

Rubrics on Safety, Environmental, societal (global awareness) impacts of the Design

	Unacceptable (0)	Marginal (1)	Acceptable(2)	Exceptional(3)
Inclusion of safety-related content (Has safety been considered appropriately in the design?)	<ul style="list-style-type: none"> • Total ignorance of safety-related issues • Obvious safety problems with the proposed design since the mechanism being built has limited attention to safety. 	<ul style="list-style-type: none"> • Group reluctantly recognizes and includes relevant safety-related design issues • The design appears to be potentially safe but the safety awareness is poorly articulated in the report; some attention seems to be given to safety. 	<ul style="list-style-type: none"> • Group usually recognizes and includes relevant safety-related design issues • Safety awareness has clearly been part of the proposed design with a considerable attention given to safety, from the conceptual beginnings of the design work. 	<ul style="list-style-type: none"> • Group almost always recognizes, anticipates, and includes relevant safety-related design issues • The design is innovative in building with thoroughness, safety into the proposed design process.
Inclusion of environmentally related content	<ul style="list-style-type: none"> • Total ignorance of environmentally related issues 	<ul style="list-style-type: none"> • Reluctantly recognizes and includes relevant environmentally related design issues 	<ul style="list-style-type: none"> • Usually recognizes and includes relevant environmentally related design issues 	<ul style="list-style-type: none"> • Almost always recognizes, anticipates, and includes relevant environmentally related design issues
Understanding of environmental impact of design	<ul style="list-style-type: none"> • Neither synthesizes nor demonstrates understanding of environmental impact 	<ul style="list-style-type: none"> • Reluctantly synthesizes and demonstrates understanding of environmental impact 	<ul style="list-style-type: none"> • Usually synthesizes and demonstrates understanding of environmental impact 	<ul style="list-style-type: none"> • Almost always synthesizes and demonstrates understanding of environmental impact
Understanding of the impact of their engineering design solutions in a global and societal context	<ul style="list-style-type: none"> • Students are not fully aware of the societal impact of engineering situations their design may lead to, and need guidance to assess global impact acceptance and adaptation, to think about such situations and act towards designing under such considerations. 	<ul style="list-style-type: none"> • Students have very limited awareness of the societal situations their design may lead to, but need guidance to assess the actual possible situations and adapt their future design steps to such situations. 	<ul style="list-style-type: none"> • Students demonstrate full awareness of the social implications such as acceptance and adaptation of the people using or being exposed to the design. 	<ul style="list-style-type: none"> • Students are able to analyze the impact of the social implications of their design such as acceptance and adaptation of the people using it or being exposed to it. The students also understand the economic implications of their design such as entrepreneurship potential, sustainability or employment substitutions or aids that the commercialization of their product might bring.