

Student Name			Outcome C – ability to design a system, component, or process to meet desired needs	
Course/Assignment used for Direct Measurement:				
Categories of Performance	Level of Accomplishment			Sub-Scores
	-1 Inadequate <i>(provide comments)</i>	0 Adequate <i>(description of minimum standard)</i>	+1 More than Adequate <i>(provide comments)</i>	
Develops, implements and documents a good design strategy.		A logical design procedure was chosen. Steps taken were documented. Strategy was followed with only minor, if any, tasks ignored.		
Understands problem situation; documents the goals, objectives and constraints.		Took steps to understand the problem situation from the perspective of the client, customer or end-user. Documented goals, objectives and constraints. Considered safety, social factors, the environment, etc as appropriate and ethical.		
Performs background research as needed.		Sought to identify and use knowledge of other similar designs/systems. Performed background research as needed to understand the problem, the relevant phenomena, and the needed technology.		
Generates and evaluates multiple solutions and chooses optimum.		Generated and evaluated multiple solutions. Identified optimal alternatives.		
Uses knowledge and skills to analyze system and component behavior as needed to complete the design.		Used knowledge and skills (including engineering, science, math, statistics, computers and relevant software) to analyze system and component behavior as needed to complete the design. Used analysis to guide configuration, sizing, details of components.		
Produces a safe, realistic, useful and complete design.		Chose optimum solution and design details. Produced a safe, realistic and complete design. Verified the acceptability of the solution in terms of meeting objectives, constraints and overall needs of the client. Used good engineering judgment. Insured that recommendations met established design considerations.		
Total Score				
<i>(Total scores greater than or equal to zero meet the minimum expectations of the faculty and the program objectives.)</i>				