High School Head VEX Robotics Coach

Position Overview

Provides strategic and technical leadership for a comprehensive competitive VEX Robotics program. This role manages laboratory resources, navigates VEX Robotics Competition (VRC) calendars, and empowers student leaders to operate the program as a cohesive, student-run engineering enterprise.

- **Reports To:** Athletic/Activities Coordinator
- **Position Type:** Year-round stipend with peak commitment during the VRC season.

Key Responsibilities

1. Program & Calendar Management

- **Schedule Coordination:** Manage VEX tournament and qualifier calendars. Balance iterative scrimmage schedules with high-intensity build seasons leading to regional and VEX Robotics World Championship events.
- **Volunteer Coordination:** Oversee the onboarding of adult volunteers and mentors, ensuring compliance with district policies and background checks.
- **Resource & Space Allocation:** Oversee the logistics of a shared workshop space, ensuring equitable access to VEX structural parts, official field perimeters, game elements, and testing spaces.
- **Program Compliance:** Maintain active team registrations on RobotEvents, competition requirements, and coach certifications across REC Foundation programs.

2. Technical Mentorship

- **Platform Mentorship:** Mentor students on the VEX V5 platform, focusing on C++ and Python via VEXcode, custom mechanism fabrication, pneumatic systems, and sensor integration for autonomous and driver-controlled periods.
- **Tool & Shop Safety:** Enforce rigorous safety protocols for a diverse workshop environment, ranging from basic hand tools to specialized shop equipment.

3. Student-Led Enterprise Leadership

- **Leadership Structure:** Design a scalable student leadership matrix that enables students to manage daily operations and program logistics.
- **Peer Mentorship:** Foster a program culture where experienced students help mentor newer members to build long-term sustainability.
- **Career Pathways:** Actively guide students in leveraging their robotics experience for STEM scholarships, internships, and university engineering programs.

4. Finance, Sponsorship, & Logistics

- **Budgeting:** Manage budgets combining school funds, sponsorships, and grant allocations.
- **Procurement:** Oversee inventory and parts ordering, managing vendor relationships and maintaining efficient supply chains.
- **Event & Travel Logistics:** Coordinate travel, lodging, and district permissions for local, state, and signature VEX competition events, , including any national competitions if the students advance to that level.
- **Collaboration:** Coordinate and collaborate with other VEX/FIRST coaches regarding shared space and possible equipment.
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<u>Qualifications & Skills</u>

Required:

- **Experience:** Experience working with high school youth in a structured VEX Robotics, VRC, or project-management capacity.
- **Organization Skills:** Proven ability to manage complex, overlapping schedules, large groups of students, and multi-layered budgets.
- **Background Screening:** Ability to clear all district background checks, youth protection training, and safety certifications.

<u>Working Conditions</u>

- High-energy, fast-paced workshop environment.
- Significant time commitment extending across both school semesters, including evenings and weekend tournaments.
- Ability to travel for competition events.

<u>Compensation</u>

- The stipend range for this position is $5,539 - $6,926. The successful candidate will be placed on the range according to relevant education and experience.