

Rubric for Design components and Technical skills

Criteria	Weight	Exemplary	Acceptable	Needs Improvement	Unacceptable
Design process	30%	(28-30 points) Clear evidence of ability to understand the design requirements, limitations, analyze different alternatives, and provide a feasible design.	(15-27 points) Some evidence of ability to understand the design requirements, limitations, analyze different alternatives, and provide a feasible design.	(8-14 points) Little evidence of ability to understand the design requirements, limitations, analyze different alternatives, and provide a feasible design	(0-7 point) No evidence of ability to understand the design requirements, limitations, analyze different alternatives, and provide a feasible design
Use of Engineering Technology principles	20%	(19-20 points) Clear evidence of ability to use engineering Technology principles to process and implement, devices or systems	(10-18 points) Some evidence of ability to use engineering principles to process and implement, devices or systems	(3-9 points) Little evidence of ability to use engineering principles to process and implement, devices or systems	(0-3 points) No evidence of ability to use engineering principles to process and implement, devices or systems
Application of tools, techniques and skills to develop and implement the design	30%	(28-30 points) Clear evidence of ability to correctly apply tools, techniques and skills to effectively solve problems or design a system	(15-27 points) Some evidence of ability to correctly apply tools, techniques and skills to effectively solve problems or design a system	(8-14 points) Little evidence of ability to correctly apply tools, techniques and skills to effectively solve problems or design a system	(0-7 points) No evidence of ability to correctly apply tools, techniques and skills to effectively solve problems or design a system
Final Design	20%	(19-20 points) Design meets or exceeds desired objectives.	(10-18 points) Design meets desired objectives.	(3-9 points) Barely capable of achieving desired objectives	(0-7points) Not capable of achieving desired objectives.

Rubric for Progress Report

Criteria	Weight	Exemplary	Acceptable	Needs Improvement	Unacceptable
Clarity of Purpose	5%	(5 points) The project's objectives are clearly stated.	(3-4 points) The project's objectives are presented.	(1-2 points) The project's objectives are incomplete.	(0 point) The project's objectives are missing.
Accuracy of Content	20%	(19-20 points) Information included in the report is consistently accurate.	(10-18 points) With some minor exceptions, the information included in the report is accurate.	(3-9 points) The information in the report is partially incorrect or unclear.	(0-3 points) The information in the report is incorrect or unclear to the point of being misleading.
Organization	10%	(9-10 points) Good organization; points are logically ordered; sharp sense of beginning and ending	(5-8 points) Organized; points are somewhat jumpy; sense of beginning and ending	(2-4 points) Some organization; points jump around; beginning and ending are unclear	(0-1 points) Poorly organized; no logical progression; beginning and ending are vague
Diagrams	10%	(9-10 points) All diagrams, charts, and drawings are accurate, consistent with the text, and of good quality. They enhance understanding of the text. All are labeled correctly in accordance with engineering standards and are referred to in the text.	(5-8 points) For the most part, figures, charts, and drawings are accurate, consistent with the text, and of good quality. They are generally labeled correctly in accordance with engineering standards. All are referred to in the text.	(2-4 points) Figures, charts, and drawings are of poor quality, have numerous inaccuracies and mislabeling, or may be missing. There may be no corresponding explanatory text or there may be redundancy with the text.	(0-1 points) Figures, charts, and drawings are not utilized where they would clearly be desirable to emphasize or clarify results.
Detailed Description of Important Elements of Progress	20%	(19-20 points) Report contains statements about activity highlights, including but not limited to: * Activities * Experimental results * Explanation of results * Reasons for discrepancies between what was planned and what occurred.	(10-18 points) Report contains description of activities, results and/or explanations.	(3-9 points) Report contains some description of activities, results and/or explanations.	(0-3 points) Report does not contain results or explanations for lack of results.

Plans for Next Step	10%	(9-10 points) Planned activities for the next week are listed, showing understanding of what must be done to continue the project. Alternative ideas are included that demonstrate foresight about potential problems.	(5-8 points) Report gives indication of what steps come next. Demonstrates some understanding of possible problems but offers no alternate ideas.	(2-4 points) Report gives vague indication of what steps come next.	(0-1 points) No attention given to next week's plan.
Quality of Information	10%	(9-10 points) Supporting points are covered in detail and information is pulled from credible sources	(5-8 points) Most supporting details are explained and the credibility of information is adequate	(2-4 points) Supporting details are poorly explained and credibility of information is questionable	(0-1 points) Supporting details are missing or not understandable and information is completely inaccurate
Grammar, Usage, Mechanics, Spelling	10%	(9-10 points) No errors	(5-8 points) Less than three errors with minimal impact on conveying information	(2-4 points) More than three errors with some impact on conveying information	(0-1 points) Numerous errors distract from understanding
Format	5%	(5 points) Typed; clean; followed format instructions	(3-4 points) 1-2 format errors	(1-2 points) 3-5 format errors	(0 point) No clear formatting

Rubric for Final Report

Criteria	Weight	Exemplary	Acceptable	Needs Improvement	Unacceptable
Clarity of Purpose	5%	(5 points) The project's objectives are clearly stated.	(3-4 points) The project's objectives are presented.	(1-2 points) The project's objectives are incomplete.	(0 point) The project's objectives are missing.
Accuracy of Content	20%	(19-20 points) Information included in the report is consistently accurate.	(10-18 points) With some minor exceptions, the information included in the report is accurate.	(3-9 points) The information in the report is partially incorrect or unclear.	(0-3 points) The information in the report is incorrect or unclear to the point of being misleading.

Organization	10%	(9-10 points) Good organization; points are logically ordered; sharp sense of beginning and ending	(5-8 points) Organized; points are somewhat jumpy; sense of beginning and ending	(2-4 points) Some organization; points jump around; beginning and ending are unclear	(0-1 points) Poorly organized; no logical progression; beginning and ending are vague
Depth of Analysis	30%	(28-30 points) Results are carefully and objectively analyzed. Interpretations are made using appropriate equations, models, or theories.	(15-27 points) Engineering analysis is detailed enough to aid understanding but is not enhanced with equations, models, or theories.	(8-14 points) Engineering analysis is not detailed enough to support the project objective.	(0-7 points) Engineering analysis is so sketchy and inadequate that the reader is not able to evaluate the validity of the interpretation of findings.
Quality of Information	20%	(19-20 points) Supporting points are covered in detail and information is pulled from credible sources	(10-18 points) Most supporting details are explained and the credibility of information is adequate	(3-9 points) Supporting details are poorly explained and credibility of information is questionable	(0-3 points) Supporting details are missing or not understandable and information is completely inaccurate
Grammar, Usage, Mechanics, Spelling	10%	(9-10 points) No errors	(5-8 points) Less than three errors with minimal impact on conveying information	(2-4 points) More than three errors with some impact on conveying information	(0-1 points) Numerous errors distract from understanding
Format	5%	(5 points) Typed; clean; followed format instructions	(3-4 points) 1-2 format errors	(1-2 points) 3-5 format errors	(0 point) No clear formatting

Rubric for Presentation

CATEGORY		Exemplary	Acceptable	Needs Improvement	Unacceptable
Content/Stays on Topic	25%	(21-25 points) Shows a full understanding of the topic; stays focused	(15-20 points) Shows a good understanding of the topic	(9-14 points) Shows a good understanding of parts of the topic; 50% off topic	(0-9 points) Does not seem to understand the topic very well
		(21-25 points)	(15-20 points)	(9-14 points)	(0-9 points)

Posture and Eye Contact	25%	Consistently stands up straight, looks relaxed and confident. Establishes eye contact during the presentation.	Stands up straight and establishes eye contact during the presentation.	Sometimes stands up straight and establishes some eye contact. Uses distracting movements.	Slouches and/or does not look at people during the presentation.
Visual Aid	20%	(16-20 points) Appropriately supported presentation	(9-15 points) Effective but too much or too little	(1-9 points) Visual aid not relevant and/or adequate	(0 points) No aid
Speaks Clearly	20%	(16-20 points) Speaks clearly and distinctly all (95-100%) of the time. Mispronounces no words. No filler use. Presentation flows.	(9-15 points) Speaks clearly and distinctly most of the time or mispronounces one word. Some filler use.	(4-9 points) Speaks clearly and distinctly some (94-85%) of the time. Mispronounces no more than one word	(0-4 points) Often mumbles or cannot be understood OR mispronounces more than one word. Excessive fillers.
Timing	10%	(10 points) On Time	(7-9 points) Over/under 30 seconds	(2-6 points) Over/under 1 minute	(0-1 points) Over/under 2 minutes or more

(Design components Score) X (0.25) =

(Progress report Score) X (0.3) =

(Final report Score) X (0.4) =

(Presentation Score) X (0.05) =

Total =