

Graduation Manual

Geomatics ***For the Built Environment*** **Year 2014 – 2015**

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Introduction

This manual is based on the official regulations concerning the graduation process and is meant for students, mentors, delegates of the Board of Eaminers and others who are involved in the evaluations of the graduation process. This manual contains important information about the setup of the graduation process.

Chapter one provides the scheme of the setup of the evaluations and a scheme explaining the responsibilities of everyone involved per evaluation.

Chapter two contains information about the quorum, the appraisal and the 'with distinction' regulation.

The appendices contain details on the subjects to be assessed, graduation plan, reflection requirements, an example of a graduation contract and the references to official regulations which this manual is part of.

1.0 Graduation Process

1.1 Admission

Students may only embark on the graduation work if they have completed all core courses except for the electives outlined in article 3.17 (Student Charter, Part III: Implementation Regulations of the Course and Examination Regulations, Master of Science Geomatics, 2014 – 2015).

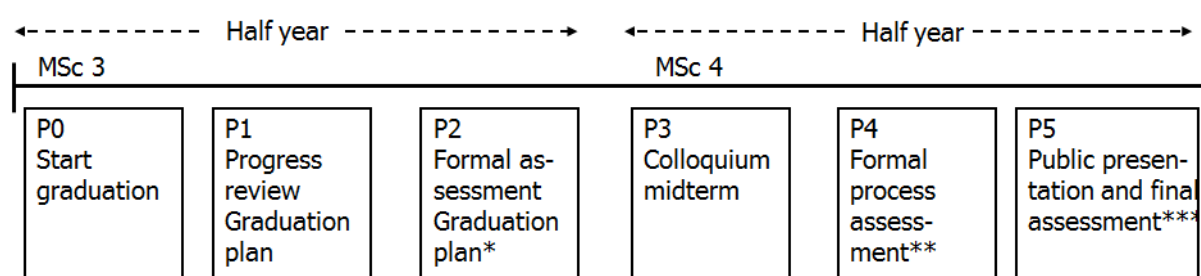
1.2 Evaluations

In the course of the graduation process two obligatory progress reviews (P1 and P3) and three formal assessments (P2, P4 and P5) take place. All evaluations are to take place within the period of nine months. The location of all evaluations must be situated at the Delft Technical University Campus.

Time Schedule		
What	When	Responsible
P0: Register graduation students	Start	Graduation Coordinator (list)
P1: Progress review Graduation plan Presentation: 10 minutes Questions & Appraisal: 10 minutes	9-10 weeks after P0	Graduation Coordinator (event)
Submit final Graduation plan to Main Mentor/ Second Mentor/Delegate of Board of Examiners	1 week before P2	Student
P2: Formal assessment Graduation plan Presentation: 15 minutes Questions : 15 minutes Closed Appraisal: 15 minutes Committee informs student about GO/ NO-GO	9-10 weeks after P1	Graduation Coordinator (event)
P3: Colloquium midterm Presentation: 15 minutes Questions: 15 minutes	7-8 weeks after P2	Main Mentor
Submit draft thesis to Main mentor/Second Mentor/Third Mentor/Delegate of Board of Examiners	1 week before P4	Student
P4 Formal process assessment Presentation: 30 minutes Questions: 15 minutes Closed appraisal: 15 minutes Committee informs student about GO/NO-GO	7-8 weeks after P3	Student, Main Mentor
Submit final thesis to Main mentor/Second mentor/Third mentor/Delegate of Board of Examiners	1 week before P5	Student

Time Schedule (continuation)

What	When	Responsible
P5: Public presentation and final assessment Public presentation: 30 minutes Questions: 15 minutes Closed appraisal: 15 minutes Result and graduation ceremony: 30 minutes	4-5 weeks after P4	Student, Main Mentor
Total:	38 weeks	



* P2: Formal assessment of the Graduation Plan ([template](#)), admission to Master 4

** P4: [Form](#) for P4 formal assessment (paper form)

*** P5: [Form](#) for P5 formal final assessment (SharePoint)

1.3 Mentors and graduation team

Main Mentor (Graduation Professor)

The Graduation Professor is the Main Mentor. The Main Mentor is responsible for the overall Graduation Project, especially the scientific level. The main Mentor is approached shortly after P1 and participates during the P2, P3, P4 and P5.

The Graduation Professor is a(n) (Associate) Professor from the Faculty of Architecture and the Built Environment, depending on the subject of the graduation research. The student chooses a subject from the list of graduation subjects (see website Geopmatics.tudelft.nl), or makes a research proposal in consultation with the Second Mentor. After choosing a subject the student approaches the Graduation Professor.

Geomatics Graduation Professors:

- Prof. dr. P.J.M. van Oosterom (OTB)
- Prof. dr. J.E. Stoter (Urbanism)
- Ass. Prof. dr. S. Zlatanova (Urbanism)
- Ass. Prof. dr. S.C. van de Spek (Urbanism)
- Ass. Prof. dr. Franklin van der Hoeven (Urbanism)
- Ass. Prof. dr. Bastiaan van Loenen (OTB)

Second Mentor (Daily Supervisor)

The Daily Supervisor is approached before the P1 and participates during the P2, P3, P4 and P5. The Daily Supervisor is a teacher or PhD employee from TU Delft, depending on the subject of the graduation research. The Daily Supervisor is the direct contact for the student. The Daily Supervisor is a technical expert on the field of the graduation project.

Third Mentor (Co-Reader)

The co-reader is the 3rd Mentor. This Mentor only participates during the P4 and P5.

The Mentor is a teacher or PhD employee from another chair/section/department than the Main Mentor. The Mentor receives the Graduation research from the student and is able to criticise the content.

Delegate of the Board of Examiners (BE)

The Delegate of Board of Examiners participates as chairman during the P2, P4 and P5.

The Delegate of Board of Examiners is appointed by the Board of Examiners after admission to the P2.

1.4 Detailed scheme per evaluation

Evaluation 0 P0 - Start graduation

Goal Start of the administration process during the Synthesis project
Who Graduation Coordinator together with Education and Student Affairs at the Faculty of Architecture

P0 responsibilities		
Part	Action	Responsible
Preparation	Determine which students will participate; give names to Education- & Student Affairs for progress check	Graduation Coordinator
	Check whether students meet admission requirements	Education and Student Affairs
Completion	If student meets admission requirements, make student file in sharepoint	Education and Student Affairs

The Graduation Coordinator will send a list of candidates to Education and Student Affairs of the Faculty.

Evaluation 1 P1- Progress review Graduation plan

Goal	Assess whether the student's working method and progress guarantee he/ she will be able to meet the requirements for the P2 in time
Where	Reserved room by Graduation coordinator
Structure	Presentation Graduation plan
Assessor	Second Mentor Graduation Coordinator
Subjects of assessment	Research and Process (see Appendix 1)
Method of assessment	Assessment is based on the P1 assessment criteria; the Second Mentor and Graduation Coordinator give the student the student a good (+), sufficient (0) or negative (-) indication per aspect.. Main mentor is approached and the topic is discussed with him/her.
Method of assessment registration	The assessment is registered on the P1 assessment form by the Main Mentor; the conclusion is registered on the digital assessment form as well
Consequence of Assessment	The student proceeds; If necessary the Main Mentor advises the student concerning his working method and pace

P1 responsibilities		
Part	Action	Responsible
Preparation	Schedule day, time and location and inform student and Graduation Professor	Graduation Coordinator
	15 minutes before session, install (if necessary) digital presentation	Student
At the evaluation	Present draft Graduation plan	Student
	Fill in "P1 assessment form" (Sharepoint)	Main Mentor
Completion	Complete registration at the assessment form: use notes, advise and make agreements	Main Mentor
	Within 2 days after P1; send the assessment form to the student, with email button on the assessment form	Main Mentor

Evaluation 2 P2 – Formal assessment Graduation plan

Goal	The P2 assessment is essential to get admission to Master 4; the base for achieving the P2 should be the belief that the student can graduate in six months with a satisfactory result
Where	Reserved room by Graduation Coordinator
When	End of Master 3, in fixed weeks according to the academic graduation calendar
Admission conditions	Subscription for the P2 presentation is only possible after having gained all study credits of the first year with exception of 1 elective (5 credits) maximum
Structure	15 minutes presentation 15 minutes questions 15 minutes for appraisal
Assessors	Main Mentor Second Mentor
(all required)	Delegate of Board of Examiners
Subjects of assessment	Research, Presentation and Process (see Appendix 1)
Method of assessment	Assessment is based on the P2 assessment criteria; the mentors give the student a good (+), sufficient (0) or negative (-) indication per aspect The mentors give the student a final conclusion: passed, retake or failed
Method of assessment registration	The assessment and conclusion are registered on the P2 assessment form in the digital Graduation Registration by the Main Mentor (Sharepoint)
Consequence of assessment	If a student passes, the chance to graduate within six months is realistic. If the assessment result is “retake” the student does a retake within two week and at result “failed” the student will have to register again for the next P2 period for a new P2 evaluation
Retake based on restriction	At result “retake” the assessors are convinced that a realistic chance exists the student will be able to pass a retake by making a restoration assignment within 2 weeks; in that case the restriction is described at the P2 assessment form The main mentor agrees a date and time for the retake with the student, the second mentor and the external examiner in order to solve the restriction; if the restriction isn’t solved with this retake, than applies the rule stated under “failed”
Failed	If a retake based on a restriction as described above isn’t achievable or the student didn’t lift the restriction, than the student has to retake the graduation assessment in the next quarter during the scheduled P2 period

P2 responsibilities		
Part	Action	Responsible
Preparation	Schedule day, time and location and inform student, Main Mentor and Second Mentor	Graduation Coordinator

P2 responsibilities (continuation)		
Part	Action	Responsible
Preparation (continuation)	Registration for the P2 in Sharepoint	Graduation Coordinator
	Check whether student meets the admission requirements and register in Sharepoint	Education & Student Administration
	Discuss results admission check	Education & Student Administration with secretary of the Board of Examiners
	Inform student by email on result admission assessment	Board of Examiners
	Allocate Delegate of the Board of Examiners and register the appointment in Sharepoint	Secretary Education- & Student Affairs (authorized by the Board of Examiners)
	Fill in the Graduation Plan (template)	Student
	Hand in the research and graduation plan to the Mentors and send Graduation Plan to the Secretariat of the Board of Examiners at least one week before P2	Student
	File Graduation Plan in the digital graduation registration	Secretary Education and Student Affairs
	Read the Graduation Plan	Mentors and Delegate of the Board of Examiners
	15 minutes before session, install digital presentation	Student (See Appendix 1 for exact definition for preparations for this evaluation)
At the evaluation	Act as chairman	Delegate of the Board of Examiners
	Present graduation plan, draft research results and draft of graduation project using digital presentation	Student (See appendix 1 and 2 for exact products for this evaluation)
	Questioning the own academic field	All mentors
	Evaluate academic level of student's presentation and mentors questions	Delegate of Board of Examiners
At the appraisal	Act as chairman	Delegate of Board of Examiners
	Determine final judgement	All mentors
	Document the judgement and conclusion on the P2 Assessment form in the digital Graduation Registration (Sharepoint)	Main Mentor
Completion	Inform the student of assessment; make arrangements for retake (restriction) if necessary	Main Mentor
	Complete assessment form with own notes within two workings days	Second Mentor, and Delegate of Board of Examiners

P2 responsibilities (continuation)		
Part	Action	Responsible
Completion (continuation)	Check P2 assessment form on completeness and send it to the student by email, using the button on the Assessment form within five working days	Main Mentor
	Check whether forms are all present and filled in correctly; undertake action if items are missing; register completion	Education- & Student Affairs
	Register P2 completion date in Osiris	Education and Student Administration

Evaluation 3 P3 - Colloquium midterm

Goal	Survey whether the students working method and progress guarantee he or she will be able to meet the requirements for the P4 in time
Where	Reserved room by Main Mentor
Structure	15 minutes presentation 15 minutes questions
Assessors	Main Mentor, Second Mentor
Subjects of assessment	Research, Presentation and Process (see Appendix 1)
Method of assessment	Assessment is based on the P3 assessment criteria; the Mentors gives the student a positive or negative indication concerning execution plan and progress graduation project
Method of assessment registration	The assessment and conclusion are documented on the P3 assessment form in the digital Graduation Registration by the Main Mentor (Sharepoint)
Consequence of assessment	The student proceeds; If necessary the Main Mentor advises the student concerning his/her working method and rate

P3 responsibilities		
Part	Action	Responsible
Preparation	Schedule day, time and location and inform student and Graduation Professor	Main Mentor
	Register scheduled date in digital graduation registration	Main Mentor
	15 minutes before start evaluation, install digital presentation	Student (See appendix 1 for exact definition for required products for this evaluation)
At the evaluation	Present graduation plan and graduation project	Student (See appendix 1 for exact description of required products for this evaluation)
Completion	Fill in the P3 assessment form (Sharepoint)	Main Mentor
	Determine conclusion: YES – student made enough progress to register for nominal P4 NO – student didn't make enough progress for nominal P4	
	Inform the student of assessment; advice on progress	Main Mentor
	Send the digital assessment form to the student, within 2 days after P3; use button on assessment form to do this	Main Mentor
	Register P3 completion date in Osiris	Education and Student Administration

Evaluation 4 P4 - Formal process assessment

Goal	Assessment whether content of academic fields and presentation meets the requirements to admit the student to the final public presentation (P5)
Where	Reserved room by Scheduling BK
When	During Master 4, in fixed weeks according to the academic graduation calendar
Admission requirements	Student has finished all educational components with exception from P4 and P5 assessment by application for P4 assessment (P4 form)
Structure	30 minutes presentation 15 minutes questions 15 minutes closed deliberation committee Committee informs student about GO/NO-GO
Assessors (all required)	Main Mentor Second Mentor Third Mentor Delegate of the Board of Examiners
Subjects of assessment	Research, Presentation, Process and Project (see Appendix1)
Method of assessment	Assessment is based on the P4 assessment criteria The mentors give the student a good (+), sufficient (0) or negative (-) indication per aspect Finally, the mentors give the student a positive (GO) or negative (NO-GO) judgement on the graduation project
How is the assessment registered	The assessment and conclusion are registered on the P4 assessment form in the digital Graduation Registration (Sharepoint)
Consequence of assessment	At result "GO" the student proceeds to the P5; At result "NO GO" the student has to register for a new P4 in the next period; this is called the retake P4 If necessary the Main Mentor advises the student concerning his/her working method and rate
Retake	The retake will be held within the next P4 period; an appointment must be made with the Main Mentor; if the retake ends in another 'NO-GO' an appointment with the study counsellors needs to be made; any intermediate results will expire

P4 responsibilities		
Part	Action	Responsible
Preparation	Fill in the P4 application form and collect signatures from all mentors including the delegate of the Board of Examiners	Student
	Deliver P4 form to Secretariat Education and Student Affairs	Student
	Register the P4 applications in the digital graduation registration	Secretary Education and Student Affairs

P4 responsibilities (continuation)		
Part	Action	Responsible
Preparation (continuation)	Check whether student meets the admission requirements	Education & Student Administration
	Discuss check on admission requirements	Education & Student Administration with Secretary of Board of Examiners
	Inform the student on the result of the admission check	Education & Student Administration on behalf of the Board of Examiners
	Schedule P4 day, time and location	Scheduling BK
	Products available for all mentors and Delegate of the Board of Examiners at least 1 week for P4	Student
	15 minutes before start evaluation, install digital presentation	Student (See Appendix 1 for exact definition for required products for this evaluation)
At the evaluation	Act as chairman	Delegate of the Board of Examiners
	Present research result/ graduation project using digital presentation	Student (See appendix 1 for exact description of the products for this evaluation)
	Questioning the own academic field	All mentors (in the order Third Mentor, Main Mentor, Second Mentor)
	Assess academic level of students' presentation and questions of the mentors	Delegate of Board of Examiners
At the closed appraisal	Act as chairman	Delegate of Board of Examiners
	Determine final judgement	All mentors
	Determine if the student must be advised to consult a academic counsellor	Main mentor, other mentors and delegate of Board of Examiners
	Document the assessment and conclusion on the digital P4 assessment form	Main Mentor
Completion	Inform the student of assessment	Main Mentor
	If result GO: determine P5 date and register P5 date in digital graduation registration (Sharepoint)	All mentors (date) Main Mentor (register)
	Process graduation document within five workdays (Sharepoint) and send it to student by email, using the button on the assessment form	Main Mentor
	Check whether forms are all assessment forms are filled in correctly Undertake action if items are missing	Education- & Student Affairs

P4 responsibilities (continuation)		
Part	Action	Responsible
Completion (continuation)	Register P4 completion in Osiris	Education and Student Administration
	(If desired) Request a copy of the P4 assessment form from the Main Mentor (Sharepoint)	Student
	Informs Geomatics marketing at geomatics@tudelft.nl about completion of P4 and provides title of the project, name and student number	Student

Evaluation 5 P5 - Public presentation and final assessment

Goal	Public presentation and final assessment
Where	Reserved room by Scheduling BK
When	End of Master 4, in fixed weeks according to the academic graduation calendar
Structure	15 minutes preparation 30 minutes presentation 15 minutes questions 15 minutes closed appraisal 15 minutes result and graduation ceremony
Assessors	Main Mentor Second Mentor Third Mentor
(all required)	Delegate of the Board of Examiners
Subjects of assessment	Research, Presentation, Process and Project (see Appendix1)
Method of assessment	Assessment is based on the P5 assessment criteria; the mentors give the student a mark for conducted Research (50%), Presentation (15%), Presentation (10%) Process(15% and Project (20%)
How the assessment is registered	The assessment and conclusion are registered on the <u>P5 assessment form</u> in the digital Graduation Registration (Sharepoint)
Consequence of assessment	All parts should be rewarded with at least the mark 6.0 and the end mark should also be 6.0 or higher Student is graduated and receives subsequently his or her Master diploma

P5 responsibilities		
Part	Action	Responsible
Preparation	Register a preferred P5 date, in the P5 period according to the Graduation Calendar, in the digital registration (at P4 assessment form)	Main Mentor
	Check whether student meets the admission requirements If yes deliver diploma to Education- & Student Affairs	Education- & Student Affairs and Central student Administration
	Inform student on admission, procedure and P5 obligations	Secretary Education and Studentaffairs
	Schedule P5	Scheduling BK
	Print student's blanc P5 mark list	Secretary Education and Studentaffairs
	Collect the diploma and blanc mark list at Education- & Student Affairs on P5 day	Delegate of Board of Examiners
	Delivers a printed copy of the final thesis to all Mentors, Delegate of the Board of Examiners and Director of Education one week before P5	Student

P5 responsibilities		
Part	Action	Responsible
Preparation (continuation)	Digitally store the graduation presentation at TU Delft repository at the latest within a week after the final presentation	Student
	15 minutes before start evaluation, install digital presentation.	Student (See appendix 1 for exact definition for required products for this evaluation)
At the evaluation	Act as chairman	Delegate of Board of Examiners
	Present research result/ graduation project and reflection using digital presentation	Student (See appendix 1 for exact definition for required products for this evaluation)
	Questioning the own academic field	All mentors (in the order Third Mentor, Main Mentor, Second Mentor)
	Assess academic level of students' presentation and questions of all mentors	Delegate of Board of Examiners
At the closed appraisal	Act as chairman	Delegate of Board of Examiners
	Determine the marks for all academic fields, presentation and end mark	All mentors
	Register all marks on the P5 assessment form in the digital Graduation Registration (Sharepoint)	Main Mentor
	Open diploma envelop and determine if student graduated "with distinction"	Delegate of Board of Examiners
Completion	Welcome student and public to diploma ceremony and explain procedure	Delegate of Board of Examiners
	Inform the student of assessment and address on the process, content of graduation project and the method of working	Main Mentor
	Hand out P5 mark list to student	Main Mentor
	Hand out diploma	Delegate of Board of Examiners
	Sign diploma two sided	Student
	Process graduation file within five workings days (Sharepoint)	Main Mentor
	Check whether assessment forms are filled in correctly Undertake action if items are missing; register completion P5	Eduction and Student Affairs
	Unsubscribe as TU Delft Student	Student

P5 responsibilities (continuation)		
Part	Action	Responsible
Completion (continuation)	Register P5 result in Osiris	Education and Student Administration
	After student uploaded final presentation at TU Delft repository: send diploma supplement to student address	Education and Student Administration

2.0 Particular circumstances

Quorum at evaluations

A quorum is required for the graduation evaluation to be valid.

Quorum for P2: Main mentor, Second mentor and Delegate of the Board of Examiners.

Quorum for P4 and P5: Main mentor, Second mentor, Third mentor and Delegate of the Board of Examiners.

- **Absence of Delegate of the Board of Examiners**

The Board of Examiners appoints Delegate and Deputy Delegate of the Board of Examiners for all evaluations. If the Delegate of the Board of Examiners will be unable to attend an evaluation he/she asks the Deputy Delegate to replace him/her. If both delegates are unable to attend looks for appropriate solution, the evaluation cannot be cancelled. The Deputy Delegate of the Board of Examiners is registered in the digital graduation registration.

- **Absence of one of the mentors**

If it is known in advance that the main mentor or other mentors will be unable to attend, a presentation must be held for that mentor prior to the evaluation. The assessment and signature of the mentor concerned must be written down in a letter. This letter must be given to the Delegate of the Board of Examiners in a closed envelope. At the appraisal this assessment will be taken into account by the other mentors for determining the final assessment.

At unexpected absence there will be looked by the Main mentor and other present mentors for an exam authorized deputy within the same academic field.

The Secretariat of the Board of Examiners is also informed by the Main mentor or Delegate of the Board of Examiners about this absence. The evaluation should preferably be continued and the final assessment should be determined after hearing the absent mentor.

The determination for a GO / NO GO or the registration of the marks on the final mark lists only takes place after consulting the absent mentor by phone. If this isn't possible final judgment at the P4 is postponed at the P5 a "pass" is registered for the involved academic field. In both cases a meeting with the absent mentor takes place on the shortest possible term, to determine a final conclusion. At doubt or on request of the student, it may be decided that an extra presentation must be held.

Problems in the appraisal

It may occur that the appraisal doesn't lead to an assessment. The Delegate of the Board of Examiners informs the student on this situation and explains the applied procedure and the corresponding terms.

Subsequently he collects the presented products and presents the problem to the Chairman of the Board of Examiners.

The Chairman of the Board of Examiners will reconvene the mentor team and the Delegate of the Board of Examiners for a reappraisal, which he will chair, in which he will attempt to achieve consensus. In case of failing he will make a final decision.

2.1 Special qualifications

Honourable mention ¹

On intercession of the mentor and approval of the external examiner the predicate honourable mention may be attached to the examination result. The condition for this is that the examinee achieved a mark 8.5 or higher for the graduation project.

The student is informed on the honourable mention at the diploma ceremony. The written honourable mention will be handed over to the student within two weeks after the final presentation.

¹ The complete system is described in Article 36 of the Rules and Regulations of the Exam Committee.

In case of particular circumstances or exceptional characteristic an honourable mention is only possible after agreement from the Board of Examiners.

With distinction ²

The student graduates his Master exam 'with distinction' if he meets the following conditions:

- the weighted average of the results of the Master courses not including the Master final Project is at least 8.0 or higher
- the final mark for the public final presentation is at least 8.0 or higher
- and the Master program is completed within 3 years.

In that case a note 'with distinction' is made on the student's diploma.

² The complete system is described in Article 35 of the Rules and Regulations of the Exam Committee.

Appendix 1 Subjects to be assessed per evaluation

To assess subjects per evaluation

Note: consult your Main Mentor the exact interpretation of the requirements.

P1	P2	P3	P4	P5
Geomatics				
Process documents <i>preliminary graduation plan</i>	Process documents <i>final graduation plan</i>	Process documents <i>preliminary products proposed in P2</i>	Process documents <i>master thesis report</i>	Process documents <i>final master thesis report</i>
Research <ul style="list-style-type: none"> ▪ motivation/problem field/relevance ▪ problem statement ▪ objectives ▪ research questions ▪ theoretical framework ▪ methodology ▪ preliminary project and results ▪ preliminary choice of case 	Research <ul style="list-style-type: none"> ▪ motivation / problem field /relevance ▪ position in the academic and professional debate ▪ problem statement, objectives, research questions, approach, theoretical framework, methodology ▪ references ▪ preliminary project set up and results 	Research <ul style="list-style-type: none"> ▪ methodology ▪ link theory-design & planning ▪ preliminary conclusions 	Research <ul style="list-style-type: none"> ▪ motivation / problem field / relevance ▪ theoretical framework ▪ methodological framework ▪ analyses, research results ▪ conclusions / recommendations ▪ references 	Research <ul style="list-style-type: none"> ▪ motivation / problem field / relevance ▪ theoretical framework ▪ methodological framework ▪ analyses, research results ▪ conclusions / recommendations ▪ references
	Presentation <ul style="list-style-type: none"> ▪ written, oral, graphics and demo 	Presentation <ul style="list-style-type: none"> ▪ text, oral, graphics and demo 	Presentation <ul style="list-style-type: none"> ▪ written, oral, graphics and demo 	Presentation <ul style="list-style-type: none"> ▪ written, oral, graphics and demo
Process <ul style="list-style-type: none"> ▪ planning 	Process <ul style="list-style-type: none"> ▪ academic attitude: evidence based, logical, critical ▪ planning 	Process <ul style="list-style-type: none"> ▪ academic attitude: evidence based, logical, critical ▪ planning 	Process <ul style="list-style-type: none"> ▪ academic attitude: evidence based, logical, critical ▪ planning 	Process <ul style="list-style-type: none"> ▪ academic attitude: evidence based, logical, critical

P1	P2	P3	P4	P5
			<i>Project</i> <ul style="list-style-type: none"> ▪ originality and scientific level ▪ professional significance ▪ independence and own initiative ▪ planning and compliance with planning ▪ conducting research ▪ controlling the subject ▪ being able to make assessment 	<i>Project</i> <ul style="list-style-type: none"> ▪ originality and scientific level ▪ professional significance ▪ independence and own initiative ▪ planning and compliance with planning ▪ conducting research ▪ controlling the subject ▪ being able to make assessment ▪ <i>reflection of the research (see Appendix 3)</i>

Appendix 2

Content of Graduation plan

Graduation Plan

The graduation plan consists of at least the following data/segments:

Personal information	
Name	
Student number	
Address	
Postal code	
Place of residence	
Telephone number	
E-mail address	
Mentors	
Main mentor (Graduation Professor)	
Second Mentor (Daily Supervisor)	
Project Location	
Title	
Title of the graduation project	
Research	
Problem Statement	
The definition of the problem has to be significant to a clearly defined area of research.	
Research Question and scope	
This research question has to reflect the problem statement. This section has to include what the intentions are of the graduation research.	
Process	
Method description	
A description of the methods and techniques of research, which are going to be utilised.	
Background information and general practical preference	
The literature (theories or research data) and general practical experience/precedent you intend to consult.	
Relevance	
The value of the graduation research in the larger social and scientific framework.	
Time planning	
A scheme of the division of the workload of the graduation research in the timeframe. The submitted Graduation document might be rejected if the planning is unrealistic.	

Appendix 3

Reflection P5

At P5 a reflection must be included as a distinct part of the thesis (a separate chapter) or as a separate document.

In this reflection the student uses a short substantiated explanation to account for the results of the research in the graduation phase (product, process, planning).

Depending on the research, reflection on a number of the following aspects should be included (you may choose in which order). The reflection should be in the form of a text, with diagrams and sketches for purposes of illustration and clarification.

Aspect 1

- **The relationship between the methodical line of approach of the Master Geomatics and the method chosen by the student in this framework.**

Aspect 2

- **The relationship between the conducted research and application of the field geomatics.**

Aspect 3

- **The relationship between the project and the wider social context.**

Appendix 4

Reference to official regulations

Subject	Registered at	Article
Graduation work	<i>Student Charter, Part II: Implementation Regulations of the Course and Examination Regulations, Master of Science Geomatics, 2013-2014</i>	2.5
The designation "With distinction" for Master degree audit	<i>Student Charter, Part II: Implementation Regulations of the Course and Examination Regulations, Master of Science Geomatics, 2013-2014</i>	2.13