*Robot Features*

* *4M drivetrain*
* *Upper arm for picking up mobile goals and placing them onto platforms*
* *Lower clamp for dragging mobile goals*
* *GPS sensor for moving and inertia sensor for rotating*

Autonomous Period (starting on the right side)

1. The robot starts on the row of tiles in front of the alliance station and in front of the right neutral mobile goal
2. The robot moves forward to the right neutral mobile goal
3. The robot clamps onto the right neutral mobile goal
4. The robot moves back to its starting position
5. The robot rotates right (about 45°) facing the right alliance mobile goal on the AWP line
6. The robot moves forward to the right alliance mobile goal
7. The robot picks up the right alliance mobile goal with its arms
8. The robot releases its (3) preloads onto the right alliance mobile goal branch
9. The robot rotates back to its starting rotation

Autonomous Period (starting on the left side)

1. The robot starts on the row of tiles in front of the alliance station and right next to the left alliance mobile goal
2. The robot moves forward in a non-linear fashion to the left neutral mobile goal
3. The robot clamps onto the left neutral mobile goal
4. The robot moves back to its starting position
5. The robot rotates right (about 90°) facing the left alliance mobile goal next to the platform
6. The robot picks up the left alliance mobile goal with its arms
7. The robot releases its (3) preloads onto the left alliance mobile goal branch
8. The robot rotates back to its starting rotation

Programming Skills (starting on any right side, 319 points)

1. The robot starts facing the left red alliance mobile goal in the blue alliance home zone
2. The robot clamps onto the left red alliance mobile goal
3. The robot releases its (3) preloads onto the left red alliance mobile goal branch
4. The robot moves to the right red alliance mobile goal
5. The robot picks up the right red alliance mobile goal with its arms
6. The robot moves to the red balancing platform for that alliance
7. The robot drops the right alliance mobile goal onto the red balancing platform with its arms
8. The robot unclamps the left red alliance mobile goal onto the floor
9. The robot picks up the left red alliance mobile goal with its arms
10. The robot drops the left red alliance mobile goal onto the red balancing platform with its arms
11. The robot turns around and moves to the right neutral mobile goal
12. The robot picks up the right neutral mobile goal with its arms
13. The robot moves to the center neutral mobile goal
14. The robot clamps to the center neutral mobile goal
15. The robot moves to the red balancing platform
16. The robot drops the right neutral mobile goal onto the red balancing platform with its arms
17. The robot unclamps the left neutral mobile goal onto the floor
18. The robot picks up the left neutral mobile goal with its arms
19. The robot drops the left alliance mobile goal onto the red balancing platform with its arms
20. The robot turns around and moves to the left neutral mobile goal
21. The robot picks up the left neutral mobile goal with its arms
22. The robot moves to the red balancing platform
23. The robot drops the left neutral mobile goal onto the red balancing platform with its arms
24. The robot clamps onto the left blue alliance mobile goal
25. The robot moves to the right blue alliance mobile goal
26. The robot picks up the right blue alliance mobile goal with its arms
27. The robot moves to the blue balancing platform for that alliance
28. The robot balances onto the blue balancing platform with the two mobile goals