

## Project Requirements for STAA 568

| Project Phase | Required / Optional Tools for Project Completion   |
|---------------|--|
| Define        | Project Charter<br>5W2H<br>Thought Process Map / Tool Progress Report<br>CT Tree<br>S-I-P-O-C<br><br>Optional (Based on Project) <ul style="list-style-type: none"> <li>Pareto Chart</li> </ul>  |
| Measure       | Process Flow Map<br>C&E Diagram<br>Run Chart<br>Process Capability Analysis<br><br>Optional (Based on Project) <ul style="list-style-type: none"> <li>Value Stream Map               <ul style="list-style-type: none"> <li>Muda identification</li> </ul> </li> <li>DPMO Baseline and Sigma Level</li> <li>Data Collection Plan</li> <li>Measurement System Analysis</li> </ul> |
| Analyze       | Exploratory Data Analysis<br>Hypothesis Testing<br><br>Optional (Based on Project) <ul style="list-style-type: none"> <li>FMEA</li> </ul>  |
| Improve       | Pugh Concept Matrix<br>Solution Selection Matrix<br>Design of Experiments: <ul style="list-style-type: none"> <li>Full or Fractional Factorial Design</li> </ul><br>Optional (Based on Project) <ul style="list-style-type: none"> <li>Poke Yoke</li> </ul>  |
| Control       | Control Plan<br>SPC<br><br>Optional (Based on Project) <ul style="list-style-type: none"> <li>5-S</li> </ul>   |