



iGP: Autonomous Car

iGP Module: Chassis Design of the Autonomous Electric Vehicle

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In this module, undergrads will model, design, manufacture and assemble an Aluminum Chassis for an Electric Vehicle. The design will be based on reverse engineering an existing Golf Cart. The final Electric Vehicle is where all the rest of the teams will integrate their parts such that the vehicle becomes an autonomous electric vehicle. The team is expected to:

1. Reverse Engineer an existing electric golf cart
2. Estimate forces and loads on the Chassis Frame
3. Survey different Materials for different car components
4. Identify the placement of other teams' components on car and adding brackets to install them
5. The design of all required jigs
6. Manufacturing & Assembly
7. Testing
8. Integration & Final Testing