

# Online Winter Internship

On

## Vehicle Design (Quad Bike)

### Internship Modules:

#### Module 1: Chassis Design

- Dimensioning
- Considerations

#### Module 2: Suspension System Design

- Spring Design
- Roll Centre
- Types of Suspension System

#### Module 3: Steering System Design

- Steering Geometry
- Caster Angle, Camber Angle, KPI
- Steering Ratio
- Turning Radius

#### Module 4: Powertrain Design

- Gear Ratio
- RPM Calculation for Required Speed
- Tractive Effort

## **Module 5: Brake Design**

- Braking Force
- Pedal Ratio
- Weight Distribution
- Stopping Distance