

MARKING CRITERIA AND STUDENT FEEDBACK

MODULE: Race Engineering	ASSIGNMENT: Driver Analysis
STUDENT: Jamie Prewett	DATE: 17/12/18

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	Percent Awarded
1. Research-informed Literature Extent of research and/or own reading, selection of credible sources, application of appropriate referencing conventions. (e.g. Research of testing procedures, vehicle specifics, aerodynamic principles, testing methods etc.)			%
40-49%: References to a limited range of mostly relevant sources. Some omissions and minor errors. Referencing conventions evident though not always applied consistently. <i>You have only conducted basic research to support data analysis as a driver development tool . We would expect a wider range of background reading to be evident at this level.</i> <i>You have only conducted minimal research into testing techniques</i> <i>Jamie, although you have included references to a range of web based sources, at this level we would expect you to be reviewing published material such as books and journal papers to support your knowledge and understanding. Citations could have been embedded in your discussions to support statements made</i>	10	4.5	45
2. Knowledge and Understanding of Subject Extent of knowledge and understanding of concepts and underlying principles associated with the discipline. (e.g. Choice of tests and explanation of underlying principles)			
60-69%: Knowledge is extensive. Exhibits understanding of the breadth and depth of established views. <i>You show a good level on understanding of driver techniques and how these may effect vehicle performance in general.</i> <i>You demonstrate some understanding of the methods and techniques applied in the data analysis to characterise the performance of the drivers.</i> <i>It's good you note that 100% braking may not be optimal due to lock ups. Through your discussions you demonstrate a good knowledge of driver approaches through the interpretation of the data. Further analysis and use of secondary channels would have helped demonstrate a greater depth of knowledge.</i>	20	13	65
3. Analysis Analysis, evaluation and synthesis; logic, argument and judgement; analytical reflection; organisation of ideas and evidence (e.g. Analysis of data, findings and use of MATH channels)			
60-69%: Sound, logical, analytical thinking; synthesis and evaluation. Ability to devise and sustain persuasive arguments, and to review the reliability, validity & significance of evidence. Ability to communicate ideas and evidence accurately and convincingly. Sound, convincing conclusions / recommendations. <i>Generally you have conducted some good analysis of the data obtained to draw some conclusions on driver performance. Conclusions could be more persuasive with a deeper analysis</i> <i>You have presented data for each driver and identified obvious differences. You could have conducted further analysis to explain root causes of driver inputs.</i> <i>Good to see lap times plotted for each driver indicating consistency - shame these are not overplayed for direct comparison of drivers. You could have looked at secondary channels to demonstrate the lock ups which can occur using too much braking pressure. Whilst you have clearly identified driving errors with some reasoning, data analysis of each driver could have been clearer with the use of overlays to demonstrate where the different approaches were successful. this could have also been conducted to compare each session for a driver to identify if the instructions were implemented and successful. Conclusions drawn could be more convincing with further analysis of data and alternative presentation methods of results.</i>	40	25.2	63
4. Practical Application and Deployment Deployment of methods, materials, tools and techniques; application of concepts; formulation of innovative and creative solutions to solve problems. (e.g. Test Plan, Use of Motec I2, conclusions drawn from analysis)			
60-69%: A very good application of a range of methods, materials, tools and/or techniques. Very good consideration of the context of the application, with perceptive use of examples, where relevant. Evidence of some innovation and creativity. <i>Group 2: Session 1: Test ran smoothly. Obviously a plan and clear instructions for drivers. Data was observed closely and preliminary analysis conducted in real time. Test generally professionally run - you could be a bit slicker with less down time between runs. Good to see notes taken of spins and run wides. Session 2: Test team entered test with clear instructions and requests - you clearly had a plan. Team issued clear instructions to drivers to implement during their sessions - this could have been supported with data overlays to show drivers if you had conducted a new run every instruction. All team members knew their individual tasks and collected data well whilst conducting some good 'live' data analysis to compare with hypothesis. Some good critical analysis of the control cases evident - you noticed drivers who had access to data implementing improvements before instructions given.</i> <i>You have only used very basic Motec tools to display and interrogate your data. Further use of the materials available would have helped you conduct a more through analysis.</i>	20	12.8	63.75
<i>Basic results presentation with only limited use of the analysis tools available.</i>			
5. Skills for Professional Practice Attributes in professional practice: individual and collaborative working; deployment of appropriate media; presentation and organisation. (e.g. Technical report writing and presentation.)			
70-79%: Can communicate professionally and, confidently in a suitable format. Work is coherent, very fluent and is presented professionally. <i>A very professional document which has an excellent structure and is a coherent account of the investigation conducted.</i> <i>Technical report formatting and presentation generally is very good. A couple of minor errors only.</i> <i>Try not to write in first person - you should refrain from using 'we' and I.</i>	10	6.8	68
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		62.3 %