

REQUIREMENTS

- 1. **Team Requirement-** The team registering for uit go kart championship (UITGKC)must have a team name ,teamLogo, Team Captain and the Faculty Facilitator. There is no limitation on the number of registrations from same campus . There cannot be more than 20members in a team under any circumstances.
- 1.1. **Team Name and Team Logo** Every team must have a unique team name and an impressive team logo.
- 1.2. **Discipline**-All the team members must be from engineering and 11th and 12th class students. **Driver's Requirements**
- **1.1. Age-Every team is supposed**to have two drivers and both the drivers must be atleast **18 years of age.**
- **1.2. Driver's License-Team** Team drivers must have a valid driving license (Four wheeler) issued by the government of India (learner's license not allowed). Drivers must carry the original license and the undertaking from signed by the parents and faculties advisor during the time of event and produce the self-attested Xerox copy to the registration desk. Kart driver must produce original license whenever organizer asked. Before endurance test the kart driver must show or produce the original license to organization authority or technical team
- **1.3. MedicalInsurancewithfullAccidentalCover**: Both the drivers must have a valid medical insurance with full accidental cover, which must be presented on the event site when asked by the

officers.

1.4. Drivers Safety Gear- The following are the minimum requirement and restrictions that will be

enforced through technical inspection, at any stage of competition. Noncompliance if any observed bythe inspection/organizing/judging committee members must be corrected and no vehicles withoutpassing the technical inspection would be allowed to participate further in the event. All the parts of Driver's Safety Gear must meet the required rating (specified). No driver would be allowed todrive the vehicle without the complete driver's safety gear in any of the dynamic event.

2. Vehicle Requirements

2.1. Chassis Design Requirements

The vehicle must have four (4) wheels that cannot be in a straight line in longitudinal direction. The vehicle must have a wheelbase of at least

center of contact on ground of the front to rear tires with the wheels pointed straight ahead. mountings and designing of chassis should be such that there should be between the driver and any component of the vehicle in static and dynamic condition thighs etc. Body parts making contact with the parts at normal seating position are excluded rule.

2.2. Chassis Material

The tube pipe and Steel tube used in the fabrication of the chassis or the other frames/supports should be seamless (seamed pipes are not allowed). Minimum cross section must be 1 inch (25.4 mm), for pipe it will be Outer Diameter (OD) and for rectangular or square section, it will be its minimum height. The pipe material used for chassis must have minimum wall thickness of 1.5 mm. the material used in chassis should have a minimum carbon percentage of 0.15%. Material certification is essentially required to be produced during the technical impressed. Material should be certified from any of their cognized material testing laboratories for its

go Kart mical and mechanical properties, the same report should be presented at the time of inspection and throughout the event.

- 2.3. Bumper (Front and Rear) Bumpers must be installed in the front and rear of the vehicle such that they cover the tires and Protect them from any collision which may occur on the track. They must be made of steel tubes. Minimum (OD) outer diameter 1 inch (25.4 mm) and minimum wall thickness 1.6 mm. Bumpers must have proper accessibility for use as towing point for towing.
- 2.4. Suspension No Suspension allowed. (Any kind of suspension system is not allowed). 2.5. Ground Clearance With the driver aboard there must be a minimum clearance of 1 inches from the ground to the lowest point of the vehicle (except tires) of the vehicle. No compensation (like chain sprocket, brake disc in ground clearance would be entertained).
- 2.6. Visibility The power train compartment must be completely visible to examiners at the time of inspection.
- 2.7. Brake light: The vehicle must be installed with a brake light red in colour which is clearly visible by the rear vehicle (At least from a distance of one meter). If an LED brake light is used, it must be clearly visible in day light. This light must be mounted ONE FOOT above the ground between the wheel centerline. All the electrical connections done must be well insulated and should be tied properly.
- 2.8. Toeing points Toeing point may be used on front and rear bumper or the maybe separate from it attached with the chassis
- 2.9. Steering System The steering system must be able to control (simultaneously) at least two (2) wheels. The steering system must have positive steering stops that prevent the steering linkages from locking up either in RH or turning (the inversion of a four-bar on the rack and must prevent the tires from contacting body, or frame members during the track events. Allowable total steering system free 7degrees, measured at the steering wheel. The steering wheel must be mechanically connected to the front wheels, i.e. steer- by- wire or electronic steering is strictly prohibited. The shape of steering wheel can be of any type: continuous, H-shaped, C shaped etc. Do note that the shape and size should be such that its rotation is unhindered by any part of driver's
- 2.10. Braking System The brake system installed must be capable of stopping the vehicle in a straight line with during the brake test. The vehicle must have hydraulic braking system that stops at least 2 wheels/Axle simultaneously. The pedal must directly actuate the master cylinder through a rigid link (i.e., cables are allowed). All brake links must be securely mounted and not fall below any portion of the vehicle. Electronic braking systems are strictly prohibited. In case of any wheel mounted disc brake mechanism bleeding ports for disc caliper should be upside to any part of the braking system. **2.11**. Visibility Requirement The power train compartment must be completely visible to examiners. must have proper shields.
- 2.12. Driver Seat and Its The seat mounting must be rigid enough to withstand the various forces that the vehicle will undergo go-kart is being driven on the track. The driver seat should be at least 2 i The Driver's seat must be designed in such a way that it prevents lateral motion of the driver when multi directional forces act on him when cornering or braking. These at must not protrude below the e lowest plane of the chassis frame, under any condition what-so-ever.
- **2.13 Wheels and Tires** Teams must use standard go-karting tires Acceptable tire size for front is 10x4.5-5(all dimensions in inches) and for rear tire11x7.1-5
- **2.14. Bolts** All bolts used in the system must meet metric grade 8.8 or more .No fasteners used should be less than 8.8. Thread lockers spring washers are prohibited. All fasteners used should have min 2 threads 10x4.5-5(all dimensions.
- 2.15 lock nuts Locking nuts are mandatory to be used everywhere in the vehicle. Failure to fulfil this, no team will get "Technical Inspection (T.I) OK" for the vehicle.

2.19. **Fire Extinguisher** Each team must have at least two (2) nos. of 1kg ABC type fire extinguishers. One present at the an done with the team representative extinguisher should be in proper working condition. It should be accompanied with a sticker or a bill clearly mentioning its expiry date.

JUDGEMENT CATAGORIES