

## Project Engineering Notebook Requirements

The purpose of the notebook is to document the process the team used to design, build, and test their robot. ALL teams (both BEST Award and non-BEST Award competing teams) are required to submit a Project Engineering Notebook.

### Notebook Specifications:

- Binder cover must identify:
  - School
  - Team name
  - Teacher contact
  - Team number
- Include the following:
  - Title page – include the same information that appears on the binder cover
  - Table of Contents
  - Description of the process the team used to design and complete its robot
  - Research paper: (minimum of 2 pages, maximum of 5 pages)
  - Documentation of safety procedures
  - A supplemental appendix - no more than 20 pages in length; front and back pages are allowed.
- Standard, 8 ½" x 11" paper, double-spaced, 1" margins, and Times New Roman (preferred) or similar business-style font no smaller than 12 pt. Single-spacing is acceptable in tables and outlines.
- Limited to 30 typed **single-sided** pages or less (note that title page and Table of Contents page will not be counted as part of the 30 pages)
- Submitted in a *standard 3-ring binder* with a maximum 2" ring size

## **Notebook Evaluation**

The notebook will be judged on the documentation of the following:

***Implementation of the Engineering Design Process*** – Evidence that the engineering process was effectively used (30 pages including research paper).

***Research Paper*** – Correlation between game and current and future use of similar technology; Any related information of game theme, such as history, famous inventor(s), or major milestones; Creativity in linking game theme to appropriately related science/technology content; Proper use of grammar and composition throughout paper; citations of sources used to gather information for paper (MANDATORY 2-5 pages).

***Safety*** – Emphasize how safety was addressed including evidence that safety training occurred and safe practices were followed to prevent students' misuse of tools and other devices/equipment that may result in personal injury or damage to property.

***Support Documentation*** - The appendix may include support documentation such as CAD /other drawings, photos, organization charts, minutes of team minutes, test results, etc. that support the main document. *This material should directly support the process described in the primary document and NOT reflect activities related to community or promotional efforts, spirit development, or team-building.*

***Overall Quality and Completeness of Notebook*** - Organization, appearance, adherence to specifications, quality of content and submission of required Team Demographics Form.

### ***Implementation of the Engineering Design Process***

What is the Engineering Design Process? This process should include brainstorming approaches, analytical evaluations of designs and alternatives, and offensive and defensive evaluation of gaming strategies. Included is a graphic representation with an outline of the engineering process that can be used as a guide in developing your notebook.