

TEAM 3667 - MECANUM KNIGHTS



JOB TITLE:

ROBOT DRAFTER/DESIGNER (COMPUTER AIDED DESIGN)

GENERAL DESCRIPTION:

The computer aided designers' ultimate responsibility is to design a robot that is effective at playing the game, reliable, and robust thereby maximizing the team's chance of success at competitions, and to contribute to the formal engineering design process to which the team is committed.

In a typical six week build season, the CAD team will create:

- Week 1: Analyze the game manual, participate in game strategy development, collaborate with others
- Weeks 2 & 3: Finalize the robot design and produce part drawings
- Weeks 4 & 5: Support the build team; revise the robot design, if needed;

KEY SKILLS:

- Use or learn to use drawing, graphic design, CAD, game design, or multi-media software
- Use or learn to use SolidWorks effectively
- Create solid models and drawings
- Create visual representations of other individual's ideas
- Validating robot design via CAD software
- Ability to generate ideas
- Ability to prioritize work and stay focused on completion of a task
- Possess a flexible mindset and be open to the ideas of others

DETAILED JOB DESCRIPTION:

- Create solid models and drawings
 - 2D drawings to be used when making parts
 - Validation of prototype ideas
 - Create conceptual designs of the robot and its functional components
- Analyze the game manual in depth, to ensure the robot design meets game constraints
- Confirm the robot design will successfully execute the team's game strategy
- Provide conceptual design and graphic creation services to other team members
- Communicate effectively to develop a shared vision and understanding of the robot design across the whole team

POSITION FILLED

PERSON HIRED

DATE HIRED ____/____/____

ADDITIONAL
COMMENTS
