

Marking scheme

Computational Modelling of Turbulent Air Flow in the High-Speed Leg of the
Virginia Tech Stability Wind Tunnel

Module Leader: Tamás István Józsa

Problem statement (10%)

1. Motivation for this study / background
2. Concise and organised literature review with categorised information presentation
3. Description of the problem that is being solved in this assignment with an articulated aim

Methodology (20%)

1. Work is reproducible based on the report and result files are shared as requested
2. Choices of simulation parameters (e.g., numerical settings and wall functions) are justified
3. Governing equations and boundary conditions are described mathematically

Results and discussion (50%)

1. Results are of high quality (good readability)
2. Uniform and consistent presentation of figures and tables
3. All tasks are addressed and results are correctly interpreted
4. Discussion covers other academic publications and theory beyond observed trends

Conclusions (10%)

1. Conclusion and summary presented clearly and concisely
2. Learning outcome identified and potential outlook given

Structure (10%)

1. Scientific language / consistent writing
2. Overall presentation of results
3. Structure of assignment / layout

MSc Mark Range & Standard	Criteria / Descriptor
<p>80 - 100% Standard = Excellent</p>	<p>Demonstrating a comprehensive knowledge and understanding of the subject and subfields. High capacity for critical evaluation. Novel application of the subject matter to a specific context. <u>Process:-</u> Requiring a student to have: Undertaken extensive further reading. Produced a <u>well structured</u> piece of work. Demonstrated excellent communication skills. Exercised a high level of original thought.</p>
<p>70 - 79% Standard = Very Good</p>	<p>Demonstrating an extensive knowledge and understanding of the subject and subfields. Very good capacity for critical evaluation. Effective application of the subject matter to a specific context. <u>Process:-</u> Requiring a student to have: Undertaken substantial further reading. Produced a <u>well structured</u> piece of work. Demonstrated very good communication skills. Exercised a significant level of original thought.</p>
<p>60 - 69% Standard = Good</p>	<p>Demonstrating a good knowledge and understanding of the subject and subfields. Good capacity for critical evaluation. Competent application of the subject matter to a specific context. <u>Process:-</u> Requiring a student to have: Undertaken some further reading. Produced a <u>well structured</u> piece of work. Demonstrated good communication skills.</p>
<p>50 - 59% Standard = Satisfactory</p>	<p>Demonstrating a satisfactory knowledge and understanding of the subject and subfields. Standard critique of the subject matter. Adequate application of the subject matter to a specific context. <u>Process:-</u> Requiring a student to have: Undertaken adequate further reading. Produced an adequately structured piece of work. Demonstrated basic but satisfactory communication skills.</p>
<p>40% - 49% Standard = Borderline</p>	<p>Demonstrating an inadequate knowledge and understanding of the subject and subfields. Lacking critique of the subject matter. Limited application of the subject matter to a specific context. <u>Process:-</u> Requiring a student to have: Undertaken some relevant reading. Produced a piece of work with a simple structure. Demonstrated marginal communication skills</p>
<p>0 - 39% Standard = Fail</p>	<p>Demonstrating a lack of knowledge and understanding of the subject and subfields. Absence of critique of the subject matter. Lacking application of the subject matter to a specific context. <u>Process:-</u> Requiring a student to have: Undertaken inadequate reading. Produced a poorly structured piece of work. Demonstrated poor communication skills.</p>