



Research Presentation - FIRST Robotic Sector Area

In order to design something in a specific area such as a robot for the 2015 FIRST Robotics Competition, there must be an understanding of the actual game, robot components, mechanics, etc. Research must be done to establish a base to work from. Once there is a base of understanding and some technical knowledge, it is possible to start thinking of designs.



FIRST Robotic Expert Areas

- Circle/highlight your selection area

1. FIRST Rules and Strategy
2. *CAD
3. *Drive System
4. *Mechanisms
5. Controls
6. *Mechanical
7. Electrical
8. Pneumatics
9. Electronics
10. Programming

* Priority collaborative partners, put your partner's name beside area, above.

Pick an expert area and research 3 major sub-topics important to that area in relation to the FIRST Robot design and build process that would be helpful for anyone designing a robot for that year with presentation to include:

1. Title page topic and short description, (2)
2. Contents/overview, (2)
3. Sub topic 1, (4)
4. Sub topic 2, (4)
5. Sub topic 3, (4)
6. Summary/conclusion (2)
7. Your resources and further support, (2)

Best way to start, is copy the key topics to a blank word processing app, change the topics to separate headings, add your research as you find it, then add to your presentation. You may use Power Point, Slide Share, Google Slides, or similar online presentation tool, later to be exported out to local presentable file format (PDF/PPT) for presentation in class, i.e. no cloud links as you will presenting from instructors' account/computer at the front.

Evaluation

Once done, objectively give yourself a mark and have a peer mark your work for self/peer marks.

Evaluation Table for Research Report and Presentation on a Selected FIRST Robotic Expert Area

#	Category	Description	Mark	Self-Eval. Mark	Peer-Evaluator name _____	Teacher Mark
1	Content	* Key topics (above) are all there	20			
2	Layout	Organized, visual appealing, text size, & easy to read	15			
3	Presentation	Content communication, knowledge, & time	20			
		Total up your marks →	55			
		Self and peer marks out of 10				