### **Assessment Matrix for BEng 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)	High-quality planning, made excellent use of time and resources.	Very well-planned project, only occasional evidence of deficiencies.	Mostly well planned, but some deficiencies observed.	Planning was generally satisfactory, although it could have been better in several areas.	Poor planning, or not keeping to the plan, tended to make inefficient use of time and resources.	A disorganised project, often lacking focus and direction.	Little or no evidence of any planning.
Initiative (Weighting = 1)	Major input to the technical work; took ownership of the project.	Regularly overcame technical problems with minimum reliance on supervisor.	Student achieved much technical work independently, requiring supervision only to overcome problems.	Student required regular assistance from supervisor but performed some technical work independently.	Student required continual detailed guidance from supervisor on direction of the technical work.	Student relied entirely on supervisor and contributed little to project technical decisions.	Student contributed very little or nothing to the project.
Professional Conduct (Weighting =1)	Student integrated fully into engineering environment and contributed to a range of activities as a valued peer.	Student worked very well within the engineering environment, with very few difficulties. Exhibited a high level of professionalism.	Interaction with colleagues, where appropriate, was good. Practiced professional behaviour.	Interaction with colleagues, where appropriate, was satisfactory. There was evidence of understanding professional behaviour.	Student did not integrate into the engineering environment and had difficulty operating with colleagues on a dayto-day basis.	The student found operating in the professional environment challenging, so achieved very little.	The student did not operate at any meaningful level in a professional environment.
Technical Quality of Work (Weighting = 2)	Excellent work of publishable quality and insight. A rigorous treatment of a limited technical or creative design problem with excellent analysis or creative design choices.	Very good quality work with only minor failings, and clear insight into a limited technical or creative design problem with very good analysis or creative design choices.	Competent work, and trustworthy results but only limited insight into a technical or creative design problem with suitable analysis or creative design choices	Satisfactory solution of a limited technical or creative design problem with satisfactory analysis or creative design choices; some deficiencies in understanding.	Sporadic signs of technical quality, but overall attainment at a very modest level lacking analysis or creative design choices.	Very little evidence of bachelor's level work and results technically dubious.	No output of any value.

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

#### 2. Report (worth 65%)

(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
<b>Writing</b> (Weighting = 1)	Exceptionally clear, precise, and concise English. Excellent spelling and grammar, few typos.	Clear and well written, easy to understand, and mostly free of errors.	Most of the text is clear and easily understood. There may be issues with grammar and spelling.	The text can be understood, but some elements are not entirely clear. A sizeable volume of errors is noticeable.	Hard to understand much of the text. Significant spelling errors and grammatical flaws.	The volume and nature of the grammatical errors, combined with poor writing makes this report difficult to read.	Unintelligible. Impossible to read due to exceptionally poor use of English.
Presentation (Weighting = 1)	Professional presentation. Figures created by student enlighten and are integral to the narrative flow.	Clear and consistent presentation which is easy to read. Most figures are clear and well-presented and customised to establish the narrative.	Minor flaws in the presentation and clarity of the figures. Typically, some figures from web, which are not tailored to the narrative.	Basic presentational errors. Figures provide relevant information, but often sourced from web and do not support the narrative.	Significant flaws in the presentation detracting from the report. Most figures from web with loose connection to main text and poor labelling / captioning.	A substantial proportion of figures from web that are unrelated to the narrative. Results cannot be understood due to poor labelling / captioning.	A messy report. Figures do not match the narrative and results are unclear.
<b>Literature</b> (Weighting = 1)	Wide range of references used and discussed in some depth, indicating comprehensive background reading.	An appropriate range of relevant sources used and discussed, suggesting significant background reading in primary area and more widely.	Sufficient references used and discussed to indicate a good level of background reading in primary area. Occasional weak referencing.	Just enough sources used and discussed to suggest background reading in primary area. Some weak referencing.	Too few relevant references used and discussed, or over-reliance on doubtful sources, indicating insufficient background reading.	Only a few references used and discussed, and many are irrelevant. Little evidence of background reading.	Very few (or no) references used or discussed. No evidence of any background reading.
Technical / Design Narrative (Weighting = 3)	Authoritative account of the creative solution of a difficult technical / design problem, supported by comprehensive technical analysis.	A lucid and reasoned narrative, backed up with significant analysis, indicating a very good grasp of a difficult technical problem.	The narrative is well considered, mostly clear, of a good technical level, and supported by strong technical analysis.	The narrative is of reasonable technical depth, supported by some technical analysis, and shows satisfactory understanding.	Limited explanation of the technical work / design choices. Little technical analysis (or a trivial level of analysis). Shortfalls of under-standing in key areas.	Muddled discussion of technical work or results. Superficial understanding of the technical / design problem.	The lack of quality of the technical narrative suggests that the student has no real understanding of the problem.
Wider Context and Conclusions (Weighting = 1)	Conclusions relate to the key themes of the text, indicate mastery of the underlying material and critical assessment of the project's relevance.	Conclusions show considerable insight into both the technical results of the project, and their relation to the wider engineering context.	The text discusses a wider engineering context. Conclusions assess key technical results and relate them to this context.	The text notes a wider engineering context and the conclusions make some suitable and relevant points.	Concluding discussion very limited and omits either technical / design aspects or a recognition of a wider engineering context.	Conclusions perfunctory.	No attempt at any point in the text to draw conclusions or put the work into a wider context.

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#### 3. Oral Presentation (worth 15%)

(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
<b>Delivery</b> (Weighting = 1)	Confident, clear, and unhesitating delivery. Held attention of audience. Easy to follow arguments.	Was confident but perhaps a few minor flaws (such as hesitation, talking too fast etc).	Perhaps slightly lacking in confidence or possibly not speaking quite clearly enough.	Overall a reasonable delivery, but there were issues regarding clarity, or fluency.	A hesitant or unclear delivery made understanding the presentation difficult.	Hesitant, unclear, monotonous, hard to maintain attention. Difficult to follow arguments.	No fluency or clarity. Too many basic errors, e.g. mumbling or talking to screen.
<b>Slides</b> (Weighting = 1)	Exceptionally clear slides. Simple design, large enough font, not too much material on slides. A professional quality presentation.	Clear slides but perhaps the occasional flaw (font size, colour scheme etc), but overall an impressive presentation.	There may be a number of errors, on the slides but overall, still clear and flaws do not detract significantly from content.	Consistent errors on many slides but not of a significant nature. A reasonable effort but flaws have detracted from presentation.	Significantly flawed slides. Basic errors such as small font size, too much content on slides, over-elaborate design.	Not only are slides poor, but they make it difficult to follow argument.	Very poor slides, basic errors on every slide. Impossible to follow the technical arguments.
Technical Content (Weighting = 2)	There is a well-judged amount of high-level technical content in the presentation giving an excellent account of a challenging technical task.	The presentation has a very good level of technical content, clearly expressed, with only a small amount of superfluous information.	Overall, the content is sufficient to give the audience a good account of the technical work undertaken.	There is some irrelevant non-pertinent material, but overall, the technical content is satisfactory.	The presentation has only limited technical content with too much general background information.	The technical content is low in terms of level and quantity.	Little or no relevant technical content evident.
Structure (Weighting = 1)	Structure of the presentation makes understanding the technical arguments exceptionally clear.	A very well-structured presentation with everything where it should be to provide clarity.	Overall a well- structured presentation but perhaps one or two slides are misplaced.	Some elements of the presentation are not clear as the structure is slightly confused.	A badly structured presentation giving a confused picture of the project making it difficult to follow the arguments.	Although there is some structure to the presentation it is very confused, and it is almost impossible to follow.	No discernible attempt at a logical structure.
Response to Questions (Weighting = 2)	Answered all questions clearly and confidently. Gave the impression of having an excellent grasp of the subject.	Answered all questions competently. Has clearly developed a very good understanding of the subject.	Answered most questions well enough to conclude that the student has a developed a good understanding of the subject.	Gave some good answers but also some poor ones. Evidence of reasonable understanding of the subject.	Answered the majority of the questions poorly suggesting a lack of knowledge in the subject.	Gave some superficial answers but appears to have very little understanding of the subject.	Unable to give any sort of competent answer to any question.