

## MARKING CRITERIA AND STUDENT FEEDBACK

MODULE: Research Methods and Project

ASSIGNMENT: Viva

STUDENT: Luke Cripps

DATE: 09/05/2019

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.<br>Selection of relevant and credible sources. Very good use of referencing conventions, consistently applied.                                                                                                                                                                                                                                                                                                                                                         |  |                                                 | 10              | 6.5           |   |
| Some evidence of supporting reading to support project rationale and background context. You could have more clearly compared your results and the implications of these to existing studies.                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                 |                 |               |   |
| You referenced throughout and a bibliography was provided                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                 |                 |               |   |
| 2. Knowledge and Understanding Skills                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                 |                 |               |   |
| Extent of knowledge and understanding of concepts and underlying principles associated with the discipline.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                 |                 |               |   |
| 40-49%: Evidence of basic knowledge and understanding of the relevant concepts and underlying principles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                 | 30              | 14.4          |   |
| CFD Process outlined and understood. You could have justified the use of the MIRA geometry. The explanation of the results and the importance of these in practice showed some areas which lacked detailed and confidence in understanding.                                                                                                                                                                                                                                                                                                                                          |  |                                                 |                 |               |   |
| Provided aims and defined an understanding of some aero issues                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                 |                 |               |   |
| 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.<br>An emerging awareness of different stances and ability to use evidence to support the argument.<br>Valid conclusions and recommendations, where relevant<br>Good to see an attempt to investigate main simulation parameters. Interrogation of results could be more thorough and related back to the aerodynamic principles at play to help show critical analysis and the depth of your understanding. Some basic conclusions drawn. |  |                                                 | 20              | 11.6          |   |
| Reviewed the four variants whilst considering wake zones along with air dam and coefficient of drag however very little evidence of analytical interpretation of 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                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                 |                 |               |   |
| 60-69%: A very good application of a range of methods, materials, tools and/or techniques.<br>Very good consideration of the context of the application, with perceptive use of examples, where relevant.<br>Evidence of some innovation and creativity.                                                                                                                                                                                                                                                                                                                             |  |                                                 | 20              | 12.6          |   |
| Good to see CFD case running and producing reasonable results indicating a competence in using the software. A good number of runs investigated. It is a shame you didn't conduct experimental testing using the windtunnel to provide confidence in your results.                                                                                                                                                                                                                                                                                                                   |  |                                                 |                 |               |   |
| Some insight into computational fluid dynamics, baseline settings along with some cited validation references                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                 |                 |               |   |
| 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. Mostly coherent work and is in a suitable structure.                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                 | 20              | 11.6          |   |
| Some of the slides could have been designed more carefully as some images are hard to see. Graphs should have clear labels - even you couldn't remember the turbulence model on the graph.                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                 |                 |               |   |
| Spoke and delivered the presentation with confidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                 |                 |               |   |
| 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) |                 | 56.7          | % |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Up to one-week late                             |                 |               |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Over one week late                              |                 |               |   |