

**IFET COLLEGE OF ENGINEERING**  
**DEPARTMENT OF CIVIL ENGINEERING**  
**EXTERNAL SYMPOSIUM –IFET HACKATHON**  
**“CIVIHACK’ 19”**

- **A stadium in C shape with seating capacity of 1000 persons**

There should be data management system which will keep periodic health status of building and structures which will alarm before collapse.

**Outcomes** : Create a software for Health monitoring. With Experimental model

- **Aswimming pool with depth varying from 4 to 7 feet and area of (30x40)feet**

Wastewater treatment is a process used to convert wastewater into an effluent (outflowing of water to a receiving body of water) that can be returned to the water cycle with minimal impact on the environment or directly reused.

**Outcomes** : Low cost treatment method Prevent fresh water resources Environment friendly  
With experimental model

- **Designing rainwater harvesting and water shed management**

Due to improper irrigation there might be some possible wastage. It may be water wastages, wastages of crops and so on. In order to solve this issue, an automatic irrigation system can be introduced. By using this system it will possibly reduce such wastages. So that better utilization of resources can be made possible.

**Outcomes** .We need to develop an automatic irrigation system with basic switching mechanism of motor using sensors by sensing moisture present in the soil, so the irrigation can be done .

- **Develop two storey building with internal stair case.**

A two floor house with external stairs would generally be designed for two separate people to live in them. Ideally, such houses are rare to find now because of security issues. Most houses have staircases internally but they are not classified as anything specifically.

**Outcomes** : Create a 3D Drawing, Model for the two storey Building stair case with all loading data.

- **Designing Sewage treatment plant.**

Wastewater treatment methods are an extremely important part of keeping our environment sustainable. The treated wastewater is usually led back to natural water bodies, where it then gets extracted and later cleaned for utilities. Identification of color causing substances and removal techniques

**Outcomes** : Color removal from treated effluent