

Advanced Level Deliverable VEX Team Documentation



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Mentor(s) to ask if you have questions about this Challenge: Clinton Bolinger, Dave Bolinger or Cathy Fillwock for Mechanical/Electrical, Sean Lynch or Robin Barrie for Programming. Brandi can also validate your Notebook, but probably won't be able to answer any questions about Robot-related things.

As returning Students, you should be setting an example for new Students in quality documentation of your Team's Iterative Design Process and Strategy. While you are STRONGLY encouraged to document ALL aspects of your Team's Robot, strategy, and Team development, our goal for this Deliverable is to help you participate the area you are most interested in, so you may choose what you document.

HOWEVER - you will be judged on the quality of your work, thorough documentation process, and level of commitment to ensuring the success of your VEX Team throughout the ENTIRE season – EVEN IF YOU ARE NOT THE TEAM CAPTAIN. We understand that you probably can't be at every meeting, so we're looking for dedication while you are present.

## Engineering Notebook Instructions:

Your responses do not need to be lengthy, but you need to write legibly and use complete sentences. Bullets may be used as a form of response.

- 1. Important things to consider:
  - a. This deliverable will be ongoing throughout the VEX season, and will not have a specific outcome to be "completed", so it is up to you to decide when your documentation is sufficient enough to ask for a signature.
  - b. This Deliverable will take place over several entries, so keep a running list (on your table of contents page) of the pages containing entries for this deliverable.
  - c. You may work collaboratively with other Students on the content for these entries, but you must be the one to complete the documentation in your notebook.
  - d. You should be encouraging new Students to document THEIR progress, too! After all, they'll be doing this entry next year, so building skills now is a great idea.
- 2. As a whole, your VEX TEAM will be responsible for documenting any and all sub-sections of your Robot Design, Strategy and Iterations of up to and including, but not limited to:
  - a. Chassis
  - b. Game Piece Intake Mechanism (if applicable)
  - c. End Effector/Game Piece Scoring Mechanism (if applicable)
  - d. Above Chassis/game piece storage/delivery System (if applicable)
  - e. End-Game Mechanism (if applicable)
  - f. Programming/Autonomous Modes
  - g. All additional components



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- 3. If you are choosing to document a specific aspect of your VEX Team/Robot, work together with your Teammates to coordinate how you are going to divide documentation of each sub-section equally:
  - a. Each person MUST document AT LEAST one sub-section.
  - b. Students should take his/her summer and fall availability into consideration when deciding which section(s) (s)he will document.
  - c. If a Student misses (a) Team meeting(s) during the design, build, programming or iteration process, (s)he can "make up" the work when (s)he returns (with the help of his/her Teammates).
  - d. Be sure to date each entry!
- 4. Suggestions for documentation:
  - a. Drawings
  - b. Charts/graphs/tables
  - c. Calculations
  - d. Photographs (print, cut out, and adhere to the pages of your Engineering Notebook)
  - e. Topics of discussion
  - f. Reasoning for decisions
  - g. Goals and plan for achievement
  - h. Plusses and Deltas

To Complete Your Challenge:

- 1. Ensure that your Engineering Notebook entry is complete.
- 2. Ask one of the Mentors listed on this deliverable to approve your Engineering Notebook entry and have your deliverables checklist validated.