

MARKING CRITERIA AND STUDENT FEEDBACK						
MODULE: Research Methods and Project						
ASSIGNMENT: Written Report						
STUDENT: Luke Cripps						
DATE: 02/05/2019						
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.						
60-69%: Inclusion of a wide range of research-informed literature, including sources retrieved independently. Selection of relevant and credible sources. Very good use of referencing conventions, consistently applied.				10	6.75	
Evidence of reading from a range of sources, used to support project rationale and understanding. A more thorough review of exisiting studies could have been completed. Studies used to validate your findings, but you should have explained their findings and applications rather than generic 'validated by' comments - show their results next yours..						
There is some evidence of referencing throughout the paper however, more supporting evidence for your analysis and more research into valadation would have been an advantage.						
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. Some of the key aerodynamics principles are presented with a good understanding of these evident through your explanations. As drag is your key consideration, I would have expected further explanation of drag contributions. CFD methods could be explained in more detail explaining limitations and assumptions made with reasoning. Analysis does demonstrate some good understanding of external flow and the effects A concise insight of boundary layers and drag factors and some brief reference regarding stricter measures regarding co2.				30	17.3	
3. Cognitive and Intellectual Skills						
Analysis, evaluation and synthesis; logic, argument and judgement; analytical reflection; organisation of ideas and evidence						
50-59%: Evidence of some logical, analytical thinking and synthesis. Can analyse new and/or abstract data and situations without guidance. An emerging awareness of different stances and ability to use evidence to support the argument. Valid conclusions and recommendations, where relevant				30	17.3	
An attempt to validate and conduct method independancy studies. Your tubulence model selection could be more convincing as you have some unsubstantiated comments. You should have quantified the accuracy of your baseline model. Variant results appear to be good, but you could have conducted more detailed analysis of the flow structures and reasoned why these resulted in the overall coefficients and how representative they are for real vehicles. Spoiler/air dam investigations generally are good, but CoP doesn't make sense for either - (rear spoiler should move CoP backwards)						
You have carried out a lot of CFD investigations on different vehicle shapes however, you analysis is basic and many a time you just refer to your image without any true technical evaluation						
4. Practical Application Skills						
Deployment of methods, materials, tools and techniques; application of concepts; formulation of innovative and creative solutions to solve problem						
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.				20	12.5	
You appear to have applied a reasonable methodology - but you did not need to include the step by step description of case setup - you would have been better using these words to explain the technical validity of CFD method and limitations. CFD settings could have been summarised in a single table. It is not clear you validated you numbers against MIRA results, as you compare your results with other vehicle's coefficients. Basic postprocessing. You have conducted a large number of runs.						
Within your methods you do provide an insight into your practical application and discuss briefly validation from a case study. Your section 3 read more like an operations manual and you make statement without supporting evidence (Page 19 & 22)						
5. Transferable Skills for Life and Professional Practice						
Attributes in professional practice: individual and collaborative working; deployment of appropriate media; presentation and organisation.						
60-69%: Can communicate well, confidently and consistently in a suitable format. Work is coherent and fluent and is well structured and organised.				10	6.75	
Luke, you have presented your work well as a technical report. The report includes a number of typographical errors which should have been corrected during proof reading. Some images could also be clearer - when comparing results, image scales/legends should be the same.						
The report needed to be proof read and your introduction should have defined the need for the investigation and a stronger conclusion was required						
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)		60.5	%
			Up to one-week late			
			Over one week late			