2019 MakeX Robotics Competition

Engineering Notebook Guideline

***Instruction:**

1. **The value of engineering notebook**: It helps the team establish files and record the whole learning process. Therefore, the record of engineering notebook should run through the whole preparation process for the competition.

2.**Engineering notebook submission**: Teams can use online documents or handwriting. No matter which way to use, each team must submit a paper version onsite.

1) **Electronic engineering notebook:** After successful competition application, teams can access the registration page from the "Event List" on the personal central page need to check competition and upload the engineering notebooks. Teams need to upload the RAR file package involving source programs, team photos, robot photos and production photos before the onsite registration date.
2) **Paper engineering notebook:** As the competition programs (Courageous Traveler & Strong Alliance) require the presentation process, 2 copies of the paper version shall be submitted by each team to the judges at the presentation site. If there is no presentation process (City Guardian), teams will need to submit 1 copy of the paper version to the staff at inspection area.

3. Engineering notebook will be required for the evaluation of all awards focusing on technology. Please refer to the Competition Guide for the evaluation criteria of each award.

Basic Requirements of Cover

The team name, team number and competition program must appear on the outside cover of the engineering notebook.

Basic Requirements of Contents

1. Directory contents

Creating directory contents brings convenience for the presentation judges to

review and quickly find the corresponding section.

2. Process records

Every improvement of the robots should be recorded from prototype design, building robot, to the debugging. **Keep pictures of all manuscripts, design drawings, calculation process, circuit diagrams, etc., and insert them into engineering notebook.**

1) Schedule of robot building progress
2) Design inspiration/sketch
3) Technical principle (it can be disassembled into different parts)
4) Production step by step (with clear pictures)
5) Problems encountered and solutions

Examples of problems:

What technical failures did you encounter? Why did you fail? How did you solve the problems finally?

What efforts have you made for the robots? What improvements have been achieved?

Does your project progress schedule go as planned? What accidents or delays have occurred? How to fix it?

Have there been any dispute among the team members? How to settle it?

3. Projects summary

1) The structure and function of the project (with pictures and text enclosed)
2) The technical innovations of project
3) Competition strategies for scoring and defense

4. Team introduction

1) Brief biography of each team member and their role on the team.
2) Culture displaying (logo, team flag, slogan, posters, T-shirt, etc.)
3) Excellent achievements sharing (Stories)

5. Feelings and other things you want to share (optional)

1) Achievement in competition (Technical)
2) Growth in the competition (Spiritual)
3) Suggestions for competition