

Student Information		
Student Name:		FINAL GRADE
ID-Number:		
Title Project:		
TU/e First Assessor Name:		in 0.5 grades
Second Assessor:		
Internship PhD: if relevant		
The grade fields and the professional skill fiel	ds are automatically synced with the grades on pages. Please find the signature and	comments part on the last page.
Professional Skills: if applicable	Planning and Organizing:	
, ,	Writing:	
	Professional Attitude:	
Signatures Only sign the form when it is comple	ete. Do not make any further changes after signing.	
	Signature First Assessor	

USER MANUAL OF THE BEP RUBRIC

Ideally, the bachelor end project (BEP) should demonstrate that a student has achieved all the learning goals of Sustainable Innovation (SI) bachelor programme at a sufficient level before awarding the diploma. This way the quality of the student and the value of the SI bachelor diploma can be guaranteed. However, the learning outcomes of the SI programme are phrased in terms of ACQA competences, whereas main deliverable is the bachelor thesis, which should meet scientific standards. This rubric for the bachelor end project (BEP) thesis is designed to make the relation between the two as explicit and transparent as possible.

The rubric is designed with the following goals in mind:

- The rubric makes sure that all learning outcomes are represented in the form of ACQA competences, while still being as concise as possible.
- In addition, the relation between the actual deliverables of the BEP is made explicit by listing the features of the bachelor thesis, the writing skills and process that can be used to assess a given competence (first column).
- By making the criteria for grading explicit, the assessments from different teachers should be more homogeneous and counteract different practices. It should be easier to assess a given bachelor thesis. Given that there is a wide variety between research topics of the BEP, the criteria for excellence should NOT be read as an exhaustive list, but as guidelines for interpreting the more abstract competences.
- The rubric is a formative feedback instrument that teachers can use to give feedback about the performance of the student. Each competence can be rated from Failed, via Insufficient to Excellent.
- The comment boxes are crucial for explaining why a certain competence was rated high or low. Providing comments is therefore mandatory.
- The rubric can also be used as a summative grading instrument. Both the first assessor and second assessor can assign partial grades.
- The rubric for the intermediate report is used in an extended form for the assessment of the final report.

Usage:

- This form (final form) is only filled in by the first assessor.
- The second assessor assesses the report by means of the form for the second assessor (different form) whereafter he/she sends the form to the first assessor.
- The first assessor fills the grade of the second assessor in the box of page 14 (mandatory field). In case the assessment between the first and second assessor were different, an explanation is provided on page 14.
- The first assessor emails both of the forms to the CSA IEIS (CSA.IEIS@tue.nl), the BEP coordinator and the student.



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A. Quality Problem Identification and Theoretical Framework

Research problem, research aim and question, scientific and societal relevance

	1-4	5	6	7	8	9-10
æ	The research problem does not concern a socio-technical issue and is not related to sustainability/ sustainable innovation. There is no or poor description of the research problem leading to a clear problem statement. There is no relation to the research question/ aim or the literature does not match the problem, relevance of the research is not clear.	The research problem concerns a sociotechnical issue and is related to sustainability/ sustainable innovation. Limited description of the research problem. There is no relation to the research question/ aim or the literature does not match the problem, relevance of the research is not clear.	The research problem concerns a sociotechnical issue and is related to sustainability/ sustainable innovation. There is a broad research problem and it is connected with relevant literature to the research question/aim. The relevance of the research is described.	The research problem concerns a sociotechnical issue and is related to sustainability/ sustainable innovation. There is a clear research problem and it is connected to the research question/aim. The relevance of the research is described. Gap in the literature is identified.	The research problem concerns a sociotechnical issue and is related to sustainability/ sustainable innovation. There is a clear and concise research problem which is clearly connected to the research question/aim; the relevance of the research is substantiated. Scope and boundaries of the research are well defined.	The research problem concerns a sociotechnical issue and is related to sustainability/ sustainable innovation. There is a clear, concise and original research problem which is clearly connected to the research question/aim. The student substantiates the scientific and societal relevance of the research. Scope and boundaries of the research are well defined (boundaries).



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A. Quality Problem	Identification and	Theoretical Framework
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Description of relevant literature

1-4	5	6	7	8	9-10
A review of the relevant literature is missing, incomplete or unclear.	Review of the relevant literature is incomplete or unclear.	The relevant literature is described	The relevant literature is described, connected to the research aim		Thesis contains crititcal review of relevant literature and connects to ongoing debates and the reserach aim.

Relevant theories and key concepts

Role of theory is not
clear. Literature used
is (partly) irrelevant
and/or insufficient to
answer the research
question. And/or,
theoretical concepts are
misunderstood

Role of theory is insufficiently clear. Literature is only partially relevant. And/ or, theoretical concepts are misunderstood The main theoretical concepts and their relations are clearly defined and linked to the research question/ aim and literatures. Theoretical concepts are understood and application is sufficient

The main theoretical concepts and their relations are clearly defined and linked to the research question/ aim and literatures. Theoretical concepts are understood and application is sufficent to good.

The research question/ aim is reformulated in theoretical terms. The main theoretical concepts and their relations are clearly defined and connected to literatures. Theoretical concepts are understood and application is good. The research question/ aim is reformulated in theoretical terms. The main theoretical concepts and their relations are clearly defined and connected to relavent literatures and theoretical debates. Theoretical concepts are understood and application is excellent / original.

Explanation (obligatory)



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B. Quality of Research Methods

Scientific approach

1-4	5	6	7	8	9-10
The chosen research method(s) do not correspond (well) to the problem statement. No structured description (reproducible steps) of the research method.	Most of the chosen research method(s) and instruments do not correspond well to the problem statement. No structured description (reproducible steps) of the research method.	The research approach is mostly adequate (one or more suitable research methods) corresponding to the problem statement. The steps of the research method are listed.	The research approach is adequate. The chosen research method(s) and instruments correspond to the problem statement and are based on literature. Steps of research method are listed and basically explained. Validity of research approach is discussed. Researcher shows suffcient scientific attitude (applying (inter)discplinary literatures, concepts and methodes)	The research approach is adequate. The chosen research method(s) and instruments correspond to the problem statement and are based on literature. The chosen research approach is justified by the student. Steps of research method are listed and explained in detail. Validity of research approach is critically discussed. Researcher shows good scientific attitute (applying (inter) discplinary literatures, concepts and methodes)	The research approach is adequate and thoroughly considered. Choices are clearly justified from the perspective of the problem statement and literature. The research approach stands out because of originality and/or complexity. Steps of the research method are listed and explained in detail. Validity of research approach is critically discussed. Researcher has an excellent scientific attitude (applying (inter)disciplinary literatures, concepts and methodes)



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C. Quality of Research Execution	C. Quality	of Researcl	n Execution
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Data Collection and Data Management

1-4	5	6	7	8	9-10
The student was not able to collect data and/or process data or the collection of data is too limited.	The collection of data is too limited and/ or there are doubts about the validity and reliability of the data, prompted by the unclear or incorrect way in which the student acquired and/ or processed the data (not transparent)	The collection of data is sufficient but minimal. There is sufficient faith in the validity and reliability of data and its processing (most times transparant).	The collection of data is sufficient. There is sufficient faith in the validity and reliability of data and its processing (always transparant).	The collection of data is substantial. There is faith in the validity and reliability of the data and its processing (transparent), based on an adequate justification.	Extensive data collection. The acquisition of the data took place in an adequate fashion. The way in which the data have been processed has been meticulously documented and justified.

Data analysis and results

No or limited analysis and/or interpretation. Claims cannot be checked. There is no or limited description of the research results or the presented results do not logically follow from analysis.	Results follow broadly from analysis but without interpretation.	Correct analysis. Results follow from analysis. Analysis and interpretation are superficial	Correct analysis. Results follow logically from analysis. Results are presented clearly and organized, factual and with interpretations.	Correct and thorough analyses of the data. Results follow logically from analysis. The results are presented clear and wellorganized, factual and with interpretations. and presented in relation with research questions.	Advanced and original analyses of the data. The results follow logically from analysis. The results are presented are clear, very well- organized (emphasizing the essence of the research) and factual. The meaning of the results is described and explained in detail. Tables and figures are well integrated in the line of argumentation. Critical reflection on results and the relation between concepts.
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Grade Part C	Explanation (obligatory)



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D. Quality of The Conclusion and Discussion

Conclusions and implications

1-4	5	6	7	8	9-10
No or (very) weak conclusions. Not based on data analysis and not linked to the research questions. Or conclusions are drawn providing only partial answers to the research question, repeat results or are not substantiated by results or relevant literature.	Some conclusions are drawn providing only partial answers to the research question. Conclusions merely repeat results or conclusions are not substantiated by results or relevant literature.	Conclusions are based on analysis and linked to the research questions. The research questions are answered.	Conclusions are based on analysis, linked to the research questions, and substantiated by results and relevant literature.	Conclusions are based on analysis, clearly linked to the research questions, and well substantiated by results and relevant literature. Conclusions are formulated exactly. Scientific relevance is addressed. Strategic and/or policy implicatons are formulated.	Conclusions are based on analysis and clearly linked to the research questions. Conclusions very well substantiated by results and relevant literature on a higher level. Results are positioned in broader debates in innovation studies literature. Conclusions are formulated exactly and concise, grouped in a logical way. Identifies the scientific contribution of the research as wel as strategic and/or policy implications.

Recommendations

No or unsupported recommendations.	Recommendations are too limited and/ or the presented recommendations do not logically follow from results.	Recommendations are sufficient, but are superficial. Recommendations follow from results.	Recommendations are clear and follow logically from results. Recommendations are superficailly linked to the scientific debates in innovation studies literature or to the strategic and/or policy implications mentioned in the conclusion.	Clear, well-formulated, and advanced recommendations. Recommendations follow logically from results. Recommendations are linked to the scientific debates in innovation studies literature or to the strategic and/ or policy implications mentioned in the conclusion.	Recommendations are well-formulated, advanced and original. Recommendations follow logically from results. Recommendations are linked to the scientific debates in innovation studies literature and to the strategic and/or policy implications mentioned in the conclusion.
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D. Quality of The Conclusion and Discussion

Critical reflection on the research performed

1-4	5	6	7	8	9-10
No critical reflection on the research. Reflection only touches trivial or very general points of criticism. Or student identifies only some possible strengths and weaknesses and/or points at strengths and weaknesses which are in reality irrelevant or nonexistent	Student identifies only some possible strengths and weaknesses and/or points at strengths and weaknesses which are in reality irrelevant or non-existent	Student indicates main strengths and weaknesses in the research.	Student indicates main strengths and weaknesses in the research and is able to weigh their impact on the main results relative to each other.	Student indicates all strengths and weaknesses in the research and weighs them relative to each other. Furthermore, (better) alternatives for the research methods used are indicated. The student reflects on how technical and social science knowledge integration contributed to results.	Student is not only able to identify all possible strengths and weaknesses in the research, but is also able to indicate which strengths and weaknesses affect the conclusions the most. Student indicates all strengths and weaknesses in the research and weighs them relative to each other. Furthermore, (better) alternatives for the research methods used and suggestions for future research are indicated. The student reflects on how technical and social science knowledge integration contributed to results.

Grade Part D	Explanation (obligatory)

Proceed to the next page.



E. Skills			
Planning			
	POOR	SUFFICIENT	GOOD
Planning Of Whole BEP Project	Despite all guidance, is the student not able to organize the research. The planning is without any detail (only phasing), not feasible and/or back-up strategies are lacking. Unnecessary work is done due to bad or unchanged planning. Urgencies and importance of aspects is not recognized (despite the supervisor repeatedly addressed them).	Needs some guidance to organize the research project according to the planning. The planning is somewhat concrete (contains phases and milestones) and feasible. Back-up strategies are sufficiently thought out. Plan adapted with help of the supervisor. Urgencies and importance of aspects is not always recognized. The supervisor needs to address some priorities. Individually organizes and manages the research project according to the (adapted) planning and undertakes action if needed (own initiative, in good cooperation).	The planning is concrete (contains milestones and specifications of all activities for each of the phases of the research) and feasible. Updates during the project are processed clearly, back-up strategies are very well thought out. Urgencies and importance of aspects are recognized, priorities are set.
Planning Of Data Collection	Despite the guidance, the student was not able to plan the data collection adequately. As a result, the amount of collected data was minimal.	The planning of the data collection was adequate. The student collected the needed data within the available timeframe.	The planning of the data collection was above average. The student collected a substantial amount of data within the available timeframe.
Planning Of Writing Process	Despite all guidance, the student was not able to organize the writing process. The student was not able to hand in his intermediate and/or final report in time	The student needed some guidance to plan the writing process. The planning of the writing process was somewhat concrete (contains phases and specifications of most writing activities) and feasible. The student did hand in the intermediate and final report on time.	The planning of the writing process is concrete (contains milestones and specifications of all writing activities) and feasible. The student did hand in the kept the intermediate and final report on time.



E. Skills	
Planning	
Grade PRV Planning (PO, SUF, GO)	Explanation (obligatory)



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E. Skills

Writing Skills

Quality of Message & Readability & Structure

No line of reasoning or rudimentary argumentative
structure. Ideas are unconnected. Claims are
repeated rather than developed. Few objections
are addressed and maybe misrepresented. Claims
are not or rarely supported by reliable evidence
from credible
sources, making the report unconvincing.

POOR

Argumentative structure is evident and satisfactory. Objections are taken seriously and typically addressed fair-minded. Claims are regularly supported by valid, reliable evidence from credible sources, making the report for the most part convincing.

SUFFICIENT

Reader can easily follow the line of reasoning.
Argumentative structure is clearly evident.
Objections are taken seriously and addressed in a fair-minded way with great skill. Claims are supported by reliable, valid evidence from credible sources and effectively synthesized in a very convincing manner.

GOOD

Structure

The report is badly structured. Main structure is incorrect and/or placement of material in different chapters is illogical in many places. Chapters are separate entities and are not connected to each other. Level of detail varies widely (information missing, or irrelevant information is given).

The main structure is correct, but lower level hierarchy of sections is not always logical in places. Most sections have a clear and unique function. The connection of parts could be improved. Level of detail is inappropriate in a number of places (irrelevant information is given).

Well-structured: each section has a clear and unique function. Hierarchy of sections is correct. Ordening of sections is logical. Parts of the paper connect well to each other. All information occurs at the correct place. Level of detail is appropriate throughout the report.

Grammar/spelling

Grammar (word order, verb tenses) vocabulary (correct choice of words, no repetitive words) and textual mechanics (spelling, punctuation, capitalization) errors so numerous that they make the paper almost impossible to understand (seriously distract the reader and impede meaning). English incorrect and very hard to read.

Grammar, vocabulary and/or textual mechanical errors present, but at acceptable quantities and not seriously impeding the reader. English basically correct and readable.

Excellent grammar, vocabulary and textual mechanics (very few or no errors). English fluent and pleasant to read.



Writing Skills			
	POOR	SUFFICIENT	GOOD
Referencing	The student is often inconsistent in references in the text and/or reference list, or often references are lacking.	The student is sometimes inconsistent in references in the text and/or reference list, or a few times references are lacking.	The student uses one format for references in the text and the reference list. The reference list is complete. There are no mistakes.
Layout	The title page and/or table of content are lacking or incomplete. Headings are missing, inconsistent or unclear. Tables and figures are incomplete.	The title page and table of content are incomplete. Headings are inconsistent or unclear. Tables and figures are incomplete.	A title page, table of content, clear and consistent headings and complete tables and figures are included.
Grade PRV Writing Sk (PO, SUF, GO)	ills Explanation (obligatory)		



E. Skills			
Professional Attitude			
	POOR	SUFFICIENT	GOOD
Self-dependence	The student needed help and support to proceed in the project; did not contribute own ideas.	The student worked to a large extent independently or took initiative to receive help; needed some feedback to develop ideas.	The student worked independently; used own ideas; showed initiative
		T	
Communication, cooperation, agreements and appointments	The student is rude and/or defensive, works in isolation and is unprepared for meetings.	The student seeks for contact when needed but is sometimes still looking for an appropriate way. The preparations for meetings may vary.	The student is respectful and constructive in communication and cooperation. The student shows up well prepared for meetings.
Critical reflective	The student is not able to improve own work	The student needs some help to reflect, think	The student has a critical reflective attitude;
attitude	based on systematic critical reflection; does not incorporate (supervisor's) feedback.	and behave systematically; incorporated most of (supervisor's) feedback.	reflects, thinks and behaves systematically; incorporated (supervisor's) feedback.
Grade PRV Proffesional Attitude	Explanation (obligatory)		
(PO, SUF, GO)			

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Finalisation		
Final Comments		
Assessment of First assessor and Second assessor are largely the same	Assessment of First assessor and Second assessor were different for Block (A/B/C/D); explain your decision	Assessment of First assessor and Second assessor were different; a Third assessor has been consulted; add the extra Form
Explanation		
Grades		

Grade Type	Grade Awarded	Notes and Details
Grade Intermediate Report		20% weight Expressed in 0.1 grades
Grade Final Report		80% weight Expressed in 0.1 grades
FINAL GRADE		Expressed in half grades

The Second Assessor awarded the final report a

The above field is mandatory; fill in the final report grade of the second assessor.

When completed, add your signature (1st page) and e-mail to CSA.IEIS@tue.nl, the BEP coordinator and the student.

^{*} Please fill in the grade of the final report manually. This grade is based on the grades of block A, B, C and D, taking into account the phase of the project. This grade is not necessarily a calculated average of the grades of block A, B, C and D. Add Final comments to clarify possible differences.