

Third Reader Only

Grading Criteria for Assignment 5: Final Design Report on Crane Project

Demonstrates awareness of audience and purpose	50	
<input type="checkbox"/> Provides key information regarding the design problem, the design approach, and the design solution in the executive summary		
<input type="radio"/> Explains goal of project in terms of optimization and identifies how achievement of the goal was evaluated		
<input type="radio"/> Identifies parameters and constraints		
<input type="radio"/> Summarizes approach to optimization		
<input type="radio"/> Provides relevant performance results to describe design solution and offers a measure of the project's success		
<input type="radio"/> Refers to relevant figures and tables		
<input type="checkbox"/> Summarizes and evaluates performance results in the conclusions		
<input type="radio"/> Summarizes optimization process		
<input type="radio"/> Evaluates performance results by providing quantitative comparison of performance to predictions based on testing		
<input type="radio"/> Offers conclusions about success of design solution		
<input type="radio"/> Discusses how the optimization might have been approached differently and/or identifies sources of error that impacted performance		
<input type="radio"/> Refers to relevant figures and tables		
Demonstrates ability to present technical information	50	
<input type="checkbox"/> Uses figures and tables effectively to highlight features of the design solution		
<input type="radio"/> Provides SolidWorks side-view of the crane with labels and dimensions		
<input type="radio"/> Shows table of materials and costs		
<input type="radio"/> Shows summary of lift results		
<input type="radio"/> Constructs figures and tables to maximize readability		
<input type="radio"/> Includes concise, informative captions and labels as appropriate that allow figures to be interpreted independently of the report text		
<input type="checkbox"/> Uses figures and tables effectively to show data that informed design optimization		
<input type="radio"/> Shows at least two figures of truss designs that were eliminated		
<input type="radio"/> Identifies parameters of final design, including which were held constant and which were varied		
<input type="radio"/> Illustrates relationship between data and optimized parameters		
<input type="radio"/> Constructs figures and tables to maximize readability		
<input type="radio"/> Includes concise, informative captions or titles as appropriate that allow figures and tables to be interpreted independently of the report text		
Total	100	