

MARKING CRITERIA AND STUDENT FEEDBACK			
MODULE: Group Project and CAE			
ASSIGNMENT: Viva			
STUDENT: Group 1 Dion Billing, Toby Marshall, Harrison Liddell, Ben Coney & Ashleigh Jones			
DATE: 14/05/2019			
This section details the assessment criteria. The extent to which these are demonstrated by you determines your mark. The marks available for each criterion are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.			
Common Assessment Criteria Applied		Marks available	Marks awarded
1. Engagement with literature Skills			
Extent of research and/or own reading, selection of credible sources, application of appropriate referencing conventions.			
50-59%: Inclusion of a range of research-informed literature, including sources retrieved independently. Referencing conventions mostly consistently applied.		10	5.3
You have demonstrated some back ground reading, although rather dependant on on-line resources. Citations on the slides could have been clearer.			
Very limited referencing although you did provide some independent bibliography			
2. Knowledge and Understanding Skills			
Extent of knowledge and understanding of concepts and underlying principles associated with the discipline.			
50-59%: Knowledge is accurate with a good understanding of the field of study.		10	5.5
You have correctly identified areas of the vehicle that could provide a performance improvement. Many of the ideas were merely opinions and lacked engineering rigour. (eg motor operating temperature) The relationship between temperature and resistance should have been discussed.			
Time management reviewed along with objectives. Battery heat energy recovery and rolling resistance was defined and reviewed some deflection and consumption of energy. Motor controllers where discussed and once again regulations were adhered to. Energy recovery with thermal recovery was favoured with no external energy source could be used.			
3. Cognitive and Intellectual Skills			
Analysis, evaluation and synthesis; logic, argument and judgement; analytical reflection; organisation of ideas and evidence			
40-49%: Evidence of some logical, analytical thinking and some attempts to synthesise, albeit with some weaknesses. Some evidence to support findings/ views, but evidence not consistently interpreted. Some relevant conclusions and recommendations, where relevant		30	14.1
Your engineering opinions could have been argued by introducing some analysis. Such as calculating the energy in the battery, calculating the average power for each race time/distance. Looking at drive ratios to ensure that the motor is operating at it's most efficient point. How much heat rejection is required to maintain a stable motor temperature? How could this be captured and used t propel the vehicle?			
Battery temperature and charge cycles were reviewed via regulations. Alternative materials were discussed and bearing fiction was reviewed. Peek torque was defined. Derailleur was introduce to a budget of £500. There is very little evidence in your slides with regards to any analytical work to support your findings			
4. Practical Application Skills			
Deployment of methods, materials, tools and techniques; application of concepts; formulation of innovative and creative solutions to solve problem			
50-59%: A good and appropriate application of standard methods, materials, tools and/or techniques. Good appreciation of the context of the application, with some use of examples, where relevant.		30	17.4
It was good to see some testing, this could have been developed. What road load data was added to the rolling road controller? What vehicle speeds were reached? What was the motor current? You could have tested using a 50% marked space ration (eg at 10 second intervals) The pull testing results are confusing as you talk about force and yet the units are for torque?			
CAD model was defined and some testing was introduced to establish a baseline. A simple pull test was also discussed. Roller road testing on the rolling road to monitor battery temperature			
5. Transferable Skills for Life and Professional Practice			
Attributes in professional practice: individual and collaborative working; deployment of appropriate media; presentation and organisation.			
50-59%: Can communicate effectively in a suitable format, but may have minor errors. Can work effectively as part of a team, with clear contribution to group activities. Mostly coherent work and is in a suitable structure.		20	11.6
The slides were clear and everyone had a role in the presentation.The use of graphs and diagrams would help get the information across. It was awkward to understand the extent of the CAD component.			
Good clear slides provided. Some proof reading prior to the presentation would have been beneficial			
Assignment Mark (Assessment marks are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)		Late Submission Penalties (tick if appropriate)	
		Up to one-week late	
		Over one week late	
		53.9	%