

MASTER'S ASSIGNMENT APPLIED PHYSICSAssessment form *(can be filled in digital)*

Student name

Student number

Research group

Cohort

Date of presentation

Title thesis

☐*The report has been checked for plagiarism by the student.*☐**Grade Physics Aspects**☐**Grade General Aspects**

Cum Laude

☐**How to use this form**

On page 4 you find the general information and course information. On page 5 you find the assessment plan. Please read this before the assessment.

On page 2 and 3 you will find the tables in which you indicate the strengths and/or the points for improvement for each subject. Subsequently fill in the two grades on page 1. And if applicable, that the master's degree was awarded with "cum laude".

After the form has been completed, digitally sign¹ the form. After each digital signature the form will be saved. After that, the next one can sign.

Make or save a copy for the student and the research chair and send the assessment form to the office of Education Affairs: **BOZ-AP**, Citadel H436, BOZ-AP@utwente.nl

¹ [Click here](#) for help about digital signatures and signing of pdf documents in Adobe.

Master's Final Project Committee

Titles and name		Signature
Chair		
Daily supervisor		
Reference member ²		
Member		
Other members		

² A member of a chair in the discipline committee Applied Physics other than the chair in which the final project is carried out.

Physics aspects of assessment

Comments and feedback	
Research plan and position	Compliments Suggestions of improvement
Theoretical and experimental skills	Compliments Suggestions of improvement
Analysing skills	Compliments Suggestions of improvement
Scientific approach and handling of complexity	Compliments Suggestions of improvement
Reflective capabilities	Compliments Suggestions of improvement

Please note: the assessment form should clearly reflect/support the final grade.

General aspects of assessment

Comments and feedback	
Reporting	Compliments Suggestions of improvement
Oral presentation and discussion	Compliments Suggestions of improvement
Professional research attitude	Compliments Suggestions of improvement
Professional communication	Compliments Suggestions of improvement
Arrangement of own work within conditions of research group	Compliments Suggestions of improvement

Please note: the assessment form should clearly reflect/support the final grade.

General information

Course code :	- Physics Aspects: 193599039 (25 EC) 201800344 (20 EC) - General Aspects: 193599089 (25 EC) 201800345 (20 EC)
Course name:	Master's Assignment: Applied Physics
Lecturers (chair of the MFPC is examiner/coordinator):	The MSc Final Project Committee (MFPC) is responsible for the supervision and assessment. The committee consists of a minimum of three members, that all have a doctors degree. The chair of the committee is the graduation professor, and at least one of the members should be from another research group within the Applied Physics domain of the faculty of Science and Technology (reference member). In case the graduation professor/chair is not from within the Applied Physics domain, the reference member should be a professor from the Applied Physics domain. For the guide lines see the Rules of the Board of examiners AP.
Determining pass mark	In the assessment of the MSc assignment, two marks will be determined: (i) One grade covers the quality of the physics aspects and the research performance, (ii) One grade covers the other objectives, concerning the oral and written reporting as well as other general aspects of the research. For each mark a distinct course code has been assigned. The assignment can only be finalized when both grades are six (6) or higher.

Course Description

The individual MSc assignment comprises the completion of the master program Applied Physics. The main objective of the assignment is that the student learns and proves that (s)he is able to define, perform, complete and reflect on a research project in the applied physics domain with a large degree of independence.

The assignment is performed in one of the research groups within the Applied Physics domain of the faculty of Science and Technology of the University of Twente under the supervision of a researcher with a doctors degree and the responsibility of a MSc Graduation Committee.

The assignment can be performed (partially) within a research group outside the domain of Applied Physics or an external institute or organization. This needs the approval of the master examination committee of Applied Physics.

Course Content

The student has to perform a substantial research or design project that meets scientific criteria. The level of profundity and complexity is defined by the chair of the MSc graduation committee. The student completes the assignment with a written report (the MSc thesis) and an oral public presentation.

Students of cohort 2018 and higher graduate with a master's assignment of (2x20) 40 EC.

Students up to cohort 2018 graduate with a master's assignment of (2x25) 50 EC.

Programme objectives

In the master assignment, the programme's objectives are met, with focuses on acquiring most of the learning outcomes of the complete program:

- a thorough knowledge of the basic physics and mathematics theories;
- knowledge of physical technology, including skill in designing and applying measuring equipment and experimental techniques;
- orientation in the application areas of applied physics;
- insight into how the sciences are interconnected and the relation between science and society and the resulting responsibilities;
- skills such as being able to acquire knowledge independently; being able to contribute creatively and systematically to solving issues relating to the subject area; being able to work with colleagues;
- in and outside the discipline; and communicative, social and organizational skills.

Assessment plan Physics Research aspects

Learning objectives	Assessment	Weight
After following the course, the student is able to perform complex scientific research at a master level in the field of Applied Physics, and:		
1a. Is able to formulate an interpretation a research problem and to define the research goals 1b. Is able to define the theoretical and experimental research plan and position the research in the field.	Meeting MGC Report & presentation	~10%
2. Has the theoretical and experimental skills to execute the research, works systematically and makes well founded choices. Is able to recognize flaws in theory and has the skills to acquire missing parts.	Observation by supervisor Report & Presentation	~30%
3. Is able to analyse the results, draw conclusions and to reflect on the results with respect to the problem definition and research goals.	Observation by supervisor Report & Presentation	~30%
4. Has a scientific approach and possesses intellectual skills (can handle complexity)	Observation by supervisor Report	~20%
5. Is able to reflect on the contextual aspects of the research (social context, safety and environmental consequences, scientific and ethical aspects)	Report, Meeting MFPC Publication	~10%

Assessment plan Reporting & General aspects

Learning objectives	Assessment	Level	Weight
After following the course, the student is able:			
1. Is able to report adequately about the research in English. (report is well structured in clear and correct language)	Report	Report sufficient contents for publication	~25%
2. Is able to present and to discuss adequately about the research in English (presentation is well structured, with a clear explanation, supported by tools)	Presentation	Presentation for staff research	~25%
3. Is able to work with a high degree of independence, creativity, dedication, pace, commitment (the student himself is responsible for the progress, planning and	Observation by supervisor and MGC	Professional attitude	~20%
4. Is able to communicate professionally with the supervisor (problem owner), to co-operate with the members of the research group and to communicate with others from inside and outside the community of Applied Physics.	Observation by supervisor and MGC members		~15%
5. Is able to arrange his research within the conditions set by the group.	Observation by supervisor		~15%