

igKnightion Robotics – Programming Team Member

Reports To: Programming Mentor(s), Team Captain(s), Lead Mentor(s)

Role Overview

A programmer team member promotes and communicates the team's mission and vision, writes, tests, and maintains robot code using Java and WPILib to ensure safe, efficient, and competitive performance during the FIRST Robotics Competition.

Key Responsibilities

- Follow all team safety procedures and be on time for practices and meetings.
 - Develop and maintain robot software in Java/WPILib.
 - Collaborate with build sub team to integrate hardware.
 - Program autonomous and teleop controls based on game strategy.
 - Debug and troubleshoot code issues during build and competitions.
 - Use version control (Git/GitHub) for managing code updates.
 - Train and mentor new programming students.
 - Support drive team by refining robot performance.
 - Keep workspaces organized for optimal work efficiency.
 - Help promote our team as needed.
 - Assist other sub teams as needed.
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Skills & Qualifications

- Knowledge of Java and object-oriented programming preferred, but not required.
 - Problem-solving and debugging ability.
 - Willingness to learn robotics frameworks and adapt to hardware changes.
 - Willingness to learn, actively listen to instructions and feedback from leadership, and maintain a good attitude.
 - Teamwork and communication skills.
 - No prior programming experience required; training provided.
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Time Commitment

- **Preseason (Fall-Dec.):** 4-6 hrs/month (training & projects). Additional hours if needed.
 - **Build Season (Jan–April):** approx. 13 hrs/week. Additional hours if needed.
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Benefits

- Hands-on robotics programming experience.
- Growth in teamwork, leadership, and problem-solving.
- Strong technical skills for college/career readiness.
- Opportunity to compete and have fun as part of a high-energy FRC team.