

Minuteman FRC Team 8604

Student Leadership Position Descriptions

2021 Season

Co-Captain

The co-captain will work directly with the team captain to split responsibilities. The co-captain will be responsible for the following:

- Overall team organization
- Scheduling & posting Teams links to Slack
- Managing student relations with other students and mentors
- Work as a student-mentor liaison to ensure students and mentors working together well and students are happy with team culture

This position will develop over time and the student will have creative freedom in determining what responsibilities fall under captain and which fall under co-captain.

CAD Lead

The CAD lead will oversee the design of the robot and will be responsible for overseeing the CAD sub-team leads. The CAD lead will be responsible for the following:

- Manages deadlines for design team
- Holds periodic design reviews with CAD team
- Communicates with electrical and programming teams regularly
- Keeps open line of communication with captain, co-captain, faculty advisor and other technical mentors as needed
- Manages Onshape CAD files
- Manages subsystem integration process
- Works with captain, co-captain and manufacturing lead to create sub assembly packages to send home.
- Keeps log of 6328 mentor hours

Drivetrain CAD Lead

The Drivetrain CAD Lead is responsible for designing the drivetrain subsystem. They will communicate regularly with the CAD Lead and attend all design review sessions.

Intake & Storage CAD Lead

The Intake & Storage CAD Lead is responsible for designing the Power Cell intake and the internal ball travel system. They will communicate regularly with the CAD Lead and attend all design review sessions.

Shooter CAD Lead

The Shooter CAD Lead is responsible for designing the Power Cell shooter system. They will communicate regularly with the CAD Lead and attend all design review sessions.

Manufacturing & Assembly Lead

The Manufacturing & Assembly Lead will oversee the manufacturing and purchasing of parts for the robot as well as the assembly process. The Manufacturing & Assembly Lead will be responsible for the following:

- Coordinate with CAD lead to make parts
- Creates all part drawings to send to manufacturing sponsors
- Generates part order lists and coordinates with captain, co-captain and faculty advisor to order parts
- Manages team budget
- Oversees fabrication of any parts we make in house
- Works with CAD lead, captain, co-captain and faculty advisor to create sub-assembly packages for assembly at home
- Keeps log of 6328 mentor hours

Electrical Lead

The Electrical Lead is responsible for the hardware side of the robot control system. They are responsible for the following:

- Works with Control Systems mentor regularly
- Works with CAD lead to figure out control system mounting locations
- Oversees all wiring of robot
- Oversees all pneumatic tubing
- Manages sensors, works with CAD and programming on integration
- Keeps log of 6328 mentor hours

Programming Lead

The Programming Lead is responsible for the software side of the robot control system. They are responsible for the following:

- Serves as lead programmer
- Works with Control Systems mentor regularly
- Work with electrical and CAD leads on system integration
- Manages all robot code
- Delegate programming tasks to programming team members
- Keeps log of 6328 mentor hours

Game Design Challenge Project Manager

The Game Design Challenge Project Manager is responsible for overseeing the Game Design Challenge project. They are responsible for the following:

- Hold weekly meetings for game design challenge
- Oversees game design submission and any follow up work
- Communicates with faculty advisor, captain and co-captain
- Keeps a log of progress
- Delegates tasks to sub-team members
- Keeps log of 6328 mentor hours

Innovation Challenge Project Manager

The Innovation Challenge Project Manager is responsible for overseeing the Innovation Challenge project. They are responsible for the following:

- Hold weekly team meetings for Innovation Project
- Manages innovation project team members and delegates tasks
- Oversees Innovation Challenge submission process
- Keeps open communication line with captain, co-captain and faculty advisor on project progress
- Keeps log of 6328 mentor hours

Marketing & Community Outreach Lead

The Marketing & Community Outreach Lead is responsible for overseeing marketing project and community outreach efforts. They are responsible for the following:

- Taking meeting minutes and posting notes to Teams and Slack pages
- Delegating marketing and community outreach tasks to team members
- Communicates with faculty advisor, captain and co-captain regularly
- Developing a team logo
- Working with team members to design team apparel and set up order forms
- Creating a team PPT template and letterhead
- Communicating about team fundraisers via Slack
- Overseeing sponsor outreach efforts
- Managing community outreach efforts and events as they arise
- Managing FIRST Lego League summer camps at Minuteman