

Assessment Matrix for MSc Individual Projects (applied from Academic Year 2020-21 onwards)



1. Quality of Technical Work and Continuous Assessment of Student Performance (worth 20%)

(To be completed by project or placement supervisor only.)

| Grade Range (Highest to Lowest) | A1, A2, A3, A4, A5 | B1, B2, B3 | C1, C2, C3 | D1, D2, D3 | E1, E2, E3 | F1, F2, F3 | G1, G2, H |
|---|---|---|--|--|--|--|--|
| Descriptor | Excellent | Very Good | Good | Satisfactory | Weak | Poor | G: Very Poor H: No Attainment |
| Planning (Weighting = 1) | <i>High-quality planning, made excellent use of time and resources.</i> | <i>Very well-planned project, only occasional evidence of deficiencies.</i> | <i>Mostly well planned, but some deficiencies observed.</i> | <i>Planning was generally satisfactory, although it could have been better in several areas.</i> | <i>Poor planning, or not keeping to the plan, tended to make inefficient use of time and resources.</i> | <i>A disorganised project, often lacking focus and direction.</i> | <i>Little or no evidence of any planning.</i> |
| Initiative (Weighting = 1) | <i>Major contributions to both the technical content and overall project direction; took ownership of the project.</i> | <i>Regularly overcame problems and made strategic decisions with minimum reliance on supervisor.</i> | <i>Student required supervision only to overcome specific technical problems or make key decisions on project direction.</i> | <i>Student required assistance but performed some technical work and made some overall project decisions independently.</i> | <i>Student required continual detailed guidance from supervisor on the work and direction of the project.</i> | <i>Student relied entirely on supervisor and contributed little to project technical decisions or overall direction.</i> | <i>Student contributed very little or nothing to the project.</i> |
| Professional Conduct (Weighting =1) | <i>Student integrated fully into the engineering environment, contributed widely as a valued peer, and espoused broader ethical values in the project work.</i> | <i>Student worked very well within the engineering environment (with rare difficulties) and understood broader ethical project aspects.</i> | <i>Interaction with colleagues, where appropriate, was good. Practiced professional behaviour and noted broader ethical aspects.</i> | <i>Interaction with colleagues, where appropriate, was satisfactory. There was evidence of understanding professional behaviour.</i> | <i>Student did not integrate into the engineering environment and had difficulty in operating with colleagues on a day-to-day basis.</i> | <i>The student found operating professionally to be challenging, with respect to colleagues and to wider ethical and safety aspects of the project</i> | <i>The student did not operate at any meaningful level in a professional environment</i> |
| Technical Quality of Work (Weighting = 2) | <i>Excellent work of publishable quality with comprehensive analyses and insights. A creative, rigorous treatment of a complex problem.</i> | <i>Very good quality work with only minor failings, and clear insights and judgement for a complex multi-faceted engineering problem.</i> | <i>Competent work, trustworthy results, and a good level of insight into a complex engineering problem supported by suitable analyses.</i> | <i>Satisfactory solution of a complex technical or design problem involving analyses or creative design choices; some deficiencies in understanding.</i> | <i>Some work of limited technical quality, but only in one aspect of a complex problem. Attainment at a very modest level.</i> | <i>Very little evidence of master's level work and results technically dubious.</i> | <i>No output of any value.</i> |

Assessment Matrix for MSc Individual Projects (applied from Academic Year 2020-21 onwards)



2. Dissertation (worth 60%)

(To be completed by James Watt School of Engineering staff only.)

| Grade Range (Highest to Lowest) | A1, A2, A3, A4, A5 | B1, B2, B3 | C1, C2, C3 | D1, D2, D3 | E1, E2, E3 | F1, F2, F3 | G1, G2, H |
|---|---|--|--|---|--|---|---|
| Descriptor | Excellent | Very Good | Good | Satisfactory | Weak | Poor | G: Very Poor H: No Attainment |
| Writing (Weighting = 1) | <i>Exceptionally clear, precise, and concise English. Excellent spelling and grammar, few typos.</i> | <i>Clear and well written, easy to understand, and mostly free of errors.</i> | <i>Most of the text is clear and easily understood. There are some issues with grammar and spelling.</i> | <i>The text can be understood, but some elements are not entirely clear. A sizeable volume of errors is noticeable.</i> | <i>Hard to understand much of the text. Significant spelling errors and grammatical flaws.</i> | <i>The volume and nature of the grammatical errors, combined with poor writing makes this report difficult to read.</i> | <i>Unintelligible. Impossible to read due to exceptionally poor use of English.</i> |
| Presentation (Weighting = 1) | <i>Professional presentation. Figures created by student enlighten and are integral to the narrative flow.</i> | <i>Clear and consistent presentation which is easy to read. Most figures are clear and well-presented and customised to establish the narrative.</i> | <i>Minor flaws in the presentation and clarity of the figures. Typically, some figures from web which are not tailored to the narrative.</i> | <i>Basic presentational errors. Figures provide relevant information but are often sourced from web and do not support the narrative.</i> | <i>Significant flaws in the presentation detracting from the report. Most figures from web with loose connection to main text and poor labelling / captioning.</i> | <i>A substantial proportion of figures from web that are unrelated to the narrative. Results cannot be understood due to poor labelling / captioning.</i> | <i>A messy report. Figures do not match the narrative and results are unclear.</i> |
| Literature (Weighting = 1) | <i>Exemplary range of technical and wider ranging sources used and discussed in depth, indicating broad and critical background reading.</i> | <i>An appropriate range of relevant sources used and evaluated, indicating substantial background reading and consideration of the wider context of the problem.</i> | <i>References used and discussed indicate a good level of core and wider background reading.</i> | <i>Enough relevant references are used and discussed to indicate some technical and wider reading. Typically, weak referencing.</i> | <i>Too few relevant sources, limited to technical area, indicating insufficient wider reading. Perhaps over-reliance on doubtful sources.</i> | <i>Only a few references used and discussed, and many are irrelevant. Little evidence of background reading.</i> | <i>Very few (or no) references used or discussed. No evidence of any background reading.</i> |
| Technical / Design Narrative (Weighting = 3) | <i>Authoritative account of the novel solution of a complex problem, supported by critical evaluation at each stage of the design / technical analysis.</i> | <i>A lucid, coherent narrative, dictated by significant analyses, indicates a very good grasp and novel solution of a difficult technical problem.</i> | <i>The narrative is clear and shows how good technical or design choices followed from key technical analyses.</i> | <i>The narrative is of reasonable technical depth, indicates how analyses informed project direction, and shows satisfactory understanding.</i> | <i>Limited explanation of the technical work / design choices. Little or trivial technical analysis. Shortfalls of understanding in key areas.</i> | <i>Muddled discussion of technical work or results. Superficial understanding of the technical / design problem.</i> | <i>The lack of quality of the technical narrative suggests that the student has no real understanding of the problem.</i> |
| Wider Context and Conclusions (Weighting = 1) | <i>Text and conclusions express authoritative grasp of project results and notable insights as to their implications for engineering / society.</i> | <i>Conclusions integrate well with key themes of the text, critically assessing the wider relevance to current and future societal needs.</i> | <i>Text and conclusions show good insight into the technical results of the project, and their relation to the wider engineering and societal context.</i> | <i>The text notes a wider engineering and societal context and the conclusions make some relevant points on these.</i> | <i>Conclusions omit considered discussion of technical aspects, wider engineering implications, and societal impact.</i> | <i>Conclusions perfunctory.</i> | <i>No attempt at any point in the text to draw conclusions or put the work into a wider context.</i> |

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3. Poster Presentation (worth 20%)

(To be completed by James Watt School of Engineering staff only.)

| Grade Range (Highest to Lowest) | A1, A2, A3, A4, A5 | B1, B2, B3 | C1, C2, C3 | D1, D2, D3 | E1, E2, E3 | F1, F2, F3 | G1, G2, H |
|--|---|---|--|--|---|---|--|
| Descriptor | Excellent | Very Good | Good | Satisfactory | Weak | Poor | G: Very Poor H: No Attainment |
| Introductory Description (Weighting = 1) | <i>Extremely clear and well-presented description of the project. Easy to follow.</i> | <i>Very clear description of the project but perhaps a few minor flaws.</i> | <i>Clear description of the project but some flaws in presentation.</i> | <i>Overall a reasonable description, but there are issues regarding clarity.</i> | <i>Unclear description made understanding the purpose of the project difficult.</i> | <i>Very unclear description of the project. Very difficult to understand the purpose of the project.</i> | <i>No clarity. Too many basic errors. Project description too difficult to follow.</i> |
| Presentation of Content (Weighting = 1) | <i>Exceptionally clear presentation of poster content. Simple illustrations, large enough font, not too many words. A professional poster.</i> | <i>Clear presentation but perhaps the occasional flaw (font size, colour scheme etc), but overall an impressive poster.</i> | <i>There may be a number of errors in presentation but overall, still clear and flaws do not detract significantly from content.</i> | <i>Consistent errors in presentation but not of a significant nature. A reasonable effort but flaws detract.</i> | <i>Significantly flawed poster. Basic errors such as small font size, too much content on poster, illustrations too confusing or unclear.</i> | <i>Not only is the presentation of poster poor, but it makes it difficult to follow argument.</i> | <i>Very poor poster, basic errors in presentation throughout. Impossible to follow technical argument.</i> |
| Poster Layout (Weighting = 1) | <i>Structure of the poster makes understanding the technical arguments exceptionally clear.</i> | <i>A very well-structured poster with everything where it should be to provide clarity</i> | <i>Overall a well-structured poster but perhaps one or two items are in the wrong position.</i> | <i>Some elements of the poster are not clear as the structure is slightly confused.</i> | <i>A badly structured poster giving a confused picture of the project making it difficult to follow the arguments.</i> | <i>Although there is some structure to the poster it is very confused, and it is almost impossible to follow.</i> | <i>No discernible attempt at a logical poster layout.</i> |
| Technical Content (Weighting = 2) | <i>There is a well-judged amount of high-level technical content on the poster giving an excellent account of a challenging technical task.</i> | <i>The poster has a very good level of technical content, clearly expressed, with only a small amount of superfluous information.</i> | <i>Overall, the content is sufficient to give the viewer a good account of the technical work undertaken.</i> | <i>There is some irrelevant non-pertinent material, but overall, the technical content is satisfactory.</i> | <i>The poster has only limited technical content with too much general background information.</i> | <i>The technical content is low in terms of level and quantity.</i> | <i>Little or no relevant technical content evident.</i> |
| Response to Questions (Weighting = 2) | <i>Answered all questions clearly and confidently. Gave the impression of having an excellent grasp of the subject.</i> | <i>Answered all questions competently. Has clearly developed a very good understanding of the subject.</i> | <i>Answered most questions well enough to conclude that the student has a developed a good understanding of the subject.</i> | <i>Gave some good answers but also some poor ones. Evidence of reasonable understanding of the subject.</i> | <i>Answered the majority of the questions poorly suggesting a lack of knowledge in the subject.</i> | <i>Gave some superficial answers but appears to have very little understanding of the subject.</i> | <i>Unable to give any sort of competent answer to any question.</i> |