



RESEARCH THESIS

Monocoque Design with various modernizations

A complete revamp of the monocoque focusing on the new regulations, better aerodynamics, weight savings and torsional stiffness.

The Monocoque is at the heart of the vehicle and needs to consider all other subteams. At the same time its by far the most important and complex CFRP piece, defining the limits of what is possible for the team.

A closer look should be taken into advanced designs and manufacturing methods. Some examples of both:

- Integrated rollhoop
- Combined seat and firewall solution
- Mashined core and completely designed manufacturing process e.g. with fibersim

Also possible: alternative fibers, and FEM/CFD supported geometries.



<https://infinityracing.de/wp-content/uploads/2021/05/mono2-2.png>



Tasks:

- CAD Surface Design and extensive packaging
- Prep for Laminate Design
- Development of new methods for new integrations

Requirements:

- Extreme dedication
- CAD Advanced
- CFRP experience
- Become a full-time team member