



C-STRUCT

Safe Structures may bends but never fails

Department of Civil Engineering

About Department

Civil Department is started on 2008 with intake of 60 seats . In the Civil Department there are well equipped laboratories as follows– Concrete lab, Geotech lab, Survey lab, Environmental lab, CAD lab, Engineering mechanics lab, MOS lab .

Each lab has well experienced lab in-charge, who balances academic knowledge with practical and career oriented information.

Also some labs helps for the firms and companies in civil engineering field for testing of material, surveying & leveling.

Preface by HOD

It is an immense pleasure for Civil Department to publish a Newsletter representing Civil Department in front of all the technical and non-technical persons and students.

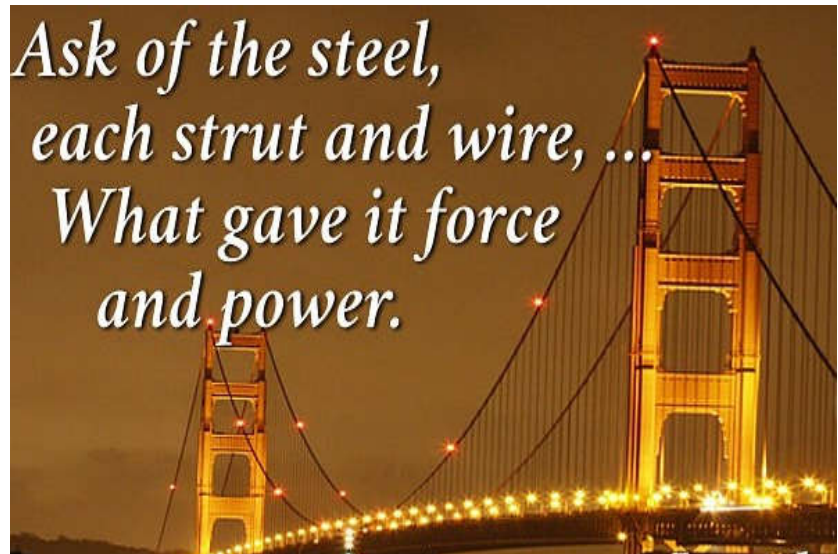
It gives the affairs in civil engineering department about academic activities, co-curricular activities and students achievements.

This Newsletter abandoned with the practical information and academic activities that we performed and succeeded to large extent from the day of establishment .

So, going through pleasure to present News Letter “C-STRUCT” of our department to all students. This News Letter is one of the ways in which we can disseminate the information about department. The past semester was of various activities by the students and faculty in academic, Co curricular, Extra curricular activities. As you read through pages, you will realize that we have succeeded in academics and Co curricular activities.

Last but not the least, the inspiring message given by Sir Winston Churchill ,

*“ We shape our buildings,
thereafter they shape us ”*



“ *Go for civil engineering because civil engineering is the branch of engineering which teaches you the most about managing people.*

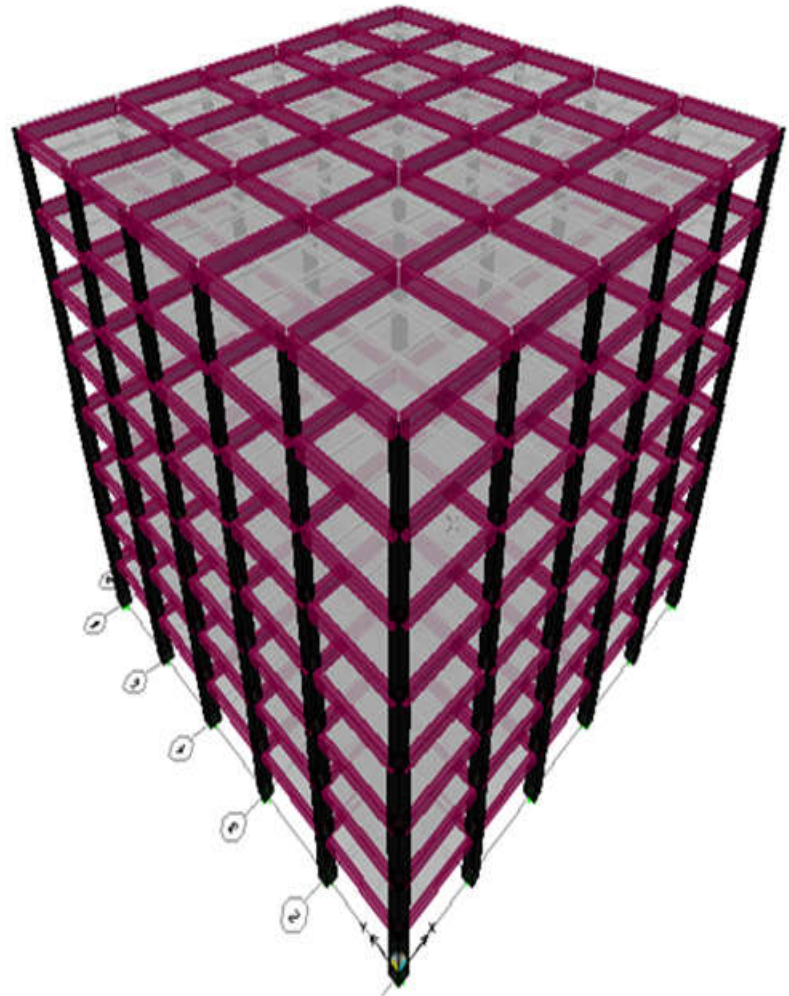
Managing people is a skill which is very, very useful & almost regardless of what you do. ”

- Sir John Harvey Jones

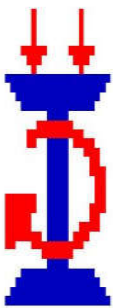
-Prof. Mr. V.D.Pore

In this work total 8 models, 4 Conventional and 4 Flat Slab building has been modeled, design and analyzed by Linear Static analysis, Response spectrum method and Nonlinear Static method. Building Considered are of G+7, G+9, G+11 and G+13 with a Floor height of 3 m. The main aim of this work is to compare the Flat Slab building and Conventional building for same height. The results in the form of Storey Drift, storey Shear, Base Shear, Time period, Storey Displacement, Performance point and Push-over curve has been evaluated. Obtained results of both conventional building and flat slab building have been compared and Following conclusions are made.

- For same height Storey Drift of Flat Slab building obtained is almost double of Conventional building. This is due to fact that Flat slab building has very less lateral load stiffness than conventional building.
- From Storey Drift values it is observed that most of the time maximum drift will occurs in Storey which is at Mid Height of building.
- By observing the performance point of buildings it can be concluded that Conventional building performs well than Flat slab building but Flat slab building also has good resistance for lateral load.



STAAD.Pro



STAAD or (STAAD.Pro) is a structural analysis and design computer program originally developed by Research Engineers International in Yorba Linda, CA. In late 2005, Research Engineers International was bought by Bentley Systems.

An older version called Staad-III for windows is used by Iowa State University for educational purposes for civil and structural engineers.

The commercial version STAAD.Pro is one of the most widely used structural analysis and design software. It supports several steel, concrete and timber design codes. It can make use of various forms of analysis from the traditional 1st order static analysis, 2nd order p-delta analysis, geometric non linear analysis or a buckling analysis. It can also make use of various forms of dynamic analysis from modal extraction to time history and response spectrum analysis.

Additionally STAAD.Pro has added direct links to applications such as RAM Connection and STAAD.Foundation to provide engineers working with those applications which handle design post processing not handled by STAAD.Pro itself.

AutoCAD

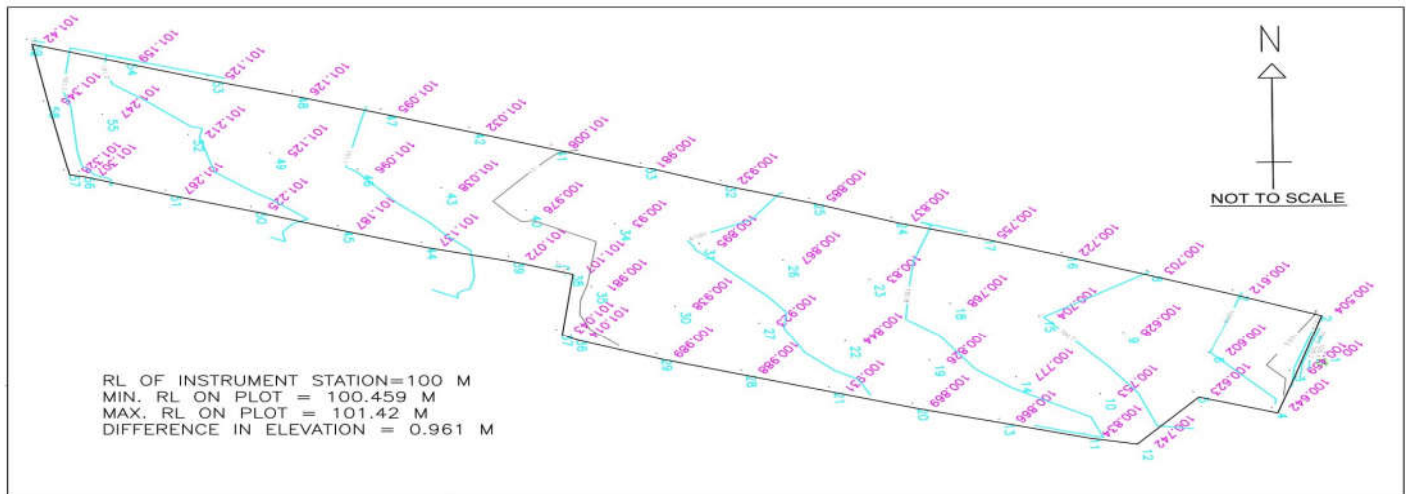
AutoCAD is a commercial software application for 2D and 3D computer-aided design (CAD) and drafting available since 1982 as a desktop application and since 2010 as a mobile web- and cloud-based app marketed as AutoCAD 360.

File formats:-The native file format of AutoCAD is .dwg. This and, to a lesser extent, its interchange file format DXF, have become de facto, if proprietary, standards for CAD data interoperability, particularly for 2D drawing exchange. AutoCAD has included support for .dxf, a format developed and promoted by Autodesk, for publishing CAD data.



“Digital Terrain Modeling using Total Station Data”

Prof. Mr. P.D. Dandge



For anyone involved in Civil Engineering, Surveying or the Construction Industry dealing with real world sites where levels can be anything but flat, Digital Terrain Modelling Application (DTM) provides the perfect tool for preparing the site models, sections and contours needed to fully develop a scheme.

Whether using data from Total Stations or your own site levels, with DTM you can save hours of dull, repetitive work, reducing the risk of error and creating 3D site models in seconds, and multiple sections in under a minute. With DTM you can view your sites from any angle to get a better appreciation of the opportunities and challenges they offer. Using DTM requires no special training, so you can be modelling and sectioning your sites in minutes.

It uses the industry standard DWG drawing format, also supporting DXF, making it easy to create models and sections using information from surveyors, as well as your own survey data.

STUDENT ACHIEVEMENTS-TOPPERS (ACADEMIC YEAR 2014-15)

CIVIL ENGINEERING

Sr. No.	Class	Name of the student	Percentage
1	FE - CE	Ms. Gorave Prachi Kerba	94.92%
2	FE - CE	Ms. Nikam Kalyani Shahaji	93.54%
3	FE - CE	Ms. Bahirwade Shital Nagesh	93.23%
4	SY -CE	Ms. Masal Vidya Aabaji	93.18%
5	SY -CE	Ms. Jagadale Sonali Shahaji	86.94%
6	SY -CE	Ms. Gadekar Shivali Sudhakar	86.47%
7	TY - CE	Ms. More Vishakha Popat	90.94%
8	TY - CE	Mr. Thite Sunil Mohan	90.59%
9	TY - CE	Ms. Sonawane Sayali Arvind	90.47%

Participation in Competitions – Sport Events

Sr. No.	Student Name	Event	Level	Result
1	Jadhav Suraj Bharat	Javelin Throw	Zonal	Winner
2	Raut Sangram Ajinath	volleyball	DYF	Winner
3	Jagdale Pruthwiraj Bhivaji	volleyball	DYF	Winner
4	Yadav Dadasaheb Maruti	volleyball	DYF	Winner
5	Kute Yash Vaibhav	volleyball	DYF	Winner
6	Pawar Pradumn Niwas	volleyball	DYF	Winner
7	Dhanawale Ajay Shivaji	volleyball	DYF	Winner
8	Sonawane Pranav Dipak	Kho-Kho	DYF	Winner

STAFF ACHIEVEMENTS

ME completed:-

Prof. Mr. V.D.Pore
Prof. Ms. R.T.Shiraskar

ME Appeared:

Prof. Mr.M.D.Thorat
Prof. Mr. M.S.Survase
Prof. Mr.S.S.Tavashi
Prof. Mr.P.D.Dandge
Prof. MR.N.D.More
Prof. Mr.R.D.Kapase



UPCOMING EVENTS

- One day **Faculty Development** program is Scheduled in the month of May 2017
- One week student training program on **Total Station** is scheduled in month of May 2017

Publications:-

- Prof. Ms. R.T.Shiraskar , “Comparative study of use of flat slab and conventional slab buildings situated in seismic zone IV ”.

CO-CURRICULAR & EXTRA CURRICULAR EVENTS

- All staff of civil engineering dept attended 2 day's International conference “Techno-Societal” held in SVERI's C. O. E. Pandharpur
- Prof. Mr.R.D.Kapase and Prof. Mr.M.D.Thorat completed “**Diploma in Structural Design**” from CADD Centre Training Services, Pandharpur in Nov 2016

EDITORIAL

It gives us great pleasure to present Second volume of our departmental newsletter “ **C-STRUCT** ” to you which gives us an opportunity to see the achievements in our departments .

We are thankful to all the students and faculties who have made contribution during preparation of this newsletter. We tried our best and have given positive efforts, expecting creative response from everyone to continue the flow of knowledge through this newsletter.

Prof. Mr. M.D.THORAT