**2021/22**

**Department of Aeronautical and Aviation Engineering**

**AAE4002 Capstone Project**

Final Report Assessment

(For the use by Academic Supervisor and Independent Assessor)

The Final Report has a weighting of up to a maximum of 50% the total marks. The Final Report is assessed by (1) the Academic Supervisors (or Industrial and Academic Supervisors shall work together to provide one assessment) and (2) one Independent Assessor.

The assessments of the Final Report by the Academic Supervisors and the Independent Assessor each weigh 50% of the Final Report marks, i.e. 25% each of the total marks.

The assessment methods and the associated percentage (%) weighting of AAE4002 are shown in Table 1.

Table 1: Assessment methods and the associated % weighting

|  |  |  |
| --- | --- | --- |
|  | **Assessments** | **% Weighting** |
| 1 | Individual Reflective Essay | 10 |
| 2 | Interim Report | 20 |
| **3** | **Final Report** | **50** |
| 4 | Oral Presentation | 20 |
|  | Total | 100 |

The Academic Supervisors and Independent Assessors have to provide their assessment and give scores out of a total of 100. These marks will be scaled down accordingly to reflect their weighting to the Final Report marks and the total marks of the capstone project.

**The Final Report Assessment Form is included in this document.**

**Please:**

1. **Fill in the Assessment Form for the project group.**
2. **Return the Assessment Form and Reports to AAE General Office (QR821) by the scheduled deadline.**

**2021/22**

**Department of Aeronautical and Aviation Engineering**

**AAE4002 Capstone Project**

**Final Report Assessment Form**

|  |  |
| --- | --- |
| **Project Code & Title:** | ( ) |
| **Academic Supervisor / Independent Assessor:** |  |

Turnitin Submission: Y / N Plagiarism detected: \_\_\_\_\_\_\_\_\_\_\_%

|  | **Maximum Marks** | **Criteria *(Refer to the Rubric for Final Report Assessment)*** | **Name & SID** | **Name & SID** | **Name & SID** |
| --- | --- | --- | --- | --- | --- |
| **Marks** | **Marks** | **Marks** |
| **Abstract and Introduction** | 10 | * Provides reader a clear overview of the project Identification of problems * Rationale for carrying out the project is explained clearly * Aims and objectives are explicitly stated | \_\_\_\_\_\_/10 | \_\_\_\_\_\_/10 | \_\_\_\_\_\_/10 |
| **Literature Review** | 10 | * Literature review is thorough, comprehensive, relevant and consistent with the research topic * Literatures are critically evaluated; original thinking is evident * Review of literature is presented in a logical and coherent manner * The work of others is acknowledged and referenced * Source material is up to date and comprehensive | \_\_\_\_\_\_/10 | \_\_\_\_\_\_/10 | \_\_\_\_\_\_/10 |
| **Methodology** | 25 | * Work scope is justifiable and workable * Awareness of various possible investigative methods * Main tasks, difficulties and problems are listed and explained * Identification, justification, explanation and use of appropriate tools and techniques/approaches * Identification of appropriate project milestones * Evidence of planning and organization to achieve the milestones and demonstrate the problem solving skills | \_\_\_\_\_\_/25 | \_\_\_\_\_\_/25 | \_\_\_\_\_\_/25 |
| **Results and Discussions** | 30 | * Clear presentation of test conditions and test data * Approach, analysis/investigative scope are appropriate (in line with the aim and objectives) * Discrepancies between theoretical and experimental results were analyzed and explained * Results supported by full documentation * Results are effectively interpreted with consistent focus on the aim Interpretation are well-integrated into existing literature * Evidence of self-determined effort to acquire additional knowledge and skills to achieve aim | \_\_\_\_\_\_/30 | \_\_\_\_\_\_/30 | \_\_\_\_\_\_/30 |
| **Conclusion and Recommendations** | 10 | * Conclusion addresses the research question/issue and achievement of aim and objectives * Conclusions are drawn from analysis and are supported by data * Clear understanding of the potentials  State limitations of final product * Realistic recommendations for future development | \_\_\_\_\_\_/10 | \_\_\_\_\_\_/10 | \_\_\_\_\_\_/10 |
| **Overall Presentation of the Report** | 15 | * Free from spelling mistake and grammatical error * Layout, format and outline of the report are consistent with the requirements * Proper presentation of charts, diagrams, tables and references * Interesting to read and visually pleasant | \_\_\_\_\_\_/15 | \_\_\_\_\_\_/15 | \_\_\_\_\_\_/15 |
| **Total** | | | **\_\_\_\_\_\_/100** | **\_\_\_\_\_\_/100** | **\_\_\_\_\_\_/100** |

**Comments** (*required)*:

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Signature: |  |  | Date of Assessment: |  |

**Rubric for Capstone Project Final Report Assessment**

|  |  |  |
| --- | --- | --- |
| **Grade** | **Marks** | **Short Description** |
| A+(>85) | (>85-100) | Excellent |
| A(>82-85) | (>79-85) |
| A-(>79-82) |
| B+(>76-79) | (>69-79) | Good |
| B(>73-76) |
| B-(>69-73) |
| C+(>64-69) | (>54-69) | Satisfactory |
| C(>59-64) |
| C-(>54-59) |
| D+(>44-54) | (>40-54) | Pass |
| D(>40-44) |
| F(<40) | <40 | Failure |

|  | **Unacceptable** | **Marginal** | **Acceptable** | **Good** | **Excellent** |
| --- | --- | --- | --- | --- | --- |
| **Abstract** | * Irrelevant to the project * Confusing and self- contradicting descriptions | * Project objectives/ tasks accomplished and/or conclusions are missing | * Give a rough overview of the project, some points are unclear | * Give a clear overview of the project | * Give a very effective overview of the project |
| **Introduction** | * Introduction extremely underdeveloped or missing * Aims and objectives are not stated * Rationale for carrying out the project is unclear | * Introduction either underdeveloped or awkward * Aims and/or objectives are either not stated or unclear * Not all important problems are identified | * Most information is presented in logical order which is easy to follow. * Aims and objectives are stated but the rationale for carrying out the project is not explained clearly | * Effective introduction brings audience to topic * Aims and objectives are stated * Identification of problems | * Highly effective introduction brings audience to topic * Aims and objectives are explicitly stated * Identification of problems * Rationale for carrying out the project is explained clearly |
| **Literature Review** | * No or irrelevant literature review | * Insufficient literature review or irrelevant materials included * Review of literature is presented in a confusing manner * Source material is outdated | * Literature review is relevant and consistent with the research topic * Literatures are evaluated though original thinking is not evident * Review of literature is presented in a logical but sometimes not coherent manner | * Thorough, relevant and consistent with the research topic * Literatures are evaluated; original thinking is evident to some degrees * Review of literature is presented in a logical and coherent manner * The work of others is acknowledged and referenced | * Thorough, comprehensive, relevant and consistent with the research topic * Literatures are critically evaluated; original thinking is evident * Review of literature is presented in a logical and coherent manner * The work of others is acknowledged and referenced * Source material is up to date and comprehensive |
| **Methodology** | * The research problem cannot be comprehended * Work scope is either unrealistic and not justifiable * Do not aware of various possible investigative methods * No progress in solving the problem * Engineering analysis infrequently used or appears trivial and leads to obvious conclusions * No or very poor technical (software   /hardware/mathematical)  skills are demonstrated during the project. | * The research problem under study can be described * Some research methods are used to solve the problem and the problem is partly solved * Included some analysis, but not very detailed or challenging; many steps seem not supported by calculations * Poor or very basic technical (software   /hardware/ mathematical) skills are demonstrated during the project | * The research problem under study is described * Some research methods are used to solve the problem and the problem is partly solved * Included some analysis; but some steps seem not supported by calculation * Basic technical (software   /hardware/ mathematical) skills are demonstrated during the project | * Causes of the problem under study can be fully explained; The pros and cons of each proposed solution found in the literature can also be explained * Suitable research methods are used to solve the problem and the problem is reasonably solved * Detailed & challenging engineering analysis; but a few steps seem not supported by calculation * Good technical (software   /hardware/ mathematical) skills are demonstrated during the project | * The problem under study is fully analyzed with solution being proposed * Suitable research methods are used to solve the problem and the problem is fully solved * Detailed & challenging engineering analysis at every stage of the design process * Excellent technical (software/hardware/ mathematical) skills are demonstrated during the project |
| **Results and Discussions** | * Lack of test conditions and test data * No explanation about any discrepancy between theoretical and experimental results * Lack of results | * Unclear presentation of test conditions and test data * Little effort in explaining the discrepancy between theoretical and experimental results is not investigated * Analysis is of trivial calculations & poorly explained | * Basically clear presentation of test conditions and test data * For many discrepancies between theoretical and experimental results, an analysis is done to explain it * Results supported by full documentation * Results are interpreted but do not have consistent focus on the aim | * Clear presentation of test conditions and test data * For any discrepancy between theoretical and experimental results, an analysis is done to explain it * Results supported by full documentation * Results are interpreted with consistent focus on the aim | * Clear presentation of test conditions and test data * For any discrepancy between theoretical and experimental results, an analysis is done to explain it * Results supported by full documentation * Results are effectively interpreted with consistent focus on the aim * Interpretation are well- integrated into existing literature * Output having the   potential for academic publication |
| **Conclusion and Recommendations** | * No conclusions or wrong conclusions | * Conclusions drawn are inappropriate or irrelevant to the project * No recommendations for future development | * Conclusions addresses the research question/issue and some of the aims and objectives are achieved * Conclusions are drawn from analysis and are partially supported by data * Recommendations for future development are somewhat unrealistic | * Conclusion addresses the research question/issue and achievement of aim and objectives * Conclusions are drawn from analysis and are mostly supported by data * Clear understanding of the potentials * Realistic recommendations for future development | * Conclusion addresses the research question/issue and achievement of aim and objectives * Conclusions are drawn from analysis and are fully supported by data * Clear understanding of the potentials * State limitations of final product * Realistic recommendations for future development |
| **Overall Presentation** | * Disorganized to the extent preventing understanding. * Full of misspellings and/or grammatical errors. | * Introduction either underdeveloped or awkward * Organizational structure occasionally unclear * Conclusion underdeveloped, obvious, or fails to match content and project objectives * A number of misspellings and/or grammatical errors | * Most information is presented in logical order which is easy to follow. * Some misspellings and/or grammatical errors. * Presentation of charts, diagrams, tables and references is sometimes improper or erroneous * Layout, format and outline of the report are sometimes inconsistent   with the requirements | * Organization is generally good, but some parts seem out of place * Minor misspellings and/or grammatical errors. * Layout, format and outline of the report are mostly consistent with the requirements | * Written work is well organized and easy to understand * Free from spelling mistake and grammatical error * Layout, format and outline of the report are consistent with the requirements * Proper presentation of charts, diagrams, tables and references |