

Learning Outcomes		fail	6	7	8	9	10
1. Theoretical knowledge & understanding	Theoretical knowledge	Does not understand and cannot reproduce directly relevant theory at the level of BSc textbooks	Understands relevant theory at the level of BSc textbooks	Understands and can reproduce directly relevant theory at the level of BSc textbooks	Understands and can reproduce directly relevant theory at the level of BSc textbooks, understands relevant theory from more advanced literature, such as MSc textbooks	Understands and can reproduce directly relevant theory at the level of BSc textbooks and more advanced literature, such as MSc textbooks	Has a theoretical understanding of the relevant theory at the level of an MSc graduate.
	Application of theory	Is not able to relate theory to the performed research	Has difficulties applying this theory to the performed research	Can apply this theory to the performed research, after being shown how to do so	Can independently apply this theory to the performed research	Has independently and very insightful applied this theory to the performed research	Has independently integrated existing theory from different sources into an original theoretical description.
2. Method and scientific approach	Responsibility	Showed no responsibility for the proper progress and completion of the project	Showed little responsibility for the proper progress and completion of the project	Did take and shows responsibility for the proper progress and completion of the project	Was project manager of his/her research project	Was a pro-active project manager of his/her research project	Was a pro-active project manager of his/her research project and was actively involved in related projects
	Communication	Did not properly communicate the progress of the project with the supervisor	Adequately communicated about the progress of the project with the supervisor	Communicated timely and adequately about the progress of the project with the supervisor	Actively sought communication about the progress of the project with the supervisor	Actively sought for information, contacts and advice with various experts inside the research group	Actively sought for information, contacts and advice with various experts inside and outside the research group
	Literature study	Cannot study literature as suggested by the supervisor	Has adequately studied literature as suggested by the supervisor	Has properly studied and understood literature as suggested by the supervisor	Has found some new literature, in addition to the literature suggested by the supervisor	Has independently found and studied a significant amount of relevant literature	Has independently performed a thorough literature study
	Critical attitude	Has no critical attitude towards the validity of own results	Limited critical attitude towards own results	Adequate critical attitude towards own results	Good critical attitude towards own results, and that of his predecessors and colleagues	Good critical attitude towards own results, and that of his predecessors, colleagues, literature and supervisor	Excellent critical attitude towards own results, literature and supervisor
	Time planning	Has not learned to think ahead in order to adequately plan experiments. As a result nominal project time was exceeded by more than 50%	Time planning should be improved, nominal project time was exceeded by more than 30%	Time planning could be improved, nominal project time was exceeded by more than 20%	Very good time planning, nominal project time was exceeded by no more than 10%	Excellent time planning. Project was finished within schedule.	Excellent time planning. Project was finished within schedule. Work done was more than expected
3. Research work	New ideas	n.a.	Did not produce any own idea during the course of the project	Suggested at least one own, but not really original, idea during the course of the project	Suggested at least one original idea during the course of the project	Has had at least one original contribution to the project not initiated or thought of by the supervisor	Has had several original ideas not initiated or thought of by the supervisor
	Experimental skills	Should improve considerably on practical (experimental/computer/design) skills, or is not always aware of safety issues.	Should improve on practical (experimental/computer/design) skills, but is always aware of safety and operates accordingly	Could improve on practical (experimental/computer/design) skills, but is always aware of safety and operate accordingly	Good practical (experimental/computer/design) skills. Works safely, carefully and precisely.	Very good practical (experimental/computer/design) skills; actively seeks to improve safety.	Exceptional practical (experimental/computer) skills; actively seeks to improve safety
	Significance	Work/design is not reliable and should be redone before it can get a follow-up	Work/design should be checked before it can get a follow-up	Work/design forms a solid basis for follow-up research, but needs further extension, verification or improvement before it can be included in external reports or publications	Work/design can be included in external reports or publications.	We are proud to communicate the results externally	We are proud to communicate the results externally. The work has directly led to a conference paper, a journal publication, or a patent
4. Report	Independence in writing	Is not able to write a report without significant support of the supervisor.	Significant corrections made by supervisor, in various iterations	Important corrections made by supervisor	Report was written by the student with limited corrections by supervisor	Report was written by the student with virtually no corrections by supervisor	Report was written by the student without any corrections by supervisor
	Quality of the report	Report does not fulfill basic requirements or contains large scientific errors;	Report fulfills basic requirements and is free of large scientific errors	Report fulfills all basic requirements and is free of scientific errors	Clear, well-written, well-structured report free of scientific errors	Very good report in terms of contents, structure and clarity	Excellent report in terms of contents, structure and clarity
	Usefulness of the report	The report is full of errors and cannot be understood	The report cannot be used as a basis for follow-up research	The report documents the performed work in such a way that it can be used as the basis for follow up research	The report could be send to third parties	Parts of the report can be incorporated in a scientific paper after modification	Parts of the report can be incorporated in a scientific paper without modification
5. Presentation & defence	Quality of presentation	Fails to give an intelligible presentation	The presentation is poorly structured	The presentation is reasonably structured.	The presentation is well-structured and conveys a clear message	The presentation is well-structured, conveys a clear, motivating message	The presentation is at the level of the better speakers at national conferences
	Depth of argumentation in oral defense	Is not able to provide basic arguments	Is able to provide basic arguments, absence of detailed argumentation	Provides detailed argumentation basic questions and basic argumentation for more advanced questions	Detailed argumentation for most questions	In-depth argumentation, leading to an interesting scientific discussion	The entire committee enjoyed the in-depth discussions with the student
	Handling questions	Is not able to deal with the most basic questions	Is able to deal with basic questions, depends on supervisor for advanced questions	Is able to deal with part of the advanced questions, rarely depends on supervisor	Deals with advanced questions efficiently and comfortably.	Deals with advanced questions efficiently and comfortably, interacts very well with questioners	Offers new insights during discussion
6. Competences	(Inter)personal skills	Has difficulties functioning in a team; has conflicts with coworkers	Has difficulties functioning in a team	Has no difficulties functioning in a team	Is a good team player	Is a very good team player or an excellent individualist	Excels as team player or is an exceptionally competent individualist
	Creativity	Not creative	Not very creative	Some creativity	Creative researcher	Very creative researcher	Exceptionally creative researcher
	Open-mindedness	Non-responsive to criticism, or responds to criticism in an aggressive, defensive way, or gets demotivated by criticism	Non-responsive to criticism, or responds to criticism in a defensive way, or loses motivation by criticism	Responds to criticism in a defensive way	Can handle criticism in a positive way	Uses criticism to improve him/herself	Is actively seeking for criticism to improve him/herself
	Language	The English/Dutch writing skills have to be improved considerably; English/Dutch speaking skills need to be improved considerably	Adequate English/Dutch writing skills Adequate English/Dutch speaking skills	Sufficient English/Dutch writing skills Sufficient English/Dutch speaking skills	Good English/Dutch writing skills Good English/Dutch speaking skills	Very good English/Dutch writing skills Very good English/Dutch speaking skills	Excellent English/Dutch writing skills Excellent English/Dutch speaking skills

Note: the minimum requirements (grade 6) allows **one** learning outcome (1 till 6) to be marked as a 5. The grade does not have to be the mathematical average of the criteria. A precision of .5 is allowed.