

JUDGE #

# WESEF Engineering Rubric

Poster ID#

*Please use your best judgment; the following is a set of criteria that can assist you in interviewing the presenters and aid in your evaluation of the students' projects. Please circle a number; you must choose a whole number.*

Guidelines	Notes
<p><b>I. Introduction &amp; Background</b></p> <ul style="list-style-type: none"> <li>Provides an intro that begins with general info leading up to the area of research</li> <li>Student understands how their research builds upon previous work</li> </ul>	<p style="text-align: center;">Lowest <span style="float: right;">Highest</span></p> <p style="text-align: center;"><b>1 2 3 4 5 6 7 8 9 10</b></p>
<p><b>II. Problem Statement/Goals</b></p> <ul style="list-style-type: none"> <li>Student clearly explained the goals or purpose of the research</li> <li>Goal(s) is/are relevant to the potential users' needs</li> <li>Explains how the goal addresses a problem (gap in previous research)</li> </ul>	<p style="text-align: center;"><b>1 2 3 4 5 6 7 8 9 10</b></p>
<p><b>III. Methods/ Materials</b></p> <ul style="list-style-type: none"> <li>Student clearly identifies their role &amp; the mentor's role in the project</li> <li>Uses an efficient and reliable method for scientific work</li> <li>A clear plan was shown and variables were identified</li> <li><i>If controls were necessary</i>, appropriate controls were correctly used</li> <li>Solution can be utilized successfully in design or construction of an end product</li> </ul>	<p style="text-align: center;"><b>1 2 3 4 5 6 7 8 9 10</b></p>
<p><b>IV. Results / Analysis / Discussion</b></p> <ul style="list-style-type: none"> <li>Student clearly and adequately explained the results of his/her work &amp; understands the relationship of the results with respect to the goals</li> <li>Solution provides improvement or alternative to existing products or designs</li> <li>Solution has been tested for performance</li> <li>Student was able to explain method of analysis used including statistical analysis, if used</li> <li>Student interpreted the data in a way that is consistent with the original hypothesis/problem statement</li> </ul>	<p style="text-align: center;">Lowest <span style="float: right;">Highest</span></p> <p style="text-align: center;"><b>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15</b></p>

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----- Rubric continues onto the back -----

<p><b>V. Conclusion / Application/ Future Research</b></p> <ul style="list-style-type: none"> <li>▪ Sound conclusions were made based on the data/schematics presented</li> <li>▪ Project was carried out to completion within the scope of the original intent</li> <li>▪ The student provided possible applications of his/her work</li> <li>▪ Demonstrated a clear direction for further study in the area of research</li> </ul>	<p>Lowest <b>1</b>    <b>2</b>    <b>3</b>    <b>4</b>    <b>5</b>    <b>6</b>    <b>7</b>    <b>8</b>    <b>9</b>    Highest <b>10</b></p>
<p><b>VI. Novelty / Creativity</b></p> <ul style="list-style-type: none"> <li>▪ A creative project demonstrates imagination and inventiveness. Such projects often offer different perspectives that open up new possibilities or new alternatives.</li> <li>▪ The project demonstrates considerable creativity in one or more of the following criteria: research question, design &amp; methods, or execution (data collection, analysis and interpretation)</li> </ul>	<p><b>1</b>    <b>2</b>    <b>3</b>    <b>4</b>    <b>5</b>    <b>6</b>    <b>7</b>    <b>8</b>    <b>9</b>    <b>10</b></p>
<p><b>VII. Quality of Presentation</b></p> <ul style="list-style-type: none"> <li>▪ Student presented the material in a clear and organized manner</li> <li>▪ The student demonstrated enthusiasm in the presentation of his/her research</li> </ul>	<p><b>1</b>    <b>2</b>    <b>3</b>    <b>4</b>    <b>5</b>    <b>6</b>    <b>7</b>    <b>8</b>    <b>9</b>    <b>10</b></p>
<p><b>VIII. Student Understanding</b></p> <ul style="list-style-type: none"> <li>▪ Student demonstrated understanding of the project by answering specific questions</li> <li>▪ Student clearly explains all aspects of the project</li> </ul>	<p><b>1</b>    <b>2</b>    <b>3</b>    <b>4</b>    <b>5</b>    <b>6</b>    <b>7</b>    <b>8</b>    <b>9</b>    <b>10</b>    <b>11</b>    <b>12</b>    <b>13</b>    <b>14</b>    <b>15</b></p>
<p><b>IX. Physical Poster Organization</b></p> <ul style="list-style-type: none"> <li>▪ The poster demonstrates an organized scientific approach</li> <li>▪ Poster clearly showed the data that was presented in identifiable tables and or figures</li> <li>▪ Poster clearly presented the specific goals or specific purpose of research study</li> <li>▪ Text was clearly visible with readable formatting</li> <li>▪ Information was creatively organized in a way that enhanced the presentation of student's research</li> </ul>	<p>Lowest <b>1</b>    <b>2</b>    <b>3</b>    <b>4</b>    <b>5</b>    <b>6</b>    <b>7</b>    <b>8</b>    <b>9</b>    Highest <b>10</b></p>

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