecturers and other persons authorised to examine under state law. The only persons appointed as observers will be those who have successfully completed the relevant master's examination or at least a comparable examination.

(2) Students may propose the supervisor for their master's thesis and the examiners for their oral examinations and thesis defence. Such proposals will not constitute an entitlement.

(3) The names of the examiners should be shared with students in good time.

(4) The provisions set forth in § 18 (6) also apply to examiners and observers.

#### § 20 Purpose of the Master's Examination

By passing the master's examination, students will obtain the professional qualification facilitated through the degree programme. This will establish that students have a solid understanding of the subject matter, that they are able to apply scientific methods and knowledge, and that they have acquired the extensive specialist knowledge required for their transition into the professional arena.

#### § 21

# Purpose, Topic, Submission, Evaluation and Repetition of the Master's Thesis and Thesis Defence

(1) The master's thesis should demonstrate that students are capable of using scientific methods to independently work on complex problems in their field of study within a specified time frame.

(2) The master's thesis may be supervised by a professor or another person authorised to examine students under the Saxon Higher Education Autonomy Act, provided this person works in the Faculty of Computer Science at the Technische Universität Dresden. An authorised examiner from outside the faculty may only supervise a master's thesis with the permission of the Chair of the Examination Board.

(3) The topic of the master's thesis will be issued by the Examination Board. The topic and date of issue must be recorded. Students may request their own topics. Following their request, the Examination Board will arrange for the topic of their master's thesis to be issued in good time. Topics will be officially issued by the Examination Board – at the latest – at the beginning of the semester following the completion of their last module examination.

(4) A topic may only be rejected once, and this must be done within two months of its issue date. If students are reattempting their master's thesis, however, the topic may only be rejected if they did not make use of this option when writing their first thesis. If students reject their topic, they will be immediately issued a new one in accordance with § 21 (3) Sentence 1 to 3.

(5) The master's thesis may also be submitted as group work, provided the individual contributions of each student meet the requirements specified in § 21 (1) and can be clearly distinguished from one another and assessed as individual pieces of work through the indication of sections, page numbers or other objective criteria that allow a clear distinction to be made.

(6) The master's thesis must be written in German – or, following a successful request made to the Examination Board, in English – and punctually submitted to the Examination Office in two typed and bound copies, alongside a digital copy saved on a suitable data carrier; the submission date must be recorded. When submitting their master's thesis, students must declare in writing that they have completed their work – or, in the case of group work, their indicated share of the work – on their own and without the help of anything other than the indicated sources and resources.

(7) The master's thesis will be marked individually by two examiners according to the system described in § 12 (1) Sentence 1 to 3. One of the examiners should be the thesis supervisor. The marking process should not take longer than two weeks.

(8) The grade awarded for the master's thesis will be calculated as the average of the grades awarded by each examiner. If the grades awarded by each examiner differ by over two levels, the definitive grade will only be the average of each grade if both examiners agree to this. If the examiners cannot reach an agreement, the Examination Board will have the master's thesis marked by a further examiner. The grade awarded for the master's thesis will then be calculated as the average of all three individual marks. The provisions set forth in § 12 (2) Sentence 2 and 3 apply accordingly.

(9) If one examiner awards a grade of at least "sufficient" (4.0) while the other examiner awards a grade of "insufficient" (5.0), the Examination Board will have the master's thesis marked by a further examiner. This will determine whether the master's thesis has been passed or failed. If a pass is awarded, the final grade of the master's thesis will be calculated as the average of the individual pass marks; if a fail is awarded, the final grade will be calculated lated as the average of the individual fail marks. The provisions set forth in § 12 (2) Sentence 2 and 3 apply accordingly.

(10) If a master's thesis is awarded a grade below "sufficient" (4.0), it may be reattempted once within a year.

(11) Students must publicly explain and defend their master's thesis before the supervisor of their work (in his/her capacity as an examiner) and an observer. Further examiners may be consulted. The provisions set forth in § 21 (10), § 9 (4) and § 12 (1) Sentence 1 to 3 apply accordingly.

#### § 22 Transcript and Master's Degree Certificate

(1) Students will promptly receive a transcript to confirm they have passed their master's examination; this will be issued within four weeks if possible. The transcript for the master's examination will include the grades achieved in the modules outlined in § 27 (1), the topic and final grade of the master's thesis, the thesis supervisor, and the overall grade. The grades achieved in each examination will be indicated in a supplement to the transcript. Students may also request the inclusion of any grades achieved in additional modules and the amount of time taken to successfully complete the master's examination.

(2) Students will receive their transcript alongside a master's degree certificate bearing the same date. This will certify the awarding of the master's degree. Master's degree certificates will be signed by the Rector and the Chair of the Examination Board, and they will bear the seal of the Technische Universität Dresden. Students will also be given English translations of their certificate and transcript.

(3) Transcripts will bear the date of a student's final examination, as defined in § 14 (2). They will be signed by the Chair of the Examination Board and the Dean of the Faculty of Computer Science, and they will bear the seal of the Technische Universität Dresden.

(4) The Technische Universität Dresden will issue a Diploma Supplement (DS) in accordance with the "Diploma Supplement Model" of the European Union / Council of Europe / UNESCO. The current version of the text agreed between the KMK and HRK will be used to describe the national higher education and training system (DS Section 8).

## § 23 Invalidity of the Master's Examination

(1) If students have cheated during an examination and this is only discovered once their transcript has been issued, the grade achieved in that examination may be altered in accordance with § 13 (3). The Examination Board may declare a module examination as "insufficient" (5.0) and the master's examination as "failed". The same applies to ungraded module examinations, the master's thesis and the thesis defence.

(2) If students have taken an examination despite not meeting the requirements – without intending to cheat – and this is only discovered once their transcript has been issued, this shortcoming will be remedied by awarding a pass. If students have intentionally taken an examination despite not meeting the requirements, the Examination Board may declare the module examination as "insufficient" (5.0) and the master's examination as "failed". The same applies to ungraded module examinations, the master's thesis and the thesis defence.

(3) Students will be given the opportunity to comment before a decision is made.

(4) Invalid transcripts and their translations must be collected by the Chair of the Examination Board and, if necessary, reissued. If the master's examination has been declared "failed" due to cheating, invalid transcripts must be collected alongside the master's degree certificate, all translations and the Diploma Supplement. The decisions described in § 23 (1) and § 23 (2) Sentence 2 and 3 can no longer be made five years following a transcript's issue date.

#### § 24 Access to Examination Records

In the year following the end of the examination process, students may submit a request to gain prompt access to their written examination papers, corresponding examiner reports and their examination records.

# Section 2: Subject-Specific Regulations

## § 25 Duration, Structure and Scope of the Degree Programme

(1) The standard period of study described in § 1 runs over 4 semesters.

(2) The degree programme is structured in modules and concluded with the master's thesis and defence.

(3) Once students have passed the master's examination, they will have obtained a total of 120 credits in their modules, master's thesis and defence.

# § 26 Academic Requirements for the Master's Examination

Coursework may be requested as a prerequisite for admission to examinations. Their number, type and structure are specified in module descriptions, and the number of resit opportunities may also be limited. Students must have achieved a grade of at least "sufficient" (4.0) or a "pass" in the examinations taken in their chosen introductory modules before receiving a topic for their master's thesis. Students must have obtained a grade of at least "sufficient" (4.0) in their master's thesis before their defence of the same.

# § 27 Subject, Nature and Scope of the Master's Examination

(1) The master's examination comprises all examinations taken in core modules and optional modules, as well as the master's thesis and defence.

(2) The core modules are:

- 1. Research and Development in Computer Science; and
- 2. General Skills in Computer Science.

(3) The optional modules are:

- 1. the basic modules
  - a) Applied Computer Science;
  - b) Artificial Intelligence;
  - c) Software and Web Engineering;
  - d) System Architecture;
  - e) Computer Engineering;
  - f) Theoretical Computer Science;
  - g) Graphic Data Processing;
  - h) Non-IT Applications
- of which three must be chosen; and
- 2. the advanced modules
  - a) Advanced Applied Computer Science;
  - b) Advanced Artificial Intelligence;
  - c) Advanced Software and Web Engineering;
  - d) Advanced System Architecture
  - e) Advanced Computer Engineering;
  - f) Advanced Theoretical Computer Science;
  - g) Advanced Graphic Data Processing

of which one must be chosen to complement one of the basic modules listed from a) to g) under Number 1 above; and

3. the introductory modules

- a) Introduction to Basic Research in Computer Science and Introductory Project to Basic Research in Computer Science;
- b) Introduction to Applied Research in Computer Science and Introductory Project to Applied Research in Computer Science

of which one pair must be chosen.

(4) The required examinations assigned to each module, their nature and structure will be specified in the module descriptions. Unless otherwise stated in a module description, the subject of an examination will be the contents and skills acquired in the respective module.

(5) Students may take examinations in additional modules to those listed in § 27 (1). Such module examinations may be taken from the entire range of modules offered by the various faculties at the Technische Universität Dresden, or at a cooperating higher education institution, as determined following consultation with the candidate or examiner concerned. These do not count towards student workload or overall grades.

#### § 28 Deadline for the Submission of the Master's Thesis and the Duration of the Thesis Defence

(1) Students will be given 22 weeks to complete their master's thesis; they will obtain 29 credits. Supervisors will define the topic, tasks and scope of the master's thesis to ensure that the submission deadline can be met. The Examination Board may extend the submission deadline by a maximum of 13 weeks in exceptional cases on the basis of a substantiated request; this will have no bearing on the amount of credits obtained.

(2) The defence of the master's thesis lasts 60 minutes. 1 credit point is awarded.

# § 29 Master's Degree

Once students have passed the master's examination, they will be awarded with the title of "Master of Science" (or "M.Sc." for short).

# Section 3: Final Provisions

#### § 30 Entry into Force and Publication

These Examination Regulations will enter into force on 1 October 2010 and will be published in the Official Bulletin of the Technische Universität Dresden.

These Examination Regulations have been issued on the basis of the Resolution of the Faculty Board of Computer Science of 27 September 2010 and the Approval of the Rectorate of 25 November 2014.

Dresden,

# The Rector of the Technische Universität Dresden

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