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| Project: | Reviewer: | Date: |

| *Criteria* | *Exceeds Expectations 93-100 (A), 90-92 (A-)* | *Matches Expectations 87-89 (B+), 83-86 (B),  80-82 (B-)* | *Fair 77-79 (C+), 73-76 (C),  70-72 (C-)* | *Needs Improvements 67-69 (D+), 65-66 (D)* | *Unacceptable Below 65 (F)* | *Raw Numeric Score* | *Weight* | *Weighted* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Introduction (Ch. 1)   * Background, motivation, and justification for conducting this project | Demonstrates a comprehensive and insightful understanding of all relevant background information. | Demonstrates a clear understanding of relevant background information. | Provides some evidence of background information with some insight relevant to the project. | Demonstrates limited understanding of background information. | The background information is unclear, not explained or is missing. | 0.0 | 0.05 | 0.00 |
| Project Overview (Ch. 2)   * Project statement * Semester primary objectives and deliverables * Semester secondary objectives and deliverables * System overview | Demonstrates a comprehensive and insightful understanding of all relevant background information and the system overview. Semester objectives and deliverables are realistic, clear, and consistent with the long-term objectives. | Demonstrates a proficient understanding of relevant background information and the system overview. Most semester objectives and deliverables are realistic, and consistent with the long-term objectives. | Demonstrates some evidence of background information and the system overview. Some of the semester objectives are realistic and consistent with the long-term objectives. | Information on long-term outcomes, expected benefits, and the system overview is limited. The semester objectives and deliverables are ambiguous and/or indicate a lack of understanding. They are inconsistent with the long-term objectives. | The required information is unclear or is not included.  The semester objectives are stated without clarification or description. They are unclear and/or unrealistic. | 0.0 | 0.05 | 0.00 |
| Customer Needs and  Engineering Design  Requirements (Ch. 3)   * Customer’s needs * Design constraints * Measurable engineering specifications | All relevant requirements and constraints are identified, prioritized, and translated into clear and measurable engineering specifications as appropriate. | Most critical requirements  and constraints are identified. Many requirements are  translated into measurable engineering specifications. | Some of the key requirements and constraints are identified,  and translated into  measurable engineering  specifications. | Customer needs are incomplete, unclear, or not linked to engineering requirements. Very little engineering work has been done & presented. | Customer needs and engineering requirements are skeletal. No evidence of engineering work is shown. | 0.0 | 0.05 | 0.00 |
| System Concept  Development (Ch. 4)   * Concepts generation and selection * Multiple concepts * Appropriate visual aids | Concept space includes reasonable options for all functions. Many appropriate visual aids are used to explain the concepts. Selection criteria are well-defined, and the scores are clearly explained. | Concept space includes good breadth for all functions. Some appropriate visual aids are used to explain the concepts. Selection processes are appropriate for the given project. | Concept space includes a reasonable number of alternatives. A selection process exists, but some selection criteria are poorly  defined (may not match the specifications). | A few concepts are offered to address some functions.  The selection process does not match engineering specifications. | A single concept is offered for some functions. A selection process and/or scoring are missing from the document. | 0.0 | 0.05 | 0.00 |
| Final Design (Ch. 5):   * Application of design process * Supporting evidence (design artifacts) | The solution and approach fully demonstrate the use and understanding of the engineering design process. | Many artifacts of the engineering design process are present. | Some artifacts of the engineering design process are illustrated. | Few artifacts of the engineering design process are presented. | The solution and approach do not follow the design process. | 0.0 | 0.20 | 0.00 |
| System Evaluation (Ch. 6):   * Evaluation procedures * Documenting results * Analyses | System evaluations and experiments are used to confirm design performance with thorough consideration of relevant parameters. Test results are analyzed, compared with engineering analysis, and used to provide appropriate design guidance. | System evaluations and experiments are used to confirm design performance with consideration of relevant parameters. Test results are analyzed and used to provide design guidance. | System evaluations and experiments are used to confirm design performance with consideration of some relevant parameters. Test results are presented with some analysis. Further analysis is needed to confirm the design. | Ad-hoc system evaluations and experiments are used. The coverage is poor. Results are inconclusive and/or interpretations of the results are questionable (or incorrect). | No appropriate evaluation (or experiments) are presented. | 0.0 | 0.20 | 0.00 |
| Significant Accomplishments, Recommendations, and Conclusions (Ch. 7 & 8):   * Supported by evidence. * Honest and realistic | All claims and recommendations are honest and realistic and supported by data (evidence). | Many claims and recommendations are honest and realistic and supported by data (evidence). | Some claims and recommendations are honest and realistic and supported by data (evidence). | Few claims and recommendations are honest and realistic and supported by data (evidence). | No claims and recommendations are honest and realistic and supported by data (evidence). | 0.0 | 0.10 | 0.00 |
| Ethical and Professional Responsibilities (Appendix):   * Benefits and impact of the solution beyond technical issues | It is comprehensive, and the issues are realistic. | It covers a good breadth, and the issues are mostly realistic. | It includes some obvious issues that are mostly realistic. | It includes some obvious issues that are superficially addressed. | Few obvious issues are covered with inadequate justification/explanation. | 0.0 | 0.05 | 0.00 |
| Communication/Documentation:   * Consistent, logical flow and organization * Professional (grammar, no typos, proper citations, third person used) * Tables / figures properly labeled and cited / described in the text * Appropriate use of references and citations * Appropriate use of diagrams, figures, sketches, models * Facts and evidence provided to support conclusions | The report is consistently clear and concise, using a technical writing style with little or no spelling / grammatical errors. Well formatted and always flows smoothly in a logical manner. Numerous appropriate diagrams / figures illustrate the text. In-line citations with proper references are always included. | The report is usually clear and concise and generally uses a technical writing style with few spelling / grammatical errors. Information usually flowed smoothly and in a logical manner. Many diagrams / figures were included to clarify the text. References are often used and properly cited. | The report is generally clear and concise, with a few spelling / grammatical errors. The technical writing style is not consistently followed. Information generally flowed smoothly, but some parts were difficult to follow. Some diagrams are used to accompany the text. Some errors in referencing / citing are made. | The report is unclear and overly wordy or missing important details. It is not in a technical style (e.g. “diary-style”). The information did not flow smoothly, and a logical structure is not used. A few diagrams are included and were not properly related to the text. Few or incomplete references are used, and citations were missing or incomplete. | The report contains a few details and is unclear. Information is not organized. The writing style is informal / casual. No diagrams or illustrations are included or are improperly used. References are not used or were incomplete or missing. | 0.0 | 0.25 | 0.00 |
| Total | | | | | | | 1.00 | 0.00 |

Enter raw numeric scores. Calculate weighted scores and the total score by press Ctrl-A and F9.