Manufacturing Captain

Preferred Qualifications:

- ➔ At least 1 year of FRC experience
- ➔ Familiarity with manufacturing operations and setups for manual milling, manual turning, drilling, cutting, and finishing.
- ➔ Familiarity with CAM programming and setup and operation of the CNC machine
- ➔ Familiarity with using slicer software and operating and troubleshooting the 3-D printers
- ➔ Familiarity with operation and setup of the laser cutter
- ➔ Familiarity with tooling, feed rates, machining parameters, and optimizing machining processes
- ➔ Strong communications skills and ability to train others on shop manufacturing tools and processes
- ➔ Ability to coordinate and manage the flow of work content through the production process
- ➔ Ability to delegate and manage machining and assembly tasks to ensure on time delivery of parts and mechanisms.

Expectations – (inability to meet these expectations may be grounds for demotion from the position)

- ➔ Should attend all team competitions unless an exception is discussed with mentors before the start of the season with obvious exceptions for extreme circumstances.
- ➔ Should attend over 90% of team meetings and clearly communicate expected absences to the entire team at least a week in advance as well as ensure that their absence is prepared for and that their authority is delegated to a capable proxy.
- ➔ Will quickly resolve personal conflicts or disagreements with other team members or mentors by addressing the conflict in a healthy conversation, or requesting a third-party mentor moderate a conflict resolution session.
- ➔ Will coordinate and cooperate with other sub team captains to ensure a successful robot build
- ➔ Will meet any verbal commitments given to mentors in the form of accomplishing agreed upon goals or demonstrating reasonable progress and effort towards those goals.

Responsibilities- (This is a comprehensive list, but this position is still a learning experience. Mentors will be available to ensure your ability to meet these responsibilities will scale relative to your experience level.)

- ➔ Leading machining and assembly work to ensure on-time delivery
- ➔ Training students in the use of manufacturing equipment
- ➔ Training students to meet a high standard of quality on production of parts
- ➔ Managing shop organization of raw materials, COTS parts, fasteners, and handheld equipment
- ➔ Interpreting drawings/work instructions critically and communicating clarifications to ensure parts are machined according to design intent
- ➔ Documenting basic machining processes as standard work and creating training documents for new students
- ➔ Managing and enabling daily workload for manufacturing team members to maintain high productivity
- ➔ Contributing to troubleshooting conversations related to mechanical systems
- ➔ Performing root cause analysis on reoccurring quality issues and owning corrective actions to resolve said issues
- ➔ Cooperating with the operations captain to streamline manufacturing and assembly processes