Examination and Testing Regulations

Board of Examiners Technische Wiskunde and Applied Mathematics 29 August 2011

CONTENTS

CHAPTER 1	DEF	FINITIONS 5
Article 1.1	Concepts	5
Article 1.2	Examinations	6
CHAPTER 2	INTI	ERNAL ORGANIZATION 7
Article 2.1		sion of Duties
Article 2.2	-	7
Article 2.3	The P-committee	7
Article 2.4		8
Article 2.5		ster's programme8
Article 2.6		kible programme and combined Master's9
Article 2.7		9
Article 2.8		9
Article 2.9	• •	rt9
Article 2.10 Article 2.11		
Article 2.11		s 1
Article 2.12		
Article 2.14		gulations 1
	·	
CHAPTER 3		NING (INTERIM) EXAMINATIONS 1
PARAGRAPH	I	
Article 3.1.	•	
PARAGRAPH	2. Examinations	
Article 3.2	Meeting dates	
Article 3.3	Registration of the	ne results of the examination1
Article 3.4	The certificate, the	he diploma supplement and the award1
PARAGRAPH	3. Interim Examina	tions 1
Article 3.5	The locations of	the interim examinations 1
Article 3.6	Registration for	and withdrawal from written interim examinations of the
	Bachelor's cours	se1
Article 3.7	Written interim e	examinations1
Article 3.8	Discipline during	written interim examinations1
Article 3.9	Times and locati	ions for oral interim examinations 1
Article 3.10	Registration for a	and withdrawal from oral interim examinations1
Article 3.11	Duration of oral	interim examinations1
Article 3.12	Questions and a	ssignments1
Article 3.13	Correction of wri	tten interim examinations1
Article 3.14	The assessment	t of an interim examination1
Article 3.15	Verification of re	quired prior knowledge1
Article 3.16		e post-propaedeutic study components 1
Article 3.17		e study components for the Master's course
Article 3.18		which an interim examination will be taken
Article 3.19		ne results of an interim examination

PARAGRAP	H 4. INTERIM EXAMINATIONS OF PRACTICAL EXERCISES	17
Article 3.2	51	17
PARAGRAP		17
Article 3.2	21 Irregularities	17
CHAPTER 4	GUIDELINES AND INSTRUCTIONS	18
PARAGRAP		18
Article 4.1	Scope	18
PARAGRAP		18
Article 4.2	Guidelines for examiners	18
PARAGRAP		18
Article 4.3	Instructions for examiners	18
PARAGRAP		18
Article 4.5	Sanctions	18
0114 DTED =		
CHAPTER 5	RELATIONSHIP WITH DEAN AND PROGRAMME DIRECTOR: PUBLIC	19
Article 5.1	Presence of programme director	19
Article 5.2	Consultations regarding sanctions	19
Article 5.3	Public	19
OLIA DTED O	FINAL BROWING	40
CHAPTER 6	FINAL PROVISIONS	19
Article 6.1	Official title	19
Article 6.2	Conclusion	19
Article 6.3	Amendments to these regulations	19
Article 6.4	Unforeseen circumstances and hardship clause	19
Article 6.5	Publication	19
Article 6.6	Date of entry into force	20
ADDENDLY A	Foil/Page Cycidelines	24
APPENDIX A -	Fail/Pass Guidelines	21
A1	Fail/Pass guidelines for Propaedeutic exam	21
A2	Fail/Pass guidelines for Bachelor's exam	21
A3	Fail/Pass guidelines for Master's exam	21
APPENDIX B	Cum Laude Guidelines	22
APPENDIX C	Combined Master's examinations	23
ADDENIDIY D	Overline IMO: DID over	0.4
APPENDIX D	Combined MSc-PhD route	24
APPENDIX E	Extension of validity	25
AFFLINDIX L	Extension of validity	23
APPENDIX F	Approval of an individual/flexible minor	26
7.1.1.2.14.2.17.1	7 pproval of all marvada/noxible million	_0
APPENDIX G	Guideline Interwoven Study	28
ADDENIDIX	Cuidalina I an anno an Barnina anno	00
APPENDIX H	Guideline Language Requirement	29
APPENDIX I	Guideline on appointing a student assistant for correction work	30
· - · · ·		23
APPENDIX J	Graduation Committee and Assessment Committee	31

CHAPTER 1 DEFINITIONS

Article 1.1 Concepts

The terms set out below in these regulations are to be understood as follows:

a. the Act: the Higher Education and Research Act.

b. the university: the University of Twente.

c. the faculty: the Faculty of Electrical Engineering, Mathematics and Computer

Science (EEMCS).

d. the department: the faculty's Department of Applied Mathematics.

e1. the Bachelor's the department's Bachelor's course Technische Wiskunde.

programme:

e2. the Master's the department's Master's course Applied Mathematics.

programme:

f. examination: testing, by means of which the board of examiners establishes

whether all study components that constitute part of the student's

programme have been completed successfully.

g. study component: the smallest independent constituent of an examination for which

individual objectives are set, educational activities are organized,

and for which an examiner is appointed.

h. interim examination: the testing of the knowledge, insight and skills of the candidate.

together with an assessment of the results of that testing in relation

to a particular study component.

i. the EER: the Education and Examination Regulations of the Bachelor's or the

Master's programme.

j. the board of the board of examiners pertaining to the course or group of courses

examiners: as referred to in article 7.12 of the Act.

k. the dean: the dean of the faculty.

I. the programme the programme director of the course concerned.

director:

m. the programme a programme committee within the department, authorized to

committee: provide advice regarding the course concerned.

n. examiner: the person appointed by the board of examiners for the purpose of

holding examinations in accordance with article 7.12 of the Act.

o. graduate a professor within the department.

supervisor:

p. B-coordinator: the official responsible for the coordination of the study programme

of the Bachelor's course and who provides support to students on

matters that concern their studies.

q. M-coordinator: the official responsible for the coordination of the study programme

of the Master's course and who provides support to students on

matters that concern their studies.

r. SESC: the University's Student and Education Service Centre.

s. flexible programme: the individual course as referred to in article 7.3c of the Act.

t. student: anyone, either male or female, registered with the UT (as student or

external student) for the purpose of following a course of study and/or taking (interim) examinations for a particular programme.

u. study adviser: the official as referred to in the EER.

Article 1.2 Examinations

The terms set out below in these regulations are to be understood as follows:

a. the P-exam: the Propaedeutic (foundation course) examination for the

Bachelor's course.

b. the B-exam: the Bachelor's examination for the Bachelor's course.c. the M-exam: the Master's examination for the Master's course.

d. the exams: the P-, B- and M-examinations.

e the final assignment: the Bachelor's assignment or the final project.

f. further investigation: a contract between the lecturers concerned and the student. Set

out in the contract are conditions with which the student must comply in order to obtain a satisfactory result for the relevant study components. This contract must be capable of being rounded off during a period of four weeks over the summer and

the maximum result that can be awarded for the study

components concerned is a mark of seven.

CHAPTER 2 INTERNAL ORGANIZATION

Article 2.1 Composition and Division of Duties

- 1. The board of examiners is appointed by the dean of the faculty and consists of 5 members.
- 2. The dean appoints a professor as chairperson of the board of examiners.
- 3. The B-coordinator is a member of the board of examiners and is responsible for the day-to-day affairs relating to the (interim) examinations of the Bachelor's programme.
- 4. The M-coordinator is a member of the board of examiners and is responsible for the day-to-day affairs relating to the (interim) examinations of the Master's programme.
- 5. The registrar of the board of examiners is provided by SESC.

Article 2.2 Examination results

- 1. The board of examiners draws up guidelines for passing the examinations, subject to the understanding that a candidate successfully passes the examination if a satisfactory result is obtained with respect to all study components, and that a candidate fails the examination if a valid assessment mark is not obtained for a study component. These guidelines are set out further in appendix A to these regulations.
- 2. The board of examiners determines which classification can be derived from a particular examination and stipulates guidelines for the conferring of a classification. The guidelines which apply are set out in appendix B to these regulations. Any classification is mentioned on the diploma or certificate.
- 3. The board of examiners can deviate from the fail/pass guidelines for the P-, B- and M-examinations. Any decision to deviate from a guideline must be justified in writing by the board of examiners.

Article 2.3 The P-Committee

- 1. The examiners for all the components of the propaedeutic/foundation phase together constitute the P-committee.
- 2. The B-coordinator functions as the chairperson of the P-committee. Study advisers and mentors are admitted to meetings as advisers.
- 3. The board of examiners grants a mandate to the P-committee to determine the results of the P-examination of the student concerned at their meetings.
- 4. The P-committee can decide at its "beginning of July meeting" whether a student shall be the subject of a Further Investigation.
- 5. The P-committee notifies the board of examiners of its decisions as referred to in subsections 3 and 4 above by means of the minutes of the P-committee meetings.
- 6. Any decision of the P-committee which is found to be in conflict with these regulations can be overturned by the board of examiners.
- If the P-committee takes a decision regarding an individual student, the decision in question is taken subject to an ordinary majority of the votes cast. Entitled to vote in such matters are all members of the P-committee present who are also examiners for a study component in relation to which the student concerned is being assessed, or P-committee members who currently deputize for an examiner with respect to a component for which the student concerned is being assessed. Members who are entitled to vote are permitted to cast a single vote only.
- 8. Decisions as referred to in subsections 3 and 4 can only be taken if at least 5 members of the P-committee concerned, who are entitled to vote, are present at the meeting.

Article 2.4 Exemptions

- 1. The granting of exemptions for study components of the P- or B-examination is mandated by the board of examiners to the B-coordinator. The latter only proceeds to the granting of an exemption after advice has been received from the relevant examiner.
- 2. The granting of exemptions for study components of the M-examination is mandated by the board of examiners to the M-coordinator. The latter only proceeds to the granting of an exemption after advice has been received from the relevant examiner.
- When a student requests more than 15 ECs (European Credits) in exemptions for components of the P-programme, the B-coordinator refers this request to the board of examiners.
- 4. When a student requests more than 10 ECs in exemptions for components of the post-propaedeutic programme, the B-coordinator refers this request to the board of examiners.
- 5. When a student requests more than 6 ECs in exemptions for components of the M-programme, the M-coordinator refers this request to the board of examiners.
- 6. The B-coordinator and the M-coordinator notify the board of examiners of the exemptions they have granted at the next board meeting.
- A decision to grant an exemption made by the B-coordinator or the M-coordinator can be nullified by the board of examiners.

Article 2.5 Admission to the Master's programme

- 1. An official certificate of admission issued by the board of examiners must be submitted in order to be registered by the institution as a student in the Master's programme.
- 2. Students who are in possession of a certificate which proves that they have successfully passed the final examination of the Bachelor's course Technische Wiskunde at a Dutch university (transfer students), receive the admission certificate issued by the board of examiners without further investigation.
- 3. The board of examiners sets up an admission committee for the purpose of investigating the admissibility of students without a Bachelor's Diploma in Technische Wiskunde (lateral-entry students) to the Master's course and the issue of certificates of admission as referred to in subsection 1. The admissions committee investigates whether the following conditions are complied with:
 - The highest diploma achieved by the candidate must be at least a Bachelor's diploma, or a diploma of an equivalent level.
 - The candidate is regarded as being capable of completing the course successfully within a period of two years.
 - The knowledge of the English language both spoken and written is sufficient in order to participate in the course. A guideline is included in appendix H.
- 4. The board of examiners can issue a certificate of provisional admission. Registration with the institution is possible based on a certificate of this kind, but no rights can be derived from it with regard to taking (interim) examinations belonging to the Master's course.
- 5. In the case of a certificate of provisional admission, the board of examiners draws up a list of study components for which the attainment targets and learning objectives are set at Bachelor's level: the so-called pre-Master's programme. Only after the student has completed all study components of the pre-Master's programme, is he or she actually granted admission and can his or her registration be converted to a full registration as a student of the Master's course, with all the rights which it entails.
- 6. A fixed period of one year applies to the certificate of provisional admission. This means that the certificate of provisional admission expires after a period of one year if the pre-Master's programme has not been completed by that time.

Article 2.6 Approval to follow a flexible programme and combined Master's

- 1. A request for the approval of a flexible programme is submitted in writing to the board of examiners.
- 2. The board of examiners takes a decision regarding approval within two months after the request is submitted. If the board of examiners decides to approve the request, the board of examiners indicates at the same time the course of study to which the flexible programme is regarded to belong. The decision of the board of examiners is communicated to the applicant in writing.
- 3. A student can take examinations for two Master's courses on the basis of a combined package that satisfies the requirements of the individual courses. The guidelines regarding a combined Master's examination is to be found in appendix C.
- 4. The AM Master's course offers the possibility of following a combined MSc-PhD route. The guideline for a combined route is to be found in appendix D.

Article 2.7 Extension of validity

The board of examiners sets up a guideline for the extension of the period of validity of assessments. The guideline is included in appendix E to these regulations.

Article 2.8 Minor

- 1. The board of examiners, after having consulted with the programme committee, decides on minor subjects that can be chosen by students on the Bachelor's course. These subjects are then confirmed in the so-called minor matrix.
- 2. The board of examiners draws up a guideline for the approval of an individual minor. This guideline together with the protocol of an international minor is included in appendix F.

Article 2.9 Administrative support

- 1. The board of examiners is supported by SESC.
- 2. SESC receives a copy of all decisions that have been taken by or on behalf of the board of examiners.

Article 2.10 Quorum

- 1. The board of examiners can only take a decision if the number of members present amounts to more than half of the overall number of members.
- 2. Only in exceptional cases can there be any deviation from that which is stipulated in the previous subsection if the interest of a registered student so requires.

Article 2.11 Ballot

- 1. A decision of the board of examiners is taken on an ordinary majority of the votes cast.
- 2. If the votes cast in a ballot regarding the pass mark achieved by a registered student result in a tie, the registered student fails.
- 3. If votes cast regarding the award of a classification result in a tie, the classification is not awarded.
- 4. A blank vote can only be cast in the event of a conflict of interest.

Article 2.12 Authorized signatories

- 1. The certificate, issued to confirm that the bearer has successfully passed the P-, B-, or M-examination, and the diploma supplement are both signed by a member of the board of examiners, preferably by the chairperson.
- 2. Other certificates or declarations that are issued by the board of examiners are signed by at least one member of aforesaid board.

Article 2.13 Examiners

The board of examiners confirms a list of examiners annually.

Article 2.14 Practicability of the regulations

The board of examiners evaluates the practicability of these regulations once a year.

CHAPTER 3 RULES GOVERNING (INTERIM) EXAMINATIONS

PARAGRAPH 1. Scope

Article 3.1 Scope

The rules referred to in this chapter are the rules that the board of examiners can impose under article 7.12 subsection 4 of the Act relating to proper procedure during (interim) examinations and with regard to measures to be taken within that context, as well as rules in regard to examinations which the board of examiners can impose by virtue of its coordinating and organizational function.

PARAGRAPH 2. Examinations

Article 3.2 Meeting dates

- 1. The board of examiners, or on its instructions, SESC, taking into account the provisions stipulated in the EER, sets out an annual timetable of dates and times at which the board of examiners will meet to determine the results of the examinations.
- 2. The board of examiners, or on its instructions, SESC, notifies these dates and times to the programme director and takes responsibility for their publication.
- 3. The board of examiners meets once each month in principle.

Article 3.3 Registration of the results of the examinations

- 1. The board of examiners notifies the results of an examination to SESC within 5 working days after the results have been determined. SESC then notifies the result to the exam candidate in writing.
- 2. SESC bears responsibility for the registration of the examination results and the classifications awarded.
- 3. SESC also registers which certificates have been issued.
- 4. Only successfully passing an examination, together with any awarded classification, constitute public information.

Article 3.4 The certificate, the diploma supplement and the award

- 1. If a student meets the examination requirements, the student will be called upon by SESC to send in a form setting out his or her details.
- 2. The awarding of the certificate takes place in a manner to be decided by the board of examiners following consultation with the dean.
- 3. A separate list of study components pertaining to the examination together with their assessments will be issued, either during the awarding of the certificate or later. This list constitutes a part of the certificate. Study components already assessed as satisfactory but which do not constitute part of the examination can also be included on this list, but these do not count towards the conferment of cum laude.
- 4. The certificate is dated according to when the final study component was completed successfully, unless a request in accordance with subsection 7 is submitted. In that case the pass date is determined by the board of examiners.
- 5. If the completion of the final study component for an examination was planned for 1 September, but was unable to take place due to force majeure, the board of examiners, at the request of the examiner or the candidate, will exert itself to avoid any negative consequences for the candidate.
- 6. The request of the examiner or candidate, as referred to in subsection 5, will be submitted to the board of examiners as quickly as possible after the situation of force majeure has occurred.
- 7. When a student has complied with the requirements of the examination but does not yet wish to receive a certificate, he or she must send in a request to the board of examiners asking it not to proceed with issuing the certificate at least one month before taking his or her final component of the examination.

PARAGRAPH 3. Interim Examinations

Article 3.5 The locations of the interim examinations

The location at which a written interim examination is taken is determined by SESC, under the responsibility of the board of examiners and in consultation with the rooms manager of the university.

Article 3.6 Registration for and withdrawal from written interim examinations of the Bachelor's course

- 1. The registration for written interim examinations takes place by means of a signature of the study adviser on the study plan of the candidate, as indicated in the EER.
- 2. Withdrawal from a written interim examination is permitted up to 24 hours before commencement of the interim examination concerned and subject to the provision that the change made to the study syllabus has taken place in the manner specified by the EER.
- 3. In the case of a non-timely withdrawal, the interim examination is regarded as having been taken.
- 4. If in the judgement of the examiner there is an instance of an excusable absence, the examiner, in variation to what is stated above in subsection 3, is entitled to decide that the interim examination can be taken during a period which he or she will specify.
- 5. If registration or withdrawal cannot take place by means of the study syllabus, the board of examiners determines how an interim examination candidate can register or withdraw.

Article 3.7 Written interim examinations

- The completion of a written interim examination for a subject taught by the Department of Applied Mathematics takes a maximum of 3 hours. The completion of a written interim examination for a subject that is not taught by the department takes a maximum of 3.5 hours.
- 2. The maximum number of marks that can be achieved per assignment is mentioned on each assignment.

Article 3.8 Discipline during written interim examinations

- 1. The examiners ensure that invigilators are appointed who will make sure that the examinations take place in proper order. At least one lecturer who is an expert in the subject area to which the examination relates will be present, or will be capable of being present within five minutes.
- 2. The examinee must be present in the place where the interim examination is to be taken at least 5 minutes before the commencement of the interim examination. If, in the opinion of the invigilator, the proper order of the interim examination is jeopardized by the late arrival of a candidate, the invigilator can decide that the interim examination cannot be taken by the examinee concerned.
- 3. The examinee is obliged to identify him- or herself to the invigilator by means of the UT certificate of registration.
- 4. Instructions given by the invigilator immediately before, during, or immediately after the interim examination must be followed by the candidate.
- 5. Unless decided to the contrary by the board of examiners or the examiner, the examination paper may be taken away by the candidate following the completion of the interim examination.
- 6. If, in the opinion of the invigilator, the proper order of the examination is disrupted to such an extent that no further responsibility can be taken for the authenticity of the work completed, the sitting must be suspended and the work collected by the invigilator. The invigilator immediately reports this to the board of examiners concerned, which ultimately passes judgement on the validity of the work handed in.

Article 3.9 Times and locations for oral interim examinations

- 1. If the EER determines that a study component of a course should be subject to oral examination, the period during which this oral interim examination is to take place will be set out in the interim examinations roster as stipulated in the EER.
- 2. In other cases the examiner will determine the date, time and location for an oral examination following consultation with the candidate, unless the examiner has already indicated in advance the dates and times at which oral examinations can take place.

Article 3.10 Registration for and withdrawal from oral interim examinations

- 1. In the cases as stipulated in article 3.9 subsection 2, students who wish to take an oral interim examination for a study component should submit a request for that purpose to the examiner or the examiners. The request must be supported by the study adviser. The examiner decides on the request.
- 2. Withdrawal from an oral interim examination is permitted if this takes place by means of notification from the student to the examiner or examiners, at the very latest on the day prior to the day on which the interim examination should have taken place.
- 3. In the case of non-timely withdrawal, the interim examination will be regarded as having taken place.
- 4. If in the judgement of the examiner or examiners there is an instance of an excusable absence, the examiner, in variation to what is stated above in subsection 3, is entitled to decide that the interim examination can be taken during a period which he or she will specify.

Article 3.11 Duration of oral examinations

Completing an oral interim examination takes a maximum of 1.5 hours.

Article 3.12 Questions and assignments

- 1. The questions and assignments for an interim examination do not exceed the already disclosed sources from which the examination material is derived. These sources have for the most part been made known prior to the commencement of the preparatory course work for the interim examination. The definite scope of the study material will be made known in detail no later than one month prior to taking the interim examination.
- 2. The interim examination represents the educational objectives according to content and form.
- 3. The questions and assignments are such that, measured according to reasonable standards, the examination candidate has sufficient time to answer the questions and complete the written assignments correctly within the stipulated duration of the interim examination.
- 4. If during or after an interim examination it appears that problems arise or have arisen with regard to the foregoing subsections of this article, the examiner will consult with the board of examiners regarding any measure to be taken. The measure, if any, will be determined by the board of examiners.

Article 3.13 Correction of written interim examinations

- 1. The examiners bear the responsibility of ensuring that the interim examinations are marked within the period of time stipulated in the EER.
- 2. When the examiner does not carry out the marking him- or herself, he or she appoints others who are also experts in the field to undertake the work. If student assistants are deployed for the marking, the examiner must comply with the guideline in appendix I.

Article 3.14 The assessment of an interim examination

1. The assessment of an interim examination is expressed in the form of a whole number on a scale from 1 to 10, with the following meaning:

1 very poor 6 pass/satisfactory 2 poor 7 very satisfactory 3 very unsatisfactory 8 good

4 unsatisfactory 9 very good 5 just below satisfactory 10 excellent

- 2. The board of examiners can permit that, in variation from the provision of the aforementioned subsection, a subject can be assessed with a mark that is not a number but a letter with one of the following designations:
 - NV did not appear; O unsatisfactory; V satisfactory; VR exemption
- 3. In variation to what is stated in subsection 1, the board of examiners, at the proposal of the examiner, can permit the assessment to take place by means of other qualifying criteria on the condition they indicate the distinction between satisfactory and unsatisfactory.
- 4. An interim examination candidate passes the interim examination if the mark given is a 6 or higher, or if the qualification is "satisfactory" or higher.
- 5. The assessment of a written interim examination occurs on the basis of pre-agreed standards.
- 6. When it appears during the interim examination that an erroneous estimate has been made with regard to completion of the examination within the stipulated time, with regard to the disambiguity of the questions or with regard to the degree of difficulty, the examiner can decide to adjust the standard. These new standards, however, must not turn out to be disadvantageous to the interim examination candidate.
- 7. The assessment of an interim examination is such that the interim examination candidate is able to verify how the result of the interim examination is reached.

8. If the assessment as stipulated in subsection 1 comes into being on the basis of an assessment of individual components, a necessary rounding upwards takes place if the final assessment should come out at half a point higher and a rounding downwards if that is not the case. An exception to the rule is an assessment which is lower than a 1; this is always rounded off to a 1.

Article 3.15 Verification of required prior knowledge

- 1. If the EER determines that successfully passing one or more interim examinations constitutes a condition for taking another interim examination, the board of examiners will verify whether or not these conditions have been complied with.
- 2. The B-coordinator and the M-coordinator have a mandate from the board of examiners to carry out the verification referred to in subsection 1.
- 3. If these conditions have not been complied with, no assessment of the relevant component is given.
- 4. A student can submit a request to the B-coordinator or the M-coordinator to be granted an exemption from a prerequisite knowledge stipulation.

Article 3.16 Admission to the post-propaedeutic study components

The board of examiners, in response to a well-founded written request from a registered student and supported by the study adviser, can determine that the registered student shall be granted exemption from the requirements set out in the EER for interim examinations in the case of post-propaedeutic study components if the P-examination has not yet been passed. If the exemption is granted, the board of examiners can at the same time specify a period of time within which the P-examination must be passed or within which a number of study points as specified by the board of examiners must be gained.

Article 3.17 Admission to the study components of the Master's course

The board of examiners can allow a student, at the latter's request, to take interim examinations belonging to the Master's course, without that student being in possession of an admission certificate as referred to in article 2.5. The guidelines that apply in these cases are included in appendix G.

Article 3.18 The language in which an interim examination is taken

- 1. The interim examinations for the study components of Bachelor's courses are taken in Dutch
- 2. An examiner for a study component of a Bachelor's course can decide to allow interim examinations to be taken in both Dutch and English.
- 3. Interim examinations belonging to the Master's course should be taken in English. In special situations, the board of examiners can also permit such interim examinations to be taken in Dutch.
- 4. The board of examiners specifies guidelines for the degree of mastery of the Dutch language insofar as it relates to admission to interim examinations for a Bachelor's course and for the degree of mastery of the English language insofar as it relates to a Master's course. The relevant guidelines are included in appendix H to these regulations.

Article 3.19 Registration of the result of an interim examination

1. The examiner notifies the result of an interim examination to SESC within 15 working days following the completion of the examination.

- 2. SESC monitors the registration of the results of the interim examinations. If registration has not taken place, SESC itself registers the results no later than within 20 working days following the date of the interim examination concerned.
- 3. Unless examinees have given prior permission, no notifications are made regarding individual details relating to the results of the interim examinations other than to the examination candidates themselves, the members of the board of examiners, the study adviser, the mentor, the programme director, the student counsellor, the examinations appeal board and other individuals or statutory bodies who are unable to carry out their functions pursuant to or by virtue of the Act without having access to such details.

PARAGRAPH 4. INTERIM EXAMINATIONS OF PRACTICAL EXERCISES

Article 3.20 Interim examinations involving practical exercises

- 1. The examination of practical exercises takes place as far as possible in accordance with the provisions set out in paragraph 3.
- 2. The assessment of the final assignment of a Bachelor's course is undertaken by at least one examiner.
- 3. The assessment of the final assignment of the Master's course is undertaken by an assessment committee. The details of the composition of the assessment committee and its tasks are set out in appendix J.

PARAGRAPH 5. FRAUD

Article 3.21 Irregularities

The examiner who:

- suspects that a student when taking an interim examination is in breach of the rules of conduct governing the examination and is thereby committing fraud, or
- ascertains that the student is acting in conflict with the pre-agreed rules governing the interim examination, as a result of which the testing of his or her own qualities and/or those of other participants cannot take place in an orderly manner, or
- finds that the student is disregarding pre-arranged agreements or rules that were set for
 working within a group of students required to hand in a joint assignment for the interim
 examination, and thereby ascertains that the student would be able to benefit as a member
 of the group from an assessment of the work of the group as a whole while his or her role in
 the group does not justify that assessment of him or her as an individual (piggybacking),
 takes action as follows:
- 1. he or she instructs the student to forgo assessment, and notifies the student of the considerations that underlie his or her decision, and
- he or she sends the details that are important for the assessment of the student and the student's behaviour to the board of examiners and requests the board to take over the assessment of the student and/or to impose such disciplinary measures as the board finds appropriate.

The board of examiners, on receiving a request as mentioned in subsection 2 above, proceeds as follows:

- 1. The student is notified formally of the request made by the lecturer and is given access to the details which the lecturer has provided in support.
- The board of examiners investigates the possibilities of creating a situation by means of mediation by an independent third party under which assessment by the examiner might still be possible (amicable settlement).
- 3. The student is invited to appear before the board of examiners and to give his or her account of the situation.
- 4. The board of examiners issues an assessment and any possible sanction measure within the normal review period as set out in the EER, unless an attempt at mediation as referred to under 2 is worthwhile and proves to be successful. The period referred to above, within which the board of examiners arrives at a decision, commences the moment the attempt at mediation proves to be unsuccessful.

The board of examiners records the course of affairs surrounding the assessment and (if deemed necessary) inserts a note of what has been decided into the student's file. Such a note can also be made if an agreement is reached between the student and the examiner.

CHAPTER 4 GUIDELINES AND INSTRUCTIONS

Note to chapter 4: in special cases, deviation from a guideline is possible with justification; an instruction is an assignment that <u>must</u> be carried out.

PARAGRAPH 1 SCOPE

Article 4.1 Scope

Under the guidelines and instructions referred to in this chapter are to be understood the guidelines and instructions which the board of examiners is entitled to issue pursuant to article 7.12 subsection 4 of the Act.

PARAGRAPH 2 GUIDELINES

Article 4.2 Guidelines for examiners

The following guidelines apply for examiners:

- the provision contained in article 3.11 on the duration of oral interim examinations.
- the provision contained in article 3.14 subsection 5 regarding standards or norms applicable to assessments.

PARAGRAPH 3 INSTRUCTIONS

Article 4.3 Instructions for examiners

The following instructions apply for examiners:

- the provision contained in article 3.7 subsection1 on the duration of written interim examinations,
- the provision contained in article 3.7 subsection 2 on the number of points per assignment,
- the provision contained in article 3.8 subsection 1 regarding invigilation,
- the provision contained in article 3.12 regarding questions and assignments,
- the provision contained in article 3.14 subsections 1 and 2 regarding the rendition of assessments (marks),
- the provision contained in article 3.14 subsection 7 regarding the ability to reconstruct the assessments,
- the provision contained in article 3.14 subsection 8 regarding the completion of the assessment,
- the provision contained in article 3.18 subsections 1, 2, and 3 regarding the language in which an interim examination is taken.
- the provision contained in article 3.19 subsection 1 regarding the period of time within which the examiner notifies SESC of the results.

PARAGRAPH 4. OTHER PROVISIONS

Article 4.5 Sanctions

- 1. If an examiner fails to comply with the provisions set out in the EER or in these regulations, the board of examiners can impose sanctions with regard to the assessment or else against the examiner concerned, insofar as those provisions fall within the competence of the board of examiners. In particular the board of examiners, exclusively in such cases, can decide to institute an investigation of its own, based solely on its legal competence to do so.
- 2. If an examiner fails to comply with the provisions set out in the EER or in these regulations, the board of examiners is entitled to propose to the dean or the programme director that sanctions be imposed against the examiner concerned.

CHAPTER 5 RELATIONSHIP WITH DEAN AND PROGRAMME DIRECTOR; PUBLIC

Article 5.1 Presence of programme director

The programme director can attend the meetings of the board of examiners.

Article 5.2 Consultations regarding sanctions

The sanctions as referred to in article 4.5 subsection 1 cannot be put into effect unless consultations have first taken place between the dean and the programme director.

Article 5.3 Public

The meetings of the board of examiners are not public meetings, unless the board of examiners should decide to the contrary.

CHAPTER 6 FINAL PROVISIONS

Article 6.1 Official title

These regulations can be referred to as the Technische Wiskunde and Applied Mathematics Examination and Testing Regulations.

Article 6.2 Establishment

These regulations were established by the board of examiners on 29 AUGUST 2011.

Article 6.3 Amendments to these regulations

- No amendments to these regulations, which are applicable to the current academic year, shall take place unless it is reasonable to suppose that aforesaid amendments will not damage the interests of students registered for the course.
- 2. Amendments to these regulations have taken place in the following articles and have been confirmed on the dates given below:

ARTICLE DATE CONTENT

Article 6.4 Unforeseen circumstances and hardship clause

- 1. In cases for which these regulations do not provide, decisions are taken by the board of examiners.
- If the application of the aforesaid regulations in particular cases could result in apparent unfairness towards a registered student, the board of examiners can decide to deviate from these regulations.

Article 6.5 Publication

- 1. The board of examiners is responsible for the publication of these regulations, including the decisions and guidelines which the board of examiners has ratified pursuant to these regulations.
- 2. The regulations, including the decisions and guidelines which the board of examiners has confirmed pursuant to these regulations, are available for inspection at SESC and in chair-related administration departments.
- 3. Available on the course's teaching site is a brief description of the most important articles for registered students taken from these regulations, together with the most important decisions and guidelines which the board of examiners has ratified pursuant to these regulations.

<u>Article 6.6</u> <u>Date of entry into force</u>

These regulations come into force on 1 September 2011.

Appendix A – Fail/Pass Guidelines

A1. Fail/Pass guideline for the Propaedeutic examination

The student has passed if the following conditions have been met:

- no mark lower than a five may appear on the B1 marks list with a maximum of one five;
- the average of the marks awarded is higher than or equal to a 6.

A2. Fail/Pass guideline for the Bachelor's examination

The student has passed if the following conditions have been met:

- the propaedeutic examination has been passed;
- no mark lower than a five may appear on the B2 and B3 marks list with a maximum of one five:
- the average of the marks awarded is higher than or equal to a 6.
- the mark awarded for the Bachelor's final project is a 6 or higher.

A3. Pass/Fail guideline for the Master's examination

The student has passed if no mark lower than a six appears on the marks list.

APPENDIX B Cum Laude Guidelines

The board of examiners can award students who pass an examination with exceptional results the predicate "cum laude". Guidelines have been established for the award of this predicate on passing the P-, B- and M-examinations.

The predicate "cum laude" is awarded if the following conditions are complied with:

- For the Propaedeutic examination:
 - the examination must be taken within one year following the initial registration for the foundation phase.
 - the average of all marks ("V" and "VR" not included) is an 8 or higher.
 Assessments that are not vital for compliance with the examination requirements are omitted when determining the relevant average.
 - the assessments for all components of the study programme must be at least satisfactory ("V", "VR", 6 or higher).
 - no exemptions have been granted.
- For the Bachelor's examination:
 - the Bachelor's examination has been passed in or within 3½ years subsequent to the first registration.
 - the average of all marks ("V" and "VR" not included) is an 8 or higher.

 Assessments that are not vital for compliance with the examination requirements are omitted when determining the relevant average.
 - the assessments for all components of the B2/B3 phase, including extra subjects, must be at least satisfactory ("V", "VR", 6 or higher).
 - no exemptions have been granted.
 - the assessment of the final project is an 8 or higher.
- For the Master's Examinations:
 - the number of ECs that have been achieved in the two years prior to the pass date amounts to at least 80% of the study workload in ECs belonging to the M-examination.
 - the average of all marks from the M-examination ("V" and "VR" not included) is an 8 or higher. Assessments that are not vital for compliance with the examination requirements are omitted when determining the relevant average.
 - the assessments for all components of the M-examination, including extra subjects, must be at least satisfactory ("V", "VR", 6 or higher).
 - no exemptions have been granted.
 - the assessment of the final project is an 8 or higher.
- If letter-designated assessments (A, B, C, E or P) appear on the certificate, the foregoing criteria are not applicable; instead the relevant decision is taken by the board of examiners.

In individual cases, the board of examiners may award the classification.

APPENDIX C Combined Master's examinations

In some cases, a student can take examinations for two Master's courses based on a combined syllabus which does justice to the requirements of the individual courses. The following conditions must be complied with in order to be eligible to take an examination for a combined course of this kind.

COMPOSITION OF A COMBINED SYLLABUS

- 1. The student's syllabus is to be described as a combination of two (not necessarily disjunctive) study syllabi, of which the one complies with the requirements of one course and the other complies with the requirements of the other course.
- 2. If the final project belongs to what is in effect the cross-section of the two partial study syllabi, as referred to in point 1 above, it must then be a project with an exceptional study requirement, which consists of the study requirement for the final project of the AM Master's course plus at least 50% of the study requirement for the graduation project of the non-AM course.

PASSING A COMBINED EXAMINATION

If a student takes a combined examination based on a syllabus as described here in order to satisfy the requirements of two courses, he or she then passes the examination if he or she would have passed the examination for both of the courses separately in accordance with the regulations that apply to the individual courses. It is then incumbent on the board of examiners of both courses to pronounce the "pass" verdict.

APPENDIX D Combined MSc-PhD route

The AM Master's course offers the possibility of following a course of study over a period of five years during which time a Master's degree is attained and a promotion is completed. A crucial double role is played in this context by the second year of the academic route. On the one hand it is the second year of the Master's phase which is concluded with the Master's diploma. On the other hand, it is during this second year that a start is also made on the promotion route, so that the promotion itself becomes feasible after a period of five years. For this purpose, use is made of the space available for the final project.

To be sure at an early stage that the student is indeed suited to undertake this course, the Master's programme deviates from what is stated in article 8 of the EER for the Master's AM on the following point: the traineeship of 20 ECs, as indicated in subsection 8.3. f and appendix 6 of the EER for the Master's AM is replaced by a Research Training of 15 ECs and a Master's subject of 5 ECs. The Research Training is a variant of the traineeship as described in appendix 6 of the EER for the Master's AM, but is focused on the academic world as practice and is carried out internally (within the university).

The Research Training should be rounded off in the first year of the Master's. If that is not the case, the student must then follow the regular Master's programme as referred to in article 8 of the EER for the Master's AM.

APPENDIX E Extension of validity

The board of examiners extends the validity of an assessment of a study component by a period of time which the board itself determines, unless in the opinion of the board of examiners, the modernity of the examination, of which the study component constitutes part, would be too severely affected by so doing, or alternatively if societal interests would be adversely affected as a result.

APPENDIX F Approval of an individual/flexible minor

For the approval of an individual minor belonging to the Bachelor's course Technische Wiskunde the board of examiners maintains the following guideline:

With regard to the content

- 1. A minor aims to provide a student with a view of a field of study other than that of the discipline of the Bachelor's course, preferably within an unrelated discipline.
- 2. A minor is of an academic level.
- 3. A minor is internally coherent.

With regard to the procedure

 The student should submit the request for approval using the "flexible minor application form".

International TW Minor protocol

The following rules apply to Bachelor's students of Technische Wiskunde who wish to make use of their minor area to study abroad for a semester:

- The university to be attended is discussed with the Internationalization Coordinator, hereafter referred to as the IC.
- Also a provisional programme is drawn up with the aid of the IC. The minor must comply with the following requirements: it must be coherent, at third-year level and it must contribute to academic formation.
- The minor programme studied abroad generally comprises 30 ECs. At the present time, only 20 ECs can be incorporated into the TW programme. If 10 ECs of mathematics subjects can be studied which can replace the TW subjects, a request with that purpose in mind can be submitted to the board of examiners. In other cases, or if the board of examiners should reject the request, the 10 ECs in question would be in addition to the 180 ECs of the Bachelor's programme.
- The programme as a whole must be approved by the board of examiners.
- Each student who studies a minor subject abroad is allocated a TW mentor. The student concerned has e-mail contact with his or her mentor at least once every three weeks during his or her stay abroad. The initiative for this contact lies with the student. The contact itself includes in all cases the progress, the subject, the coursework, counselling available at the location concerned and other matters that may be important for ensuring success in the minor subject. Non-compliance with this requirement could have the consequence that the minor subject or part of the minor subject is not recognized.
- If it should appear at the location abroad that the proposed programme cannot be conducted for any reason whatsoever, or can only be partially conducted, the student must immediately contact his or her mentor and the IC in order to investigate alternatives. The mentor and the IC will also discuss the matter with the Bachelor's coordinator and if necessary with the board of examiners.
- On his or her return from abroad, the student will report the results achieved to his or her mentor and to the IC.
- The student writes a report about the stay abroad which in all cases must include: the subjects studied, a description of the host university, the department and the students of the host university. Practical matters such as housing accommodation, travel, visas etc. should also be referred to in the report.
- This report is first approved by the mentor and the IC before the results are entered into Osiris.

- Following approval by SESC, the report is then archived in accordance with the usual procedure for traineeship and theses.
- The results achieved are entered into OSIRIS by SESC, but this takes place exclusively on the basis of authenticated certificates provided by the host university.

APPENDIX G Guideline Interwoven Study

The board of examiners can provide a student with an opportunity at his or her own request to take interim examinations belonging to the AM Master's course, without that student being in possession of a proof of admission to the examination as referred to in subsection 1 of article 2.5.

This manner of taking interim examinations is called: <u>interwoven study</u>. A number of conditions must be fulfilled in order to be permitted to undertake an interwoven study.

- The student must be registered with the institution for the Technische Wiskunde Bachelor's course.
- The student must have already received the propaedeutic/foundation course diploma in Technische Wiskunde.
- The student must have scored a minimum of 150 ECs in the Bachelor's course.
- Subsequent to discussions having being held with the M-coordinator, the student will have submitted a written application to the board of examiners and will have received written permission from the board of examiners to commence an interwoven study.

The board of examiners reserves the right in all cases to refuse this status to an applicant, if it is of the opinion that he or she could not meaningfully participate in a Master's course.

The possibilities for engaging in an interwoven study are limited. The extent of the syllabus of study components that can be completed by means of interwoven studies in the Master's course is a maximum of 30 ECs, of which a maximum of 12 ECs belong to the non-common subjects.

APPENDIX H Guideline Language Requirement

- 1. Dutch language proficiency guideline If a person has taken the state examination "Dutch as a second language", programme II, referred to in short as the NT2-II, with satisfactory results, the person concerned has sufficient knowledge of the Dutch language to be able to follow the course fruitfully.
- 2. English language proficiency guideline If a person has completed an IELTS test with a mark of 6.5 or higher for each component of the assessment, or otherwise an Internet-based TOEFEL test with a score of 20 or above for each section, the person has sufficient knowledge of the English language to be able to follow the course fruitfully. Instead of the two tests referred to above, also the Cambridge Certificate of Proficiency in English (CPE) can be taken, the final assessment for which must be a C or higher.

APPENDIX I Guideline on appointing a student assistant for correction work

Compliance must be made with the following conditions when a student assistant, under the supervision of a lecturer, is deployed for the purpose of marking:

- the programme director must be in agreement with the arrangement.
- In the opinion of the examiner, the assistant must be proficient in the subject himself or herself up to a minimum level of an 8,
- the examiner draws up a detailed correction standard to be observed,
- the examiner him-/herself first screens a number of examples of submitted answers and then discusses these with the assistant.
- the 5s and 6s are always checked again by the examiner.
- after completion, the examiner carries out a random sample survey to monitor the marking.
- the student assistant is allocated a room in which the marking can be carried out. The student is not permitted to take the examination papers home.

APPENDIX J Graduation Committee and Assessment Committee

On the commencement of the final project, the graduate supervisor sets up a graduation committee on which, besides himself or herself, at least one other member of the AM academic staff is represented. The supervisor(s) always constitute(s) part of the graduation committee and the committee can also include external members. The graduation committee discusses the progress and the direction of the research on at least three separate occasions.

At least two weeks prior to the date of the graduation presentation, the graduation committee sets up an assessment committee consisting of at least three persons (there are often four or five persons), including:

- the members of the graduation committee,
- in addition, at least one other member who has not been involved in the day-to-day supervision of the project. This latter is a member of the AM academic staff from outside the chair of his or her department, a member of the academic staff of a different department of the UT, or an expert in the field drawn from an external company or institution.

The members of the assessment committee attend the graduation presentation and study the thesis. The presentation and the thesis are discussed by the entire assessment committee, following which it determines a mark for the work as a whole (execution, presentation and thesis).

In the case of a combined traineeship and final project, a mark is determined for both the traineeship component and the project component.