Name of the student Student number

|  |  |  |
| --- | --- | --- |
| Name |  | sXXXXXXX |

Project title

|  |
| --- |
| Title of the project |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Grade for general aspects |  |  | \*\* Has the report been |  |
| Grade for physical aspects |  |  | checked for plagiarism? |  |

Research group Course code Date of final presentation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ABC |  | 201500316 (15 EC) |  | DD/MM/YYYY |

**Assessment committee**

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Signature** |
| Chair[[1]](#footnote-1) |  |  |
| External member[[2]](#footnote-2) |  |  |
| Daily supervisor |  |  |
| Additional member (optional) |  |  |

**Explanation**

How to use this form:

* Fill out the student name, number, title of the project, research group, course code and date.
* For each evaluation point, describe the most relevant positive points and suggestions for improvement; The assessment form serves as a basis for the two grades and also as feedback for the student.
* Use the test scheme and course information as guidelines to reach the two grades: One grade for the general aspects and one grade for the physical aspects of the assignment. Both grades should be given to one decimal place. Together the grades form the final result for the assignment.
* Make a copy of the completed form for the student and the research group (it can also be sent by email later).
* The chair takes care of sending the form to BOZ ([BOZ-TN-CES@utwente.nl](mailto:BOZ-TN-CES@utwente.nl)) and [tn-tnw@utwente.nl](mailto:tn-tnw@utwente.nl).

\*\* The student has the responsibility to somehow provide evidence that the report has been checked for plagiarism. For more information, contact the Applied Physics staff.

**General aspects**

**Evaluation points Remarks and feedback**

|  |  |
| --- | --- |
| **Reporting** | Positive points:  Suggestions for improvement: |
| **Oral presentation & discussion** | Positive points:  Suggestions for improvement: |
| **Research attitude** | Positive points:  Suggestions for improvement: |
| **Professional communication** | Positive points:  Suggestions for improvement: |
| **Research independence** | Positive points:  Suggestions for improvement: |

**Physical aspects**

|  |  |
| --- | --- |
| **Research plan and context** | Positive points:  Suggestions for improvement: |
| **Theoretical and/or experimental skills** | Positive points:  Suggestions for improvement: |
| **Analysis skills** | Positive points:  Suggestions for improvement: |
| **Scientific approach & handling of complexity** | Positive points:  Suggestions for improvement: |

**Test scheme bachelor assignment**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Module level** | | **Osiris level** | | | **Subject level** | | |
| *Topic* | *min. grade* | *Subject* | *min. grade* | *Weight* | *Subject* | *Way of assessment* | *Weight* |
| Bachelor assignment | ≥ 5,5 | General aspects | ≥ 5,5 | 50% | Learning objective 1 | Progress meeting with supervisor(s) | 10% |
| Learning objective 2 | Attitude during the assignment and meetings | 20% |
| Learning objective 3 | Observation from the supervisor(s) | 10% |
| Learning objective 4 | Report | 30% |
| Learning objective 5 | Presentation and discussion | 20% |
| Learning objective 6 | Context in report and presentation | 10% |
| Physical aspects | ≥ 5,5 | 50% | Learning objective 7 | Context in report and presentation | 20% |
| Learning objective 8 | Observation supervisor(s); report; presentation | 80% |

**Course information**

|  |
| --- |
| **Course description**  The Bachelor programme in Applied Physics ends with the Bachelor assignment. This allows the student to apply the knowledge and skills gained from experiments, use of theoretical models, data analysis and oral and written presentations throughout the entire Bachelor degree to a real area of research.  The student is responsible for contacting a research group and designing the project description (the research group will help with the latter). Before the start of the project, the project description and names of the assessment committee must be submitted to the secretary of the exam committee for review (via the programme coordinator).  The Bachelor assignment lasts 10 weeks full time (longer in the case of part-time research) and is based in the research group of the Chair. A daily supervisor (tutor) and teacher are assigned to assist in the smooth running.  **Course content**  The Bachelor assignment begins with an introduction and literature review. Then, the student must design an appropriate research plan and schedule that, with appropriate supervision, will allow him/her to address the research question.  The proposed research must contain sufficient scope and complexity to satisfy the requirements of a Bachelor assignment. It usually fits within the framework of ongoing scientific research of the host Chair. Throughout the project, the student discusses progress with the supervisor and teacher and adjusts the future direction as appropriate.  The Bachelor assignment ends with a written report and oral presentation, at the level expected of B3-students of Applied Physics. Assessment is done by the tutor, teacher, and an external committee member. The external committee member and teacher must both hold PhDs and be independent researchers (e.g., academic staff), coming from two different Chairs within Applied Physics (The tutor/daily supervisor is exempt from these requirements). |

|  |  |  |
| --- | --- | --- |
| **Learning objectives**  After finishing the bachelor assignment, the student is able to: | **Way of assessment** | **Weight** |
| 1. Organise and plan a research project, from problem analysis to inclusion of feedback. | Progress meeting with supervisor(s) | 5% |
| 1. Demonstrate independence in the preparation and implementation of a research project, including use of critical scientific thinking. | Attitude during the assignment and meetings | 10% |
| 1. Function professionally, in terms of communication with other students and teachers, as well as collaborate within the research community (including beyond Applied Physics). | Observation from the supervisor(s) | 5% |
| 1. Provide a clear, structured, content-based, written report. | Report | 15% |
| 1. Orally present his/her research, through a clear, structured, content-based presentation, including discussion and questions/answers with a scientific audience (other students, graders, etc). | Presentation and discussion | 10% |
| 1. Place his/her research in a social context, as well as take into account safety, environmental, and ethical issues. | Context in report and presentation | 5% |
| 1. Gather, select and process relevant scientific information with the use of concept and theories from the relevant field, including state of the art. | Context in report and presentation | 10% |
| 1. Conduct Applied Physics research at the level expected of a final year Bachelor student, including using a systematic/logical approach to: Problem analysis, formulation of research question, theoretical and/or experimental methods, data collection, and analysis (including computation where necessary); and to be able to explain, with reasoning, why these approaches have been chosen. | Observation supervisor(s); report; presentation | 40% |

Learning objectives 1 to 6 determine the general aspects (=50%); learning objectives 7 and 8 determine the physical aspects of the assignment (=50%).

1. Responsible teacher (UD, UHD, Prof.) [↑](#footnote-ref-1)
2. From other independent APh chair; at least doctoral degree. [↑](#footnote-ref-2)