

## 2020 SRC V-Portfolio Assessment Rubric

Team Name:

School:

**Content:** Please rate the team's overall understanding of the five-step Engineering Design Process.

Engineering Design Process Steps	Excellent 5	Satisfactory 3	Unsatisfactory 1	Rating
<b>1. ASK:</b> <b>Identify The Problem</b>	Constructs a <b>detailed</b> problem statement that accurately reflects the issue at hand.	Constructs a <b>satisfactory</b> problem statement that identifies the issue.	Constructs an unsatisfactory problem statement that <b>does not</b> reflect the issue at hand.	
<b>2A: IMAGINE:</b> <b>Research The Problem</b> Discuss research in a video or voice-over presentation that does not exceed 2 minutes.	Evidence of <b>detailed</b> research from <u>4 or more expert sources</u> that <b>fully</b> address the issues and the concept of STEM as it relates to robot design. (Cite your sources.)	Evidence of research from <u>3 expert sources</u> that address <b>some</b> of issues and the concept of STEM as it relates to robot design. (Cite your sources.)	Evidence of research from <u>less than 3 expert sources</u> that address <b>some</b> of the issues and the concept of STEM as it relates to robot design. (Cite your sources.)	
<b>2B: IMAGINE (Part II):</b> <b>Brainstorm &amp; Select Best Possible Solutions</b> Discuss brainstorming and your solution in a video or voice-over presentation that does not exceed 2 minutes.	Evidence of students' brainstorming possible solutions and analysis of ideas including thumbnails sketches.	Evidence of students' brainstorming possible solutions and analysis of ideas including thumbnails sketches. <i>No</i> mention of how and/or why the prototype was chosen as the best possible solution.	No evidence of students' brainstorming possible solutions including product thumbnails sketches. <i>No</i> mention of how and/or why the prototype was chosen as the best possible solution.	
<b>3. PLAN:</b> <b>Design Your Solution to the Problem Identified in Step 1</b> Discuss in a video or voice-over presentation that does not exceed 2 minutes.	Evidence of students' following a <b>plan</b> to construct the prototype against design requirements that include materials and techniques.	Evidence of students' following a plan to construct the prototype against design requirements that <b>does not</b> include materials, techniques.	<b>No</b> evidence students' followed a plan to construct the prototype.	
<b>4. CREATE:</b> <b>Develop Your Solution to the Problem</b> Discuss in a video or voice-over presentation that does not exceed 2 minutes.	<b>Detailed</b> evidence of how your team created its prototype, highlighting lessons learned and describing the procedure used to test robots (using tables, graphs, and other charts.)	<b>Satisfactory</b> evidence of how your team created its prototype, highlighting lessons learned and describing the procedure used to test robots is recorded and described (using tables, graphs, and/or charts).	<b>Limited</b> evidence of how your team created its prototype, highlighting lessons learned and describing the procedure used to test robots.	
<b>5. IMPROVE:</b> <b>Evaluate Your Solution</b> Discuss in a video or voice-over presentation that does not exceed 2 minutes.	<b>Detailed</b> evaluation of how you can modify your design to make it better.	<b>Satisfactory</b> evaluation of how you can modify your design to make it better.	<b>Limited</b> explanation of review and redesign highlighting how you can modify your design to make it better.	

<b>Mechanics: Please rate the team on the inclusion of the following elements</b>				
<b>Element</b>	<b>Excellent 5</b>	<b>Satisfactory 3</b>	<b>Unsatisfactory 1</b>	<b>Rating</b>
<b>Video Length</b>	Video presentation does not exceed 12 minutes.	N/A	Video presentation exceeds 12 minutes.	
<b>Quality of Presentation</b>	Video presentation effectively describes the engineering design process.	Video presentation partially describes the engineering design process.	Video presentation does not describe the engineering design process.	
<b>Photographs and slides</b>	<i>Photographs and slides have been included and are effectively used to enhance portfolio.</i>	Some photographs and slides were included in the presentation.	No photographs and slides were included in the presentation.	
<b>Technical Drawings/Illustrations</b>	Drawings of the robots <i>are</i> included.	N/A	Drawings of the robots <i>are not</i> included.	
<b>Total Score:</b>				
<b>Comments/Feedback:</b>				
<b>Reviewer Initials:</b>		<b>TCE Staff Initials:</b>		