

BENTLEY'S G+6 STRUCTURAL DESIGN

★ Problem Statement :

You are in a locality of Bhubaneswar that is witnessing more residential projects. New people in the town are now not just considering a living space but an aesthetically attractive building. From an engineering standpoint structure should withstand the vertical and lateral loads arising due to high occupancy.

Here, you need to design a residential building that optimizes square footage, given the intended use by the residents that you imagine, while being structurally sound and in compliance with local building codes and other environmental considerations of the building site.

- Design a seven-story residential building, using the modelling tools in STAAD.Pro.
- Assign the required materials and support to your structure.
- Assign loads and design in accordance with Indian design code standards.
- Analyze using Indian Standard codes and check your results in the output file.
- Make changes to your design, based upon analysis results, to ensure structural optimization of your design.

Full details, requirements, and instructions are provided back side.

CASO DE ESTUDIO



★ Project Tasks :

Model a B+G+6 building (total of seven stories, plus basement) in STAAD.Pro, including a staircase, with an area per floor of 1,000 sq. meters/11,000

★ Submission Requirements :

1. Register on the Bentley Education Portal and Download STAAD.Pro
2. Work on the problem statement and complete your design using STAAD.Pro
3. Submit the abstract of work by 7th April
4. Share Presentation , the STAAD.Pro model file (.std format) and Output file (.anl file) by 16th April.

★ Instructions :

1. Team can consist 2-5 members
2. The presentations will start from 9:00 AM on 17th April and Maximum presentation time of 15min (10min +5 min for questions) will be given to team
3. 10 teams will be finalized to present their work before the panel. Elimination will be based on abstract
4. The abstract should be in pdf format, withstanding the word limit of 450 words
5. Only One set of solutions is allowed per team