

Third Reader Only

Grading Criteria for Assignment 3: Progress Report on Crane Project

Demonstrates awareness of audience and purpose	50			
<input type="checkbox"/> Defines the design problem and presents evidence of progress toward a solution				
<input type="radio"/> Explains goal of project in terms of optimization, not simply max weight				
<input type="radio"/> Explains approach to or methodology used in optimization				
<input type="radio"/> Discusses optimization of trusses in terms of truss families, design instances, and design parameters				
<input type="radio"/> Provides and refers to hand calculations in appendices to verify Matlab code				
<input type="radio"/> Refers to relevant figures or tables				
<input type="checkbox"/> Summarizes and evaluates progress and discusses next steps				
<input type="radio"/> Interprets results of parametric studies				
<input type="radio"/> Uses results of parametric studies to eliminate suboptimal truss families				
<input type="radio"/> References relevant figures or tables				
<input type="radio"/> Presents team's assessment of progress to date				
<input type="radio"/> Refers to relevant results of parametric studies to describe next steps				
Demonstrates ability to present technical information			50	
<input type="checkbox"/> Uses figures effectively to highlight features of the design solution				
<input type="radio"/> Graphically defines three truss families, including key dimensions				
<input type="radio"/> Graphically defines parameters for all three truss families so that parameterization is obvious to reader				
<input type="radio"/> Illustrates effect of varying at least one parameter on shape of multiple truss instances within one family				
<input type="radio"/> Produces neatly drawn or computer-generated figures to scale				
<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 informing design optimization				
<input type="radio"/> Shows plots of member force vs. parameter and cost vs. parameter for each truss family				
<input type="radio"/> Presents data in appropriate graphic form to reflect interpretation				
<input type="radio"/> Identifies parameters, including which were held constant and which were varied				
<input type="radio"/> Constructs graphs 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 (20% of final report grade)	100			