

## MARKING CRITERIA AND STUDENT FEEDBACK

MODULE: Race Engineering

ASSIGNMENT: Aerodynamic Data

STUDENT: Anthony Hau

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 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------|-----------------|
| <b>1. Research-informed Literature</b><br>Extent of research and/or own reading, selection of credible sources, application of appropriate referencing conventions.<br>(e.g. Research of testing procedures, vehicle specifics, aerodynamic principles, testing methods etc)<br>0-29%: Little or no evidence of reading.<br>Views and findings unsupported and non-authoritative.<br>Referencing conventions largely ignored.<br><br><i>No evidence of supporting reading. You should have citations and references to demonstrate you have conducted some reading around the subject to gain established views. Some comments show you have conducted some reading but not included the evidence.</i>                                                                                                                                                                                                                                                                                                                                  | 10                                                     | 1                                                                           | 10              |
| <b>2. Knowledge and Understanding of Subject</b><br>Extent of knowledge and understanding of concepts and underlying principles associated with the discipline.<br>(e.g. Choice of tests and explanation of underlying principles)<br><br>40-49%: Evidence of basic knowledge and understanding of the relevant concepts and underlying principles.<br><br><i>You demonstrate only a vague understanding of the aerodynamic fundamentals you are investigating and this will have impacted on the strength of any conclusions drawn.</i><br><i>You demonstrate some understanding of the methods and techniques applied in the data analysis to characterise the performance of the vehicle.</i><br><br><i>Testing methods could be explained in more detail. You could have supported some of your statements with further reasoning to demonstrate a more detailed understanding. Math channels look correct, but could be explained.</i>                                                                                             | 20                                                     | 9                                                                           | 45              |
| <b>3. Analysis</b><br>Analysis, evaluation and synthesis; logic, argument and judgement; analytical reflection; organisation of ideas and evidence<br>(e.g. Analysis of data, findings and use of MATH channels)<br><br>30-39%: Some evidence of analytical intellectual skills, but for the most part descriptive. Ideas/findings sometimes illogical and contradictory. Generalised statements made with scant evidence. Conclusions lack relevance.<br><br><i>Limited analysis of data obtained. Only a very generalised appreciation for the importance/significance of the data and trends evident is demonstrated.</i><br><br><i>Fundamental math channels present and correct. These could be explained in further detail</i><br><br><i>You should have graphically presented your straight line test results and included the calculated CLs from the constant velocity testing. The Plots included do show the correct results, but you haven't included all of the requested graphs and those included are not discussed.</i> | 35                                                     | 13.1                                                                        | 38              |
| <b>4. Practical Application and Deployment</b><br>Deployment of methods, materials, tools and techniques; application of concepts; formulation of innovative and creative solutions to solve problems.<br>(e.g. Test Plan, Use of Motec I2, conclusions drawn from analysis)<br><br>50-59%: A good and appropriate application of standard methods, materials, tools and/or techniques.<br>Good appreciation of the context of the application, with some use of examples, where relevant.<br><br><i>You have used Motec to create some of the requested plots and implemented the math channels correctly.</i><br><br><i>Some evidence you planned the testing schedule, but justifications for test choices could have been outlined. You have not drawn any conclusions from the analysis conducted.</i>                                                                                                                                                                                                                             | 20                                                     | 11                                                                          | 55              |
| <b>5. Skills for Professional Practice</b><br>Attributes in professional practice: individual and collaborative working; deployment of appropriate media; presentation and organisation.<br>(e.g. Technical report writing and presentation.)<br>30-39%: Media is poorly designed and/or not suitable for the audience.<br>Poor independent or collaborative initiative.<br>Work lacks structure, organisation, and/or coherence<br><br><i>The start of a satisfactory report, but structure and content show room for improvement as it is incomplete.</i><br><i>Technical report guidelines only generally followed. You need to refer to the guidelines and make sure you present accordingly in future.</i><br><i>Report is incomplete. Formatting shows room for improvement. You should have proof read the report. There are numerous typographical errors.</i>                                                                                                                                                                  | 15                                                     | 5.7                                                                         | 38              |
| <b>Assignment Mark</b> (Assessment marks are subject to ratification at the Exam Board.<br>These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Late Submission Penalties (tick if appropriate)</b> |                                                                             | 40 %            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Up to one-week late                                    | <input checked="" type="checkbox"/> <b>Late Submission (40% before cap)</b> |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Over one week late                                     |                                                                             |                 |