



MODERATION OF MARKED ASSESSMENT

This form is used to ensure that marked assessments have been through an internal and external review process. This form should be completed for each assessment for a particular module.

PARTNER (and taught location if relevant):	Coleg Sir Gar				
EXTERNAL EXAMINER NAME:	Dr Alison Griffiths				
ASSESSMENT AUTHOR :	Robert Davies / Michael Hall				
MODULE TITLE:	Major Project				
MODULE CODE:	SGEE6003		MODULE LEVEL:	6	
COMPONENT NO. (e.g. 1 of 2):	4 of 4		COMPONENT WEIGHTING (e.g. 50% of the module):	10	
ASSESSMENT PERIOD	☐ Semester 1	☐ Semester 1 <i>Re-sit</i>	☒ Semester 2	☐ Semester 2 <i>Re-sit</i>	<i>Other, please state</i>
TYPE OF ASSESSMENT:	☒ Coursework		☐ Examination		☐ Practical
LANGUAGE OF ASSESSMENT:	English		TRANSLATION PROVIDED:	No	
TURNITIN CHECK FOR UNFAIR PRACTICE:	Yes				

Students listed in the sample below must be registered on a UWTSD award.

[illegible]

INTERNAL MODERATOR (or second marker)		Please ✓		Comments
		YES	NO	
1	Has agreement on the marks been reached?	✓		
2	Does feedback identify opportunities for improved performance?	✓		
3	Is feedback constructive?	✓		
4	Is the feedback linked to the appropriate category/ classification of the assessment criteria?	✓		
5	Is the feedback consistent across the sample?	✓		
6	Is there mention of improvement to referencing and consideration of unfair practice, where relevant?	✓		
7	Actions to complete <i>This box will expand as you type</i>			
8	How was agreement between markers reached? By verbal discussion, see appended marking sheets <i>This box will expand as you type</i>			

INTERNAL MODERATOR (or third marker, only where required, i.e. where the first two markers have been unable to reach a resolution)		Please ✓		Comments
		YES	NO	
1	Has agreement on the marks been reached?			
2	Does feedback identify opportunities for improved performance?			
3	Is feedback constructive?			
4	Is the feedback linked to the appropriate category/ classification of the assessment criteria?			
5	Is the feedback consistent across the sample?			
6	Is there mention of improvement to referencing and consideration of unfair practice, where relevant?			
7	Actions to complete <i>This box will expand as you type</i>			
8	How was agreement between markers reached? <i>This box will expand as you type</i>			

FOR COLLABORATIVE PROVISION ONLY

PARTNERSHIP TEAM LEADER		Please ✓		Comments
		YES	NO	
1	Has appropriate internal moderation taken place?			
2	Does feedback identify opportunities for improved performance?			
3	Is feedback constructive?			
4	Is the feedback linked to the appropriate category/ classification of the assessment criteria?			
5	Is the feedback consistent across the sample?			
6	Is there mention of improvement to referencing and consideration of unfair practice, where relevant?			
7	Actions to complete <i>This box will expand as you type</i>			

EXTERNAL EXAMINER REVIEW ONLY FOR THOSE MODULES / ASSESSMENT COMPONENTS detailed in the annual GA15 External Examiner Agreement

EXTERNAL EXAMINER		Please ✓		Comments
		YES	NO	
1	Has appropriate internal moderation taken place?			
2	Does feedback identify opportunities for improved performance?			
3	Is feedback constructive?			
4	Is the feedback linked to the assessment criteria?			
5	Is the feedback consistent across the sample?			
6	Is there mention of improvement to referencing and consideration of unfair practice, where relevant?			
7	Actions to complete <i>This box will expand as you type</i>			

Signed (second marker): 	Date: 23/05/2019
Signed (Partnership Team Leader):	Date:
Signed (External Examiner):	Date:

UWTSD PROVISION: please submit the completed document to the appropriate Programme Director.

COLLABORATIVE PROVISION: please submit the completed document (or make available electronically) to the Partnership Team Leader. This must be in accord with specific arrangements for sharing electronic documents (e.g. via SharePoint or similar).

NOTES ON MODERATION

All assessments which contribute to a final award/degree classification must be subject to moderation. At their discretion, Faculties may use double-marking in place of moderation.

Where moderation is used, a Moderation of Marked Assessment report (Appendix GA28) should be completed.

A list of marks for all assessment components for all students in the module should accompany the Moderation Form.

A representative sample of at least six pieces of work should be identified for moderation and should include:

- examples of work in the first class category (or equivalent for other awards);
- examples of work in the fail category;
- examples of work from each classification;
- examples of work within 2% of a classification boundary (or equivalent for other awards);
- any work on which the marker wishes for a second opinion.

If the moderation process identifies concerns relating to the marking in one or more categories, all work in the identified category must be double-marked and any residual differences in marks awarded by two markers must be resolved by means of discussion and negotiation. If such resolution is not possible, the work must be marked by a third marker identified by the Chair of the relevant Progression/Award Board. The marks awarded by the third marker are final. The process by which a final mark is agreed must be carefully documented so that the external examiner is able to follow that process.

Where a module is delivered by a collaborative partnership institution, moderation is normally a two stage process, with internal moderation at the collaborative partnership institution followed by University moderation.

THIS DOCUMENT IS ALSO AVAILABLE IN WELSH

SGEE6003 Major Project

DOUBLE MARKING SHEET AND COMBINED STUDENT FEEDBACK

Presentation 2 – Project Design, Implementation and Evaluation

2018-2019

Agreed mark

80%

Student Name: Liesel Mari Williams

Student Number 1202933

Generic Assessment Criteria	Marks available	1st Marker (RD)	2nd Marker (MH)	Agreed Mark
1. Engagement with Literature Skills.				
Section 3: Use of technical literature in final design solution (/5) Evidence was provided in reference to motor and drive data. The use of technical literature was evident in the testing explanation. Evidence was provided in reference to motor and drive data. The use of technical literature was evident in the testing explanation.	5	3	4	4
Total	5	3	4	4
2. Knowledge and Understanding Skills				
Section 1: Introduction (/5) A good introduction to the main aims and objectives specific to the project. The project was confidently introduced and the aims/objectives stated. A good introduction to the main aims and objectives specific to the project. The project was confidently introduced and the aims/objectives stated.	5	4	4	4
Section 2: FDS (/5) The original FDS was reviewed clearly with expected outcomes stated. The FDS was reviewed and deviations from the original were explained. The original FDS was reviewed clearly with expected outcomes stated and deviations from the original were explained.	5	4	4	4
Section 3: Advanced knowledge and critical understanding demonstrated in the design of the project (/10) Clearly demonstrated throughout the presentation on all aspects of the project. It was clear which parts of the final product were sub-contracted and how much was built locally. An opportunity exists to develop the rig as a sellable commodity, it would be a risk not to engage with IP and protect the design. Clearly demonstrated throughout the presentation on all aspects of the project. It was clear which parts of the final product were sub-contracted and how much was built locally. An opportunity exists to develop the rig as a sellable commodity, it would be a risk not to engage with IP and protect the design.	10	8	8	8

All sections: Response to questioning (/10) Good, well thought out answers given to questions, very good knowledge demonstrated on the wider issues such as public perception and aesthetics, legal requirements namely safety and CE marking, good consideration of IP rights and potential for further development. All questions posed by the panel were answered confidently and demonstrated excellent knowledge of the project and the wider issues associated with it. Good, well thought out answers given to questions, very good knowledge demonstrated on the wider issues such as public perception and aesthetics, legal requirements namely safety and CE marking, good consideration of IP rights and potential for further development. All questions posed by the panel were answered confidently and demonstrated excellent knowledge of the project and the wider issues associated with it.	10	8	9	8.5
Total	30	24	25	24.5
3. Cognitive and Intellectual Skills				
Section 5: Testing and analysis of result (/10) Good evidence provided from HMI screens and recorded data with graphical analysis. The testing section was well explained and the presentation included slides of the results graphs etc. Good evidence provided from HMI screens and recorded data with graphical analysis. The testing section was well explained and the presentation included slides of the results graphs etc.	10	7	8	7
Section 6: Critical evaluation of the project outcomes and comparison with the FDS (/10) Very good review and comparisons made. An excellent evaluation of the project was given and any problems and deviations were explained. An excellent evaluation of the project was given and any problems and deviations were explained.	10	8	8	8
Section 8: Overall conclusions and recommendations (/10) Very good set of conclusions for the project outcomes with a good statement for percentage completion and clear recommendation for further development. There are still issues to be resolved both in terms of functionality and quality and the proposed solutions to these were explained. Very good set of conclusions for the project outcomes with a good statement for percentage completion and clear recommendation for further development. There are still issues to be resolved both in terms of functionality and quality and the proposed solutions to these were explained.	10	8	8	8
Total	30	23	24	23
4. Practical Application Skills				
Section 3: Formulation of innovative and creative design solution to the project problem. (/5) Solutions provided for most of the aspects of the project using an innovation and creative approach in the development of the solution. Some aspects of the FDS were not completed or partially completed. Important modifications were carried out in hardware and software.	5	4	4	4

The final product used good quality components with some recycling of refurbished motors. The use of RGB was good to see on an environmental basis. Solutions provided for most of the aspects of the project using an innovation and creative approach in the development of the solution. Some aspects of the FDS were not completed or partially completed. Important modifications were carried out in hardware and software. The final product used good quality components with some recycling of refurbished motors. The use of regenerative braking was good to see on an environmental basis.				
Section 4: Deployment method, use of material, tools, equipment and techniques in the construction of the project. (/5) Suitable methods, materials, tools and equipment (hardware and software) were deployed to produce the solution. The mechanical aspects were primarily sub-contracted and problems with the quality of the aspect were explained and solutions suggested. Suitable methods, materials, tools and equipment (hardware and software) were deployed to produce the solution. The mechanical aspects were primarily sub-contracted and problems with the quality of the aspect were explained and solutions suggested.	5	4	4	4
Section 4: Quality of the final product or system (/5) High quality result for most aspects of the project with a few issues of hardware build that could be improved (relating to that constructed by the subcontracting company). The final product had some quality issues, mainly due to the sub-contractor. High quality result for most aspects of the project with a few issues of hardware build that could be improved (relating to that constructed by the subcontracting company).	5	3	3	3
Section 5: Use of test equipment and presentation of results of the project (/5) Test equipment was mainly software based (SINAMICS, TIA Portal and HMI screens). Results were clearly presented as dynamic graphs and spreadsheet tables and graphs. A good testing section was accomplished through the extensive use of appropriate test equipment. Test equipment was mainly software based (SINAMICS, TIA Portal and HMI screens). Results were clearly presented as dynamic graphs and spreadsheet tables and graphs.	5	4	4	4
Section 7: Management techniques and planning, comparison with initial plan. (/5) Good evidence provided in the form a Gantt chart comparing initial and final plans with project developed within budget. A detailed Gantt chart was provided. Good evidence provided in the form a Gantt chart comparing initial and final plans with project developed within budget.	5	4	5	5
Total	25	19	20	20
5. Transferable Skills for Life and Professional Practice				
All sections: Quality of the presentation slides – (/5) Mostly very good, clear images and diagrams. However, some slides contained too many words. Powerpoint slides were professionally produced and delivered. Mostly very good, clear images and diagrams. However, some slides contained too many words.	5	3	4	4

All sections: Quality of the delivery style – (/5) Confident, clear delivery style. Delivery style was confident and professional. Confident, clear and professional delivery style.	5	4	5	4.5
Total	10	7	9	8.5
Grand Total	100	79	82	80

SGEE6003 Major Project

DOUBLE MARKING SHEET AND COMBINED STUDENT FEEDBACK

Presentation 2 – Project Design, Implementation and Evaluation

2018-2019

Agreed mark

51%

Student Name: Michael Charles Lewis

Student Number 1402807

Generic Assessment Criteria	Marks available	1st Marker (RD)	2nd Marker (MH)	Agreed Mark
1. Engagement with Literature Skills.				
Section 3: Use of technical literature in final design solution (/5) Evidence provided in the form of the stepper motor data. Datasheets were referred to for individual components in the design phase, however there didn't appear to be any references to test data and limitations set by regulatory bodies. Evidence provided in the form of the stepper motor data. Datasheets were referred to for individual components in the design phase, however there didn't appear to be any references to test data and limitations set by regulatory bodies.	5	3	1	2
Total	5	3	1	2
2. Knowledge and Understanding Skills				
Section 1: Introduction (/5) Briefly stated but overall aims were generic and not specific to the project being solved. Explained the context of the project, but didn't really give an overview of the technical design; a block diagram would have been really useful. Briefly stated but overall aims were generic and not specific to the project being solved. Explained the context of the project, but didn't really give an overview of the technical design; a block diagram would have been really useful.	5	2	2	2
Section 2: FDS (/5) Some detail provided verbally and some on screen. However, it was not clear how the objectives had changed since the original presentation and assignment 1. Given the amount of issues that the project encountered, it wasn't clear how these would be compensated for. Some detail provided verbally and some on screen. However, it was not clear how the objectives had changed since the original presentation and assignment 1. Given the amount of issues that the project encountered, it wasn't clear how these would be compensated for.	5	2	2	2
Section 3: Advanced knowledge and critical understanding demonstrated in the design of the project (/10) A good understanding of the project design demonstrated with search coil output, the sample and hold circuit, stepper motor driver but little explanation provided for the PC communications and user display. Knowledge of the intended project was evident, however much of the intention failed to materialise in practice so demonstrating a critical understanding was only partially achieved.	10	7	6	7

A good understanding of the project design demonstrated with search coil output, the sample and hold circuit, stepper motor driver but little explanation provided for the PC communications and user display. Knowledge of the intended project was evident, however much of the intention failed to materialise in practice so demonstrating a critical understanding was only partially achieved.				
All sections: Response to questioning (/10) Some good answers provided for most of the design and some understanding demonstrate in the analogue parts of the system. Could have been more positive about what had been achieved. Helpful comments made on sound level testing and magnetic field strength results and requirements for shielding in accordance with regulations. Was able to confidently answer most questions without reference to notes, but was clearly rattled by his perception of the project being a failure. Could have been more positive in his responses. Some good answers provided for most of the design and some understanding demonstrate in the analogue parts of the system. Could have been more positive about what had been achieved. Helpful comments made on sound level testing and magnetic field strength results and requirements for shielding in accordance with regulations. Was able to confidently answer most questions without reference to notes, but was clearly rattled by his perception of the project being a failure.	10	6	8	7
Total	30	17	18	18
3. Cognitive and Intellectual Skills				
Section 5: Testing and analysis of result (/10) Some evidence provided of testing of search coil with useful waveforms showing the input and output of the sample and hold circuit. Much of the testing was not possible due to problems encountered during the implementation phase. The components that were completed could have been tested more vigorously through simulation or the construction of a test bed. Some evidence provided of testing of search coil with useful waveforms showing the input and output of the sample and hold circuit. Much of the testing was not possible due to problems encountered during the implementation phase. The components that were completed could have been tested more vigorously through simulation or the construction of a test bed.	10	5	2	4
Section 6: Critical evaluation of the project outcomes and comparison with the FDS (/10) Project outcomes were clearly evaluated and a percentage completion stated with reasons which were mainly put down to factors outside the control of the student. The actual costs were stated as an approximate value and compared to the budget. There was an evaluation on what was achieved, but there was too much emphasis on what went wrong. Could have focused more on what was achieved rather than why things weren't. Project outcomes were clearly evaluated and a percentage completion stated with reasons which were mainly put down to factors outside the control of the student. The actual costs were stated as an approximate value and compared to the budget. However, there was too much emphasis on what went wrong. Could have focused more on what was achieved rather than why things weren't.	10	6	5	5
Section 8: Overall conclusions and recommendations (/10) Conclusions were offered and recommendation given for progressing the project. However, the initial recommendations were mainly a personal reflection on what had gone wrong.	10	5	4	4

There was an evaluation on what was achieved, but there was too much emphasis on what went wrong. Could have focused more on what was achieved rather than why things weren't. Conclusions were offered and recommendation given for progressing the project. However, the initial recommendations were mainly a personal reflection on what had gone wrong.				
Total	30	16	11	13
4. Practical Application Skills				
Section 3: Formulation of innovative and creative design solution to the project problem. (/5) Good solutions provided for sample and hold circuit with a good explanation of stepper motor driver circuit. A flow chart of the microcontroller program would have helped to understand the operation of the software code. No evidence provided for design of the PC communications but some reference was made to the user screen and that these were explained in the report as part of the C code. The design solution appears to be the best of the 3 options and is suitable for the problem in theory, but given the lack of progress this could not be confirmed. Good solutions provided for sample and hold circuit with a good explanation of stepper motor driver circuit. A flow chart of the microcontroller program would have helped to understand the operation of the software code. No evidence provided for design of the PC communications but some reference was made to the user screen and that these were explained in the report as part of the C code. The design solution appears to be the best of the 3 options and is suitable for the problem in theory, but given the lack of progress this could not be confirmed.	5	3	3	3
Section 4: Deployment method, use of material, tools, equipment and techniques in the construction of the project. (/5) Clear evidence of use of equipment in the design and construction of the project. No evidence provided of programming tools used. Construction was limited to the veroboard circuits with additional work on the software for the microcontroller. Clear evidence of use of equipment in the design and construction of the project. No evidence provided of programming tools used. Construction was limited to the veroboard circuits.	5	2.5	2	2
Section 4: Quality of the final product or system (/5) The images of the prototype showed a reasonable level of quality for development. However, the final product could have been a PCB but this stage had not yet been reached. No parts of the mechanical system had been constructed other than the stepper motor itself. PC user software not presented. The individual components were not connected together so there was no final product as such. The components were of a reasonable standard. The images of the prototype showed a reasonable level of quality for development. However, the final product could have been a PCB but this stage had not yet been reached. No parts of the mechanical system had been constructed other than the stepper motor itself. PC user software not presented. The individual components were not connected together so there was no final product as such. The components were of a reasonable standard.	5	1	2	2

Section 5: Use of test equipment and presentation of results of the project (/5) Good use of test equipment for measuring the input and output of the sample and hold circuit and the sound level of the main coil and these were well presented. Some simple tests could have been shown for the operation of the ADC and the PC communications. The use of general purpose and special to type test equipment was evident. Good use of test equipment for measuring the input and output of the sample and hold circuit and the sound level of the main coil and these were well presented. Some simple tests could have been shown for the operation of the ADC and the PC communications.	5	3	4	3
Section 7: Management techniques and planning, comparison with initial plan. (/5) A revised plan was presented and briefly covered. The project seems to have run out of control with much of what was intended not being completed; contingency measures were not evident. A revised plan was presented and briefly covered. The project seems to have run out of control with much of what was intended not being completed; contingency measures were not evident.	5	2.5	2	2
Total	25	12	13	12
5. Transferable Skills for Life and Professional Practice				
All sections: Quality of the presentation slides – (/5) Very good, clear diagrams. Some slides however, contained too many words and there were some diagrams left out such as a flow chart for the software and an overall block diagram of the system showing the microcontroller. The slides were generally readable of good quality. Very good, clear diagrams. Some slides however, contained too many words and there were some diagrams left out such as a flow chart for the software and an overall block diagram of the system showing the microcontroller.	5	3	4	3
All sections: Quality of the delivery style – (/5) Generally good but there was some over reliance on reading from notes. Was clearly disappointed with the project and this showed in his mannerisms and body language. Generally good but there was some over reliance on reading from notes. Was clearly disappointed with the project and this showed in his mannerisms and body language.	5	3	3	3
Total	10	6	7	6
Grand Total	100	54	50	51