

Technische Universität Dresden
Department of Computer Science

**Examination Regulations
for the International Master's Program in Computational Engineering
at the Technische Universität Dresden**

As of 01/06/2004

On the basis of §24 of the „Gesetz über die Hochschulen im Freistaat Sachsen“ (Sächsisches Hochschulgesetz – SächsHG / Saxon law on higher education in Saxony) of June 11, 1999 (SächsGVBl., p. 293 / Saxon gazette of laws and by-laws, p. 293), amended by law on June 28, 2001 (SächsGVBl., pp. 426, 428), the Technische Universität Dresden is enacting the examination regulations hereinafter called as ordinance.

I. General Regulations

§ 1 Academic Degree

The Master's examination constitutes the postgraduate certificate, qualifying for profession as well as research, of the international Master's program in Computational Engineering. Upon successful passing of the Master's examination, the Technische Universität Dresden will award the academic degree of "Master of Computer Science" (abbr.: M.C.S.). The certificate and its English translation will include an annotation stating that the academic degree has been acquired in the international Master's program in Computational Engineering.

§ 2 Standard Period of Study, Program Structure, Scope of Course Offerings

(1) The standard period of study is two years (4 semesters). Students who have acquired the necessary prerequisites according to § 3 Sec. 1, No. 2 of the associated Conditions of Study at a German University will usually be required to spend one semester of their standard period of study at a university abroad. The examination regulations at hand and the associated Conditions of Study will guarantee that the studies, including examinations, can be completed within the standard period of study.

(2) The course offerings span three semesters. They consist of classes (lectures, tutorials, seminars, labs) organized in modules with a total scope of 90 ECTS points (credits; abbr.: cr). The fourth term is intended to be used for the writing of the Master's thesis.

(3) The course of studies will conclude with the Master's examination.

§ 3 Structure of Examinations, Examination Deadlines

(1) The Master's examination (§ 16) consists of the module examinations, the Master's thesis and its defense. Module examinations consist of several examination tasks; however, they may also consist of just one task. Examination performances can be delivered in oral or in written form (§§ 7 – 10). As a rule, the examination language is English. Students are allowed to take oral exams in German.

(2) Examination performances will usually be delivered concomitantly during one's studies at the end of the respective course. Alternative examination performances can be delivered differing from that rule. Single modules may conclude with a comprehensive examination covering contents of several classes. The successful progress in the course of study will be measured by the amount of ECTS points received for passed module examinations.

(3) The candidate has to register for participation in examinations within the respective deadlines that will be announced by the Examination Board. The deadlines for registration as well as the dates for these examinations will usually be announced via written public notice at the beginning of classes during the semester but not later than 4 weeks before the beginning of the registration process.

(4) The Master's exam has to be taken no later than by the end of the fourth semester. If the Master's exam has not been taken within four semesters after the end of the standard period of study, it will be regarded as first-time failure. A failed Master's exam can only be repeated

once within one year. After the expiration of this period, it will be regarded as ultimately failed.

§ 4 **Examination Board**

(1) The Examination Board is responsible for decisions in matters related to examinations as well as for the organisation of the exams. The Board may transfer organizational tasks to the examination office.

(2) The Board consists of one professor as chairperson, two additional university teachers with one of them being the deputy to the chairperson, an academic assistant as well as a student with all of them being members of the Department of Computer Science. The chairperson and his or her deputy are elected by the faculty council. The student will be appointed by the faculty council – in accordance with the student representatives - for one year, whereas the academic assistant and the professors will be appointed for three years. Furthermore, a deputy to the student will be appointed for one year as well.

(3) The Examination Board will ensure that the regulations in the document at hand and the associated Conditions of Study be observed. The Board arranges for the examination dates to be set and announced in due time, and they will ensure reasonable intervals between the examinations. The Board will regularly report to the faculty on developments regarding the standard period of study and examination results, and they will give advice on reforms of examination regulations and conditions of study. Furthermore, they are responsible for the disclosure of the spreading of module and final grades.

(4) The Examination Board has a quorum if two other members in addition to either the chairperson or the appointed deputy are present. Decisions are made through simple majority of the members present. Should there be a parity of votes, the chairperson's vote, in case of absence the vote of his or her deputy, will be decisive.

(5) Invitations to meetings of the Examination Board, including the respective agenda, have to be sent out in due time; minutes shall be taken. The meetings of the Examination Board are not public. The members of the Examination Board shall be sworn to secrecy by its chairperson.

(6) A candidate shall immediately receive written notification about decisions on his or her motion; in case of a decision to the disadvantage of the candidate, reasons shall be disclosed and instructions on the right to appeal will be enclosed.

(7) The members of the Examination Board are entitled to attend any examinations being taken.

§ 5 **Examiners and Assessors**

(1) The Examination Board assigns all examiners and assessors participating in the individual examinations. According to § 3 Sec. 3 and § 10 Sec. 8, a candidate may nominate examiners for the Master's thesis and oral examinations in due time; the nomination does not substantiate a claim.

(2) The examiners to be nominated may – unless urgent reasons demand a different procedure - be members or adjunct staff of the Technische Universität Dresden or other universities who are entitled to teach on their own in one of the examination subjects or in a sub-field of an examination subject. Examination performance may only be assessed by someone who owns at least the same qualification, or an equivalent, as the one to be gained by the respective examination.

(3) Only those who have themselves at least been awarded the Diplom degree in Computer Science or an equivalent degree may be nominated for examiner or, in case of oral exams, for assessor.

(4) Examiners and assessors shall be sworn to secrecy by the chairperson of the Examination Board.

§ 6

General Admission Requirements, Admission Procedures

(1) A candidate may only be admitted to the Master's examination if he or she

1. is enrolled in the Master's Program in Computational Engineering at the Technische Universität Dresden, and
2. meets the admission requirements according to § 16.

(2) In order to deliver any examination performance, the student has to register in a way to be determined by the Examination Board. The Examination Board arranges the procedure for the registration for individual examination parts and takes care of technical or organizational matters as well. The candidates are entitled to cancel their registration until up to two weeks before the examination date. This does not excuse from the deadline regulations for the taking of examinations according to § 3 Sec. 4.

(3) Admission to an examination may only be denied if

1. the requirements stated in Sec. 1 are not met or
2. the records are incomplete or
3. the candidate ultimately failed the final examinations either in the same program or, in accordance with state law, in a related program, or is currently involved in another examination procedure or
4. the candidate ultimately failed the examination by exceeding the deadlines for registering for or taking the examination or
5. the examinee lost his or her entitlement to the examination in accordance with state law.

§ 7

Forms of Examination Tasks

(1) Examination tasks can either be in the form of oral examinations (§ 8), or in the form of written examinations (§ 9) or an alternative examination task within the scope of an internship respectively, which in this case will be specified in the respective module description.

(2) If a candidate can supply plausible evidence that an examination performance cannot be delivered in part or completely in its required form due to long-term or permanent disability, the chairperson of the Examination Board has to ensure upon request that these

performances can be delivered in a form other than the one required. If necessary, the motion can be made at the same time for several or all examination parts of the Master's examination.

(3) Examinations are not public with the exception of § 8 Sec. 5 and § 10 Sec. 8.

§ 8 Oral Examinations

(1) In oral examinations, the candidates are expected to prove their ability to identify interrelations in the examination's area of study and to categorize certain questions and problems within these interrelations. Furthermore, oral examinations are used to assess if a candidate has a good command of the necessary basic knowledge.

(2) Oral examinations, which shall be taken as individual examinations, will be conducted either by one examiner with one competent assessor present or by at least two examiners (collegial examination). In the latter case, it will be a matter of principle that the candidate be questioned by one examiner only. Before deciding the grade, the examiner will hear the other examiners being present at a collegial examination.

(3) As a general rule, the duration of oral examinations is at least 15 minutes and 60 minutes at the most.

(4) For oral examinations, minutes will be taken which shall particularly focus on recording the grounds for the grade given. The candidate has to be informed about his or her grade immediately following the respective oral examination.

(5) Students who want to take the same examination at a later date shall be allowed to audit unless the candidate or one of the examiners deny their permission. However, permission to audit does not apply to consulting time or the announcement of the examination results to the candidate.

§ 9 Written Examinations

(1) In written examinations, candidates shall prove their ability to identify a problem and use common methods of the respective field to find ways to its solution within a limited amount of time and resources.

(2) As a general rule, the duration of written examinations is at least 90 minutes and 180 minutes at the most.

(3) For written examinations, minutes will be taken which shall include in particular the names of the examiners and supervisors, as well as an attendance list and the examination tasks. Written examinations, and any other written work the passing of which is a requirement for the continuation or the successful completion of one's studies, shall normally, but at least in case of a final repeat, be assessed by two examiners. The final grade will result from the arithmetic average of all individual grades. The processing time for the assessment of written examinations including the announcement of the examination results is six weeks starting the day of the examination.

§ 10 Master's Thesis

(1) The Master's thesis constitutes the examination work which concludes the academic education. It shall prove the candidate's ability to handle problems in the field of Computational Engineering or related applications independently and with scientific methods.

(2) As a general rule, the topic for the Master's thesis will be set by a professor of the Department of Computer Science, who will also be responsible for supervision during its development. For supervision, an academic assistant may be appointed. External work on one's thesis or external supervision requires the permission of the Examination Board. The candidate shall be given an opportunity to make his or her own suggestions for the topic of the Master's thesis.

(3) The topic for the Master's thesis will not be issued before the candidate's admission to the Master's examination according to § 6 and the acquirement of at least 75 of the total of 90 required cr. for the first part of the Master's examination. The topic will formally be issued by the chairperson of the Examination Board. The date of issue shall be noted down in the examination records. Upon fulfillment of the requirements stated in Sentence 1, a candidate is entitled to receive a topic for his or her Master's thesis upon request within four weeks.

(4) The Master's thesis may be submitted as a group project, provided the requirements according to Section 1 are met and the contribution to be evaluated as examination work by an individual candidate can be clearly distinguished and assessed due to indication of paragraphs, page numbers, or any other objective criteria that allow clear distinction.

(5) No more than six months shall be allocated for the writing of the Master's thesis. The responsible professor shall limit topic, task, and scope of the Master's thesis in a way that allows the observation of the deadline set for the writing of the Master's thesis. The topic may only be rejected once and only within the first two months of the allocated time; in that case, the new allocated time will again be six months. Upon the candidate's plausible request, and with permission of the responsible professor, the Examination Board may extend the allocated time in individual cases by no more than three months.

(6) The Master's thesis has to be available at the examination office in three copies by the last day of the time period allocated for its writing; otherwise, it will be considered graded with „failure“ (German grade 5.0). The date of submission shall be put on record. When submitting his or her Master's thesis, the candidate has to affirm in written form that his or her work – in case of a group project, the part labeled to be his or her contribution to the work – has been composed independently and that no other sources and means other than those specified have been used.

(7) As a general rule, the assessment in form of an opinion as well as the evaluation of the submitted Master's thesis will be done by two examiners. The supervising professor shall be one of these examiners; the other examiner will be appointed by the chairperson of the Examination Board. The final grade will result from the arithmetic average of the individual grades; should one of the grades consist of “failure” (German grade 5.0), the Examination Board will decide about the further procedure. The evaluations shall be made available to the examination office within one month of submission. Upon request, the candidate is entitled to see the evaluations; he or she shall be given the opportunity to do so one week before the defense at the latest.

(8) As a matter of principle, the Master's thesis has to be defended publicly before a board of examiners. Only those will be admitted to their defense who have acquired 90 cr. in the first part of the Master's examination according to § 16 Sec. 2. The defense can take place two weeks after submission of the thesis at the earliest; however, it should have taken place within six weeks after submission, provided the candidate is admitted to his or her defense according to Sentence 2. The board of examiners will at least consist of the supervising professor, the examiner providing the second opinion, one assessor, and, where necessary, the academic assistant appointed for supervision according to Section 2. Invitation to the defense shall be extended seven days before the defense date at the latest through public notice with all the necessary information. Record of the defense shall be taken on a form provided by the examination office. If the defense is graded with “failure” (German grade 5.0), it has to be repeated according to § 14.

(9) The Master's thesis and its defense will be graded according to § 11 Sec. 1. The grade for the Master's thesis will result from the grade for the written work with a weighting of 3 and the grade for the defense with a weighting of 1. § 11 applies accordingly.

§ 11 Examination Grading Policy

(1) The grades for all individual examinations will be determined by the respective examiners. The following grades shall be used for assessment:

1 =	superior	for superior performance;
2 =	good	for a performance that lies substantially above the average requirements;
3 =	average	for a performance that meets average requirements;
4 =	poor	for a performance that meets the requirements despite its deficiencies;
5 =	failure	for a performance that does not meet the requirements due to its significant deficiencies;

For a more differentiated assessment of a performance, interim grades shall be generated by increasing or decreasing the grade number by 0.3; however, the interim grades 0.7, 4.3, 4.7, and 5.3 are not allowed. The interim grades shall be used for the calculation of module grades according to Sec. 2 as well as of final grades according to § 17 Sec. 1.

(2) If a module examination consists of several individual examination tasks, the method for calculating the module grade from the individual examination grades shall be specified in the respective module description. The verbal equivalents for module grades are:

German Grade	Designation	ECTS Grade
For an average of up to and including 1.5	superior,	A,
For an average of above 1.5 up to and including 2.0	very good,	B,
For an average of above 2.0 up to and including 3.0	good,	C,
For an average of above 2.5 up to and including 3.5	average,	D,
For an average of above 3.5 up to and including 4.0	poor,	E,
For an average of above 4.0	failure,	FX/F.

(3) For the calculation of module grades, only the first digit after the decimal point will be considered; all other digits will be cut without truncation.

(4) For the calculation of the final grade according to § 17 Sec. 1, sections 2 and 3 apply accordingly.

(5) Module examinations are considered taken anticipatorily if this leads to the acquirement of more than 30 cr. during the first semester or more than 60 cr. until the end of the second semester. A failed anticipatory module examination counts as not taken. Examination tasks that have been graded at least with "poor" (grade 4.0) can be credited in a new examination procedure. Upon the candidate's request, passed module examinations that cover several courses according to Sentence 1 or anticipatory examinations that have been graded at least with „poor“ (grade 4.0) can be repeated at the next regular examination date in order to improve the overall grade. In these cases, the better grade will be considered.

§ 12 Withdrawal, Default, Deception, Regulations Violation

(1) If a candidate defaults an examination date without cogent reason, or if he or she withdraws without cogent reason from an examination after its start, the examination will be

considered graded with „failure“. The same applies for written examination performances that are not delivered within the allocated time.

(2) The cause accounting for withdrawal or default shall immediately be disclosed and reasonably explained to the Examination Board. In case of illness of the candidate, the presentation of a doctor's certificate, and in case of doubt of a public health officer's certificate, may be demanded. Concerning the observation of deadlines for the first-time registration for an examination, the repeat of examinations, the causes for defaulting examinations, and the observance of processing times for examinations, the illness of the candidate is tantamount to the illness of a child that is mainly under his or her care or of a relative in need of care. If the cause is accepted, a new date will be set. The examination results already available shall be credited in this case. Analogously, a new deadline for the Master's thesis shall be set.

(3) Should a candidate attempt to influence his or her examination result through deception or use of unauthorized means, or if he or she deliberately assists in a deception, the concerned examination will be considered graded with „failure“ (5.0). A candidate who intentionally disrupts the proper course of action of an examination may be excluded from the continuation of the examination – usually after previous dissuasion – by the respective examiner or supervisor in charge; in this case, the respective examination counts as graded with „failure“ (5.0). The grounds for exclusion shall be recorded in the examination minutes. In profound cases, the Examination Board may exclude the candidate from participation in further examinations.

(4) Within two weeks, the candidate may request through a well-founded written petition that the decisions according to Section 3 Sentences 1 and 2 be reviewed by the Examination Board. Incriminating decisions shall immediately be disclosed to the candidate, reasons shall be stated, and instructions on the right to appeal shall be enclosed.

§ 13 Passing, Failing

(1) The module examination is passed if the module grade is at least „poor“ (4.0). The examinations required for a module examination as well as the method for calculating the module grade from the results of the individual examinations shall be stated in the module description.

(2) The Master's examination is passed, if all module examinations have been passed and if the Master's thesis has been graded at least with „poor“ (4.0).

(3) If a candidate fails in a module examination or if his or her Master's thesis has been graded worse than „poor“ (4.0), he or she shall be informed about whether or not and if necessary to what extent and within what deadline the module examination or the Master's thesis may or has to be repeated.

(4) The Master's examination counts as first-time failure if the student fails to fully acquire all examination credits, including the second part of the Master's examination, required for the Master's degree by the end of his or her eighth semester in this program. The Master's examination may be repeated within one year. Should the Master's examination not be repeated within one year, it will count as ultimately failed.

(5) If a candidate has not passed the Master's examination, a certificate to document the examinations passed and their respective grades, the examinations still missing, and the fact that the Master's examination has not been passed may be issued upon the candidate's request and presentation of the respective proofs as well as the ex-matriculation certificate.

§ 14 Repeat of Module Examinations

(1) Failed module examinations may be repeated once. The form of the repeat examination will be determined by the examiner. The repeat of a passed examination is not permitted except as in a situation as specified under § 11 Sec. 5. Failed attempts at other universities and coequal colleges / academies in the Federal Republic of Germany shall be taken into account.

(2) A second repeat is only possible at the next best examination date in extremely well-founded exceptions. The petition has to be submitted to the Examination Board in written form within four weeks after reception of notification about the failing of the first repeat examination. A second repeat of the Master's thesis is impossible. Failed attempts at other institutions shall be counted.

(3) The repeat of a module examination according to Section 1 can only take place within one year after the completion of the first attempt. In case of defaulting the repeat deadline, the module examination will be considered ultimately failed, unless the candidate cannot be made responsible for the default.

(4) When repeating a module examination, those examinations have to be repeated that previously were not graded at least with „poor“ (grade 4.0 or E respectively).

§ 15

Credits for Years of Study, Examinations, and Study Work

(1) Years of study, examinations, and study work from other institutions will be credited as long as there is essential correspondence in content, scope, and requirements to that of the international Master's program in Computational Engineering at the Technische Universität Dresden. In doing so, an overall assessment and evaluation shall be taken instead of a schematic comparison. When crediting years of study, examinations, and study work that have been done outside of the Federal Republic of Germany, the equivalence agreements that have been approved by the Kultusministerkonferenz (conference of the secretaries of education) and the Hochschulrektorenkonferenz (conference of university chancellors) as well as arrangements within the framework of university partnerships have to be taken into consideration.

(2) Section 1 applies accordingly to years of study, examinations, and study work at federally licensed institutions for distance learning.

(3) Study work that has been done during an academic stay abroad has to be cleared with an academic teacher who is involved in the international Master's program in Computational Engineering. This teacher will attest to the equality to academic contents of the international Master's program in Computational Engineering based on the descriptions of the individual modules of the Master's program given in the Conditions of Study. The concluding crediting will be done by the Examination Board.

(4) If examinations are credited, the grades – as far as the grading systems are comparable – shall be adopted and included in the calculation of the final grade. In case of incomparable grading systems, the notation „passed“ shall be included. Indication of the crediting may be added to the program certificate. Study work and examinations are credited by the Examination Board.

(5) Upon fulfillment of the requirements of Sections 1 and 2, legal claim to crediting is given. The crediting of work that has been done in the Federal Republic of Germany will occur ex officio. The candidate has to present the documents necessary for crediting. Study work and examinations will be credited by the Examination Board.

II. Master's Examination

§ 16

Scope and Form of the Master's Examination

(1) The Master's examination consists of two parts. In the first part of the Master's examination, at least 90 cr. according to Section 2 have to be acquired. The second part of the Master's examination consists of the writing of the Master's thesis including its defense.

(2) In the first part of the Master's examination, 90 cr. have to be acquired according to the following regulations:

1. 42 cr. have to be acquired with the final module examinations of the following modules with respective weighting.
 - (a) Systems Engineering 9 cr
 - (b) Ubiquitous Information Systems 11 cr
 - (c) Distributed and Secure Platforms 11 cr
 - (d) Systems Design and Analysis 11 cr

The description of the modules including the procedures for the module examinations and calculation of the module grade will be given in an appendix to the Conditions of Study.

2. 12 cr. have to be acquired with the internship.
3. 36 cr. have to be acquired with the completion of modules providing deeper knowledge, which can be chosen from an offered set of electives. The description of the elective modules, including procedures for the module examination, will be given in an appendix to the Conditions of Study. These module descriptions will be updated by the Examination Board at the beginning of every academic year.

(3) A student may register for the second part of the Master's examination by providing the examination office with proof of at least 75 of the totally required 90 cr. of the first part of the Master's examination under consideration of § 13 Sec. 4.

(4) In the second part of the Master's examination, 30 cr. will be acquired. The second part of the Master's examination starts with the issuing of the topic for the Master's thesis.

§ 17

Calculation of the Final Grade and Certificate

(1) The Final grade of the Master's examination will result from the arithmetic average of the following grades:

1. arithmetic average of the module grades of the first part of the Master's examination, each with a weighting that equals the number of its cr. according to § 16 Sec. 2.
2. the grade of the Master's thesis with a weighting of 0.5 according to § 10 Sec. 9 and under consideration of § 11 Sec. 4.

(2) If the Master's thesis is graded with German grade 1.0 and if the final grade of the Master's examination is better than German grade 1.3, the candidate shall be awarded the final title „cum laude“.

(3) If a candidate has passed his or her Master's examination, certificates with the results shall be issued both in English and in German. The certificate will include a listing of all foreign universities the student attended within the framework of his or her studies in the international Master's program in Computational Engineering, the grades for the module examinations including the respective examination topics and the names of the examiners, the topic of the Master's thesis, its grade, and the name of the supervising professor as well as the final grade of the Master's examination. Furthermore, the candidate may request that the number of years of study and extra modules required for the successful completion of the Master's examination according to § 17 Sec. 5 be included; in doing so, the candidate has to provide respective evidence.

(4) The certificate will be dated the day the last examination was successfully taken. It has to be issued no later than eight weeks after this date and it shall be signed by the Dean and the chairperson of the Examination Board.

(5) The candidate may take further module examinations other than those that are mandatory (extra modules). Upon request, the results of these examinations will be included in the certificate, but they will not be considered for the calculation of the final grade.

§ 18

Master's Certificate

(1) Along with the program certificate the candidate will receive the Master's certificate, which is to certify the bestowal of the academic degree of Master of Computer Science (M.C.S.). The Master's certificate shall be signed by the chairperson of the Examination Board and the Chancellor of the Technische Universität Dresden, and the University's official seal shall be affixed. It will be dated the same day as the program certificate.

(2) The Technische Universität Dresden will issue a Diploma Supplement (DS) according to the Diploma Supplement Model of the European Union / Council of Europe / Unesco. For the description of the national educational system (DS section 8), the appropriately updated version of the text that the KMK (conference of the secretaries of education) and the HRK (conference of university chancellors) have agreed upon shall be used. In addition to the Diploma Supplement, the Technische Universität Dresden will issue English translations of the documentation for the bestowal of the academic degree and the Master's certificate including its supplements to the candidate.

III. Final Clauses

§ 19

Nullity of the Master's Examination

(1) If a candidate's attempt of deception in an examination or assistance in a deception becomes known after the certificate has been awarded, the Examination Board will declare the respective examination in part or completely as not passed. The same applies to the Master's thesis.

(2) If the requirements for admission to or execution of an examination were not met without the candidate's intent to deceive, and if this matter of fact only becomes known after the certificate has been awarded, the insufficiency will be corrected by the passing of the examination. If the candidate intentionally and wrongly effected the examination to take place, the Examination Board may declare the respective examination as well as the Master's examination as not passed. Before the decision, the candidate shall be given an opportunity to being heard.

(3) If an examination has been declared as not passed according to Section 1, any certificate gained through this examination, and if applicable the certificate of the bestowal of the academic degree as well as the Diploma Supplement (DS), shall be confiscated. The examination shall be repeated according to § 14. A decision according to Section 1 and Section 2 Sentence 2 is impossible after five years have passed since the date of the examination certificate.

§ 20

Access to Examination Records

Upon request to the Examination Board within one year after the completion of the Master's examination, a candidate shall be given access within reasonable terms to his or her respective written examination work, the examiners' opinions alluding to this work, and the examination minutes. The chairperson of the Examination Board determines time and place for access.

§ 21

Commencement and Announcement

(1) These examination regulations will apply to students enrolled since the fall term of the 2004/05 academic year.

(2) These examination regulations become effective as of 10/01/2004 and will be announced in the official notices of the Technische Universität Dresden.

Issued on the basis of the Senate resolution of 01/15/2003 and with approval from the Sächsische Staatsministerium für Wissenschaft und Kunst (Saxon ministry for arts and science) with order of 08/08/2003, Ref.: 3-7831-17-0371/16-1.

Dresden, 01/06/2004

Chancellor of the
Technische Universität Dresden

Prof. Hermann Kokenge