

EVALUATION RUBRIC FOR FINAL DESIGN SPECIFICATION

CRITERIA	LEVELS OF ACHIEVEMENT		
1. PREVIOUS COMMENTS (40 pts.) Sect. 1-3 SCORE: _____	Nearly all suggestions from previous papers have been addressed. Revision history is current. (40-30)	Most suggestions from previous reports have been addressed. Revision history is current. (30-10)	Few suggested revisions from earlier reports have been addressed. Revision history is not current. (10-0)
2. BLOCK DIAGRAM (20 pts.) Sect. 4.1 SCORE: _____	Block diagram is excellent. Adequate number of blocks exist, all signals (internal and external) and connections are defined (mechanical, electrical, and programming) on the diagram. Diagrams are drawn using a CAD tool. (20-15)	Block diagram includes and adequate number of blocks, and all internal lines are defined. Blocks cover adequate scope for beginning design e.g. no further decomposition is required. Diagram while usable could be better formatted to ease understanding. Diagrams are drawn using a CAD tool. (15-7)	Block diagram is missing or unintelligible. Block Diagram is not adequately decomposed. Diagrams are not drawn using a CAD tool. (7-0)
3. INTERFACE DEFINITION (40 pts.) Sect. 4.1.*, 5.*.1 SCORE: _____	All external and internal interfaces are included in the interface definition. Interfaces that are included are completely defined. Interfaces include mechanical, programming, and electrical types. Interface characteristics are in a tabular format. (40-30)	A few interfaces are missing from interface definition. Interfaces that are included are adequately defined, though not completely. Interfaces include mechanical, programming, and electrical types. Interface characteristics are in a tabular format. (30-15)	Some interfaces are missing from interface definition. Interfaces that are included are not adequately defined. Interface characteristics are not in a tabular format. (15-0)
4. DESIGN DETAILS (70 pts.) Sect. 5.*.2 SCORE: _____	Design details exist for each block in design. Details fully explain what is needed for the block, and how it operates. As needed, schematics, pseudo code, state diagrams, and mechanical drawings are included. Every electrical block contains some analysis to validate the design. Blocks that consist of 'off the shelf' pieces fully elaborate on the components. Design details exactly match interface definitions.(70-50)	Design details exist for almost every block in design. Specifics fully explain what is needed for the block, and how it operates. As needed, schematics, pseudo code, state diagrams, and mechanical drawings are included. Some blocks contain some analysis to validate the design. Blocks that consist of 'off the shelf' pieces fully elaborate on the components. Design details exactly match interface definitions.(50-20)	Design details exist but for only a small number of blocks. Blocks do not include validation of the design. Blocks that consist of 'off the shelf' pieces do not elaborate on the components. Design details do not match interface definitions. (20-0)
5. TESTING PLAN (30 pts.) Section 6.* SCORE: _____	All minimum requirements have an associated test that will validate its success with a pass or fail condition. All tests are realizable and sufficiently detailed. Most tests require collected data to be proven. Signed requirements templates are included with customer requirements, engineering requirements, weighting, and tests. (30-20)	All minimum requirements have an associated test that will validate its success with a pass or fail condition. Most tests are realizable and sufficiently detailed. Signed requirements templates are included with customer requirements, engineering requirements, weighting, and tests.(20-10)	All minimum requirements have an associated test that will validate its success with a pass or fail condition. Signed requirements templates are not included.(10-0)
6. BILL OF MATERIALS (30 pts.) Section 7.* SCORE: _____	Budgetary Analysis is complete and all needed information is present. All parts for project could be ordered from just budgetary analysis. Availability and/or lead times for every item are included. Columns for part reference, value, description, vendor number, and availability exist. (30-20)	Budgetary analysis exists, but is missing components. Many parts do not have availability information associated. There is no clear indication of where each part will come from. Columns for part reference, value, description, vendor number, and availability exist. (20-10)	Budgetary analysis exists, but is missing components. Many parts do not have availability information associated. There is no clear indication of where each part will come from. Columns for part reference, value, description, vendor number, and availability do not exist. (10-0)

<p>7. CLARITY, CONCISENESS, AND ORGANIZATION (10 pts.)</p> <p>SCORE: _____</p>	<p>Writing is straightforward and free of “padding” with no unnecessary repetition of information. Writing includes smooth, effective transitions among sentences, paragraphs, and ideas. Details fit where placed. Headers and footers are complete. (page numbers, total pages, project title, and date) (10-7)</p>	<p>Text occasionally lacks clarity, conciseness, and/or focus; Writing may be wordy or repetitive at times. The order or relationship among ideas may occasionally be unclear and hard to follow. There is little colloquial language in the document. Headers and footers are complete. (page numbers, total pages, project title, and date) (7-3)</p>	<p>Text consistently lacks clarity, conciseness, and/or focus. The text lacks coherence and the organization seems haphazard. Writing is excessively wordy/repetitive. Document does not contain proper header or footer sections. (page numbers, total pages, project title, and date) (3-0)</p>
<p>8. GLOSSARY, SOURCES, AND CONVENTIONS (10 pts.)</p> <p>SCORE: _____</p>	<p>Writing demonstrates excellent control of standard writing conventions and uses them effectively to enhance communication. Figures, tables and equations are referenced properly. The Glossary section provides informative definitions of ambiguous terms and acronyms. Definitions of cross disciplinary terms are included. All borrowed material has been acknowledged with specific in-text citation using IEEE or ASME format. All fonts are New Times Roman. (10-7)</p>	<p>Significant errors in punctuation, spelling, capitalization, or grammar do not occur frequently. Figures, tables and equations are referenced sequentially. The Glossary section provides informative definitions of ambiguous terms and acronyms. All borrowed material has been acknowledged with specific in-text citation using IEEE or ASME format. All fonts are New Times Roman. (7-3)</p>	<p>Writing demonstrates limited control of standard writing conventions (e.g., punctuation, spelling, capitalization, grammar and usage). Errors impede the text’s readability. Figures, tables and equations are not referenced sequentially. The Glossary section is lacking. References and bibliography do not adhere to IEEE or ASME style guidelines. Figures and tables are not properly referenced and consecutively numbered. Page numbers and/or numbered section headings are missing. All fonts are not New Times Roman. (3-0)</p>

Grading:

You should turn in a copy of your specification to your instructor, mentor, and project sponsor.