Rubric for the BSc project

Preamble: the final grade is the weighted average of the three subgrades: Research project (60%), Thesis (20%), Oral presentation (20%). For each subgrade the weight of the items is equal. Fine grading per item (9 or 10, 8 or 9, etc) is up to the examiners.

	insufficient (≤5)	**sufficient (6-7)**	**satisfactory (7-8)**	**good (8-9)**	**excellent (9-10)**
Research project (60%)					
1. Preparation & methodology	Is unable to complete research tasks, even with active supervision.	Can complete research under close supervision but has difficulty recognizing and formulating problems.	Can recognize and formulate problems with help from supervisor.	Can define problems clearly and apply methods proactively.	Anticipates problems and adapts existing methods with minimal guidance.
2. Experimental/analytical /programming skills	Struggles to apply basic skills and does not improve significantly even with guidance.	Can apply basic skills with guidance of the supervisor	Applies basic skills independently & advanced methods with guidance.	Independently applies a range of tools/methods correctly and effectively.	Uses tools creatively and efficiently. Shows insight into method limitations or improvements.
3. Reliability and reproducibility	Results are unreliable and cannot be reproduced due to poor documentation/data management by the student.	Outcomes are mostly reliable but difficult to reproduce due to incomplete testing and/or documentation.	Outcomes are reliable and can be reproduced in direct consultation with the student.	Outcomes are reliable and can be mostly reproduced following the description provided by the student.	Well-organized, clearly documented work that enables others to reproduce results independently.
4. Interpreting results	Cannot interpret results or explain methods, even with help.	Can explain why methods are used or able to interpret results when guided. Explanations lack depth.	Can explain why methods are used and able to interpret results within an expected context.	Can clearly explain methods and interprets results in the context and reflects on causes of unexpected outcomes	Provides insightful interpretations; links results to broader concepts and/or outlines directions for future research
5. Independence and initiative	Is unable to find and use resources (e.g., literature, software etc.) suggested by the supervisor.	Uses resources suggested by the supervisor, although additional explanation and close guidance is needed.	Uses suggested resources independently. Seeks help from the supervisor when needed.	Works with growing independence. Requires occasional guidance from the supervisor on overall direction.	Works mostly independently and demonstrates eagerness through initiative and ownership. Effectively solves problems with little input.
6. Communication and collaboration	Does not communicate issues to supervisor/group, regularly misses meetings and ignores feedback.	Has regular contact with supervisor/group but mainly to receive feedback. Not always incorporate feedback.	Updates supervisor regularly, communicate within the group and incorporates feedback.	Communicates proactively, knows when and how to ask for help.	Takes initiative in communication, facilitates collaboration within the group, and efficient teamwork.
7. Planning and time management	Cannot manage time or follow plans. Fails to meet deadlines.	Completes work but is inefficient or inconsistent with planning.	Produces a realistic project plan at the start and sticks to it. Most goals achieved with adequate time use.	Works efficiently and reaches milestones set in a project plan. Proactively adapts the plan when needed.	Goes beyond the original project plan, set new goals to enhance the outcome and complete them within the required time.
Thesis (20%)					
1. Context and interpretation	Background is missing or incorrect. Student does not clearly explain why the research was done. Results are not interpreted.	Basic background is provided but lacks depth and the motivation is weak. Interpretation is limited and not well connected to the research question.	Provides relevant background. Research question is motivated. Results are interpreted at a basic level, but discussion lacks depth or broader context.	Background and motivation are clearly presented. Results are interpreted in relation to the research question, with some reflection on future work.	Extensive contextual background is independently gathered by the student. Results are interpreted thoughtfully, with reflections on broader implications or directions for future work.
2. Methods and results	Methods are unclear or incomplete, and results cannot be understood.	Methods are described briefly with missing details. Results are presented but hard to follow or incomplete or difficult to find.	Methods are described clearly enough to understand what was done. Results are mostly clear but could be better organized or explained.	Methods are described clearly and precisely. Results are well presented with a logical flow and sufficient explanation.	Methods and results are clearly and concisely described with evidence of student's initiative such as method development or analyses beyond the expected.
3. Style and structure	Writing is hard to understand due to poor language or organization. Figures and tables are missing or unclear. Text is either significantly too short or too long and irrelevant.	Writing is understandable but lacks clarity in places. Structure is inconsistent. Some figures/tables are used but not well designed.	Writing is mostly clear and the structure is logical. Figures and tables support the content, though some design or explanation could be improved.	Writing is clear and concise. Thesis is well structured with effective use of figures, tables, and appendices.	Results are presented flawlessly and efficiently, with a clear storyline. Text, figures, graphs, tables are well-chosen or original, and efficiently guide the reader.
4. Scientific integrity	Few or no references; unclear which work is original. Contributions of others are not properly stated, or credit is claimed by the student where it should not be given.	References are cited but tend to be superficial (e.g., most recent, rather than original discovery papers). Student contributions are unclear. Use of tools (e.g., AI, code) not transparently reported.	A good number of references are cited but not all are appropriate. The work done by the student vs. others is stated (as is the use of AI) but could be more clear.	Good referencing practice; student contributions are clearly identified, and the use of tools (e.g., AI, code) is transparently reported.	The referencing is near flawless: consistent formatting is used, and sources are properly cited. Clear distinction between student's work and others'. The appropriate use of AI (if any) is made clear.
Oral presentation (20%)					
1. Contextualization & delivery	Background is unclear or missing; audience cannot understand the goal of the project. The presentation lacks structure and may be hard to follow.	Basic background is provided, but the motivation and/or research story is difficult to follow by other BSc students and experts alike. The presentation has issues in structure, pace, or timing.	Provides a good background and motivation and tells the project story but may lack clarity on results or implications. Not fully accessible to non-experts.	Clear background, motivation, and explanation of results. The story is accessible to other BSc students while also being accurate as seen by the experts. Delivery is well-paced.	Clear, engaging presentation accessible to peers and insightful for experts. It is enriched with useful and creative elements added independently. Delivery has steady pace, smooth flow, and fits the time exactly.
2. Clarity and style	Slides are poorly designed, e.g., with too much text, fonts too small, figures unclear or poorly designed. Speaker appears unprepared.	Slides are mostly adequate but there are parts of the talk which are hard to follow because of poor use of text or figure design, or because the speaker is not sufficiently prepared.	Slides are well designed but not always effective in supporting the talk (e.g., figures are too complex or misleading, text is incorrect or includes typos). Speaker shows preparation but is not fully confident.	The slides are well-designed and appropriate to convey the story of the research, which the speaker can tell in a confident and engaging way.	Slides are engaging and well-designed, containing only the necessary information to convey the research story. Speaker explains complex points clearly and keeps the audience engaged.
3. Handling questions	Unable to answer even basic questions on either the material presented or other aspects of the project.	Answers some basic questions but struggles with anything beyond what was shown in the slides.	Handles questions on presented content reasonably well, though answers may lack depth or clarity.	Answers questions accurately and concisely and links to other aspects of the project or broader context, showing good understanding.	Answers questions clearly and thoughtfully, occasionally offering deeper insights or new perspectives beyond what was presented. Has developed appropriate background slides that answer additional questions.