



C-STRUCT

Safe Structures may bends but never fails

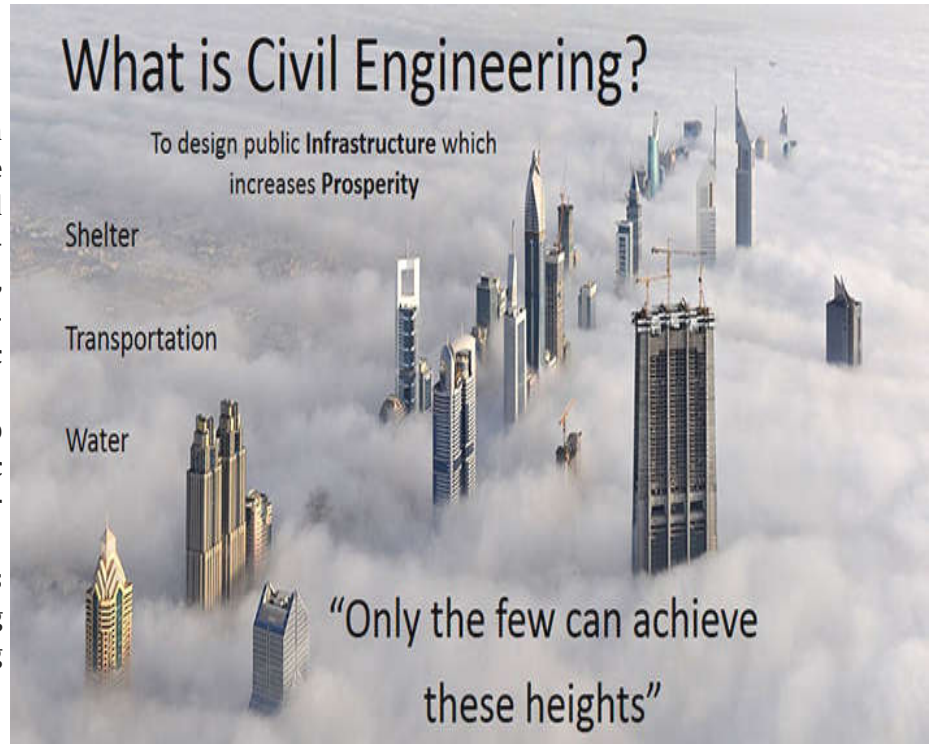
Department of Civil Engineering

About Department

Civil Department is started in 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 and Public health engineering lab.

Each lab has well experienced lab incharge, 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 our proud with immense pleasure for Civil Department to publish second issue representing Civil Department in front of all the technical and nontechnical 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 succeed to large extent from day of establishment .

So, going through pleasure to present second issue of “C-STRUCT” of our departments 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 achievements 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

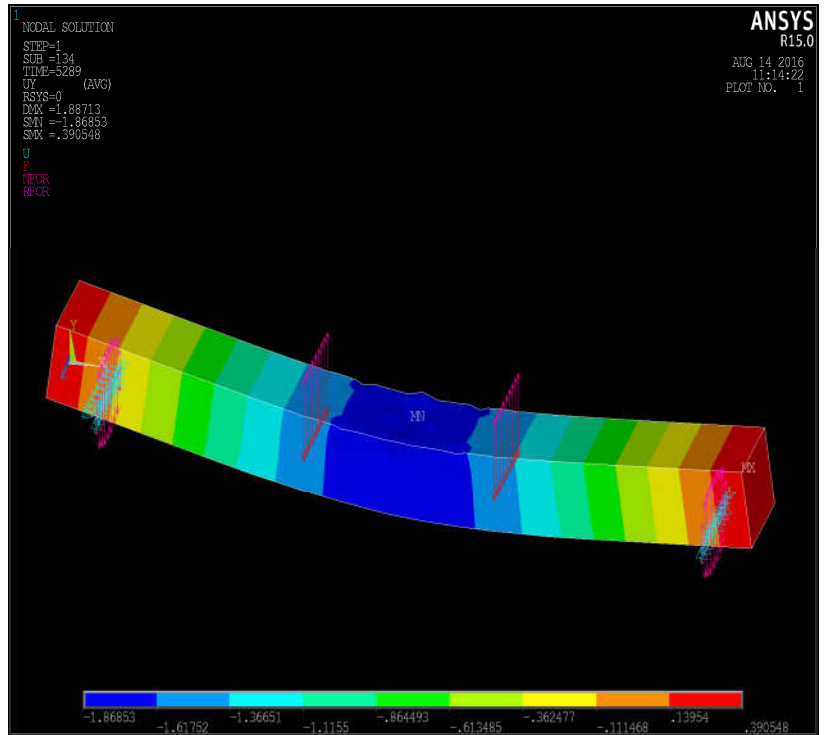
“Failure is not about to get down

but it is about refusing to get up”

-Prof. V. D. Pore

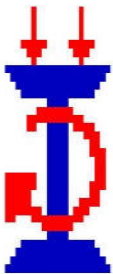
Several studies have been carried out on the development of analytical and numerical approaches for modeling of civil engineering structures. Based on various experiences physical failure and advancement in civil engineering knowledge, their methodologies have been improved drastically. Even though the dimensions and properties are decided by their methodologies, for the critical structures most of the time small scale models are developed to cross check the performance of structures.

In this study, the strength based and frequency based dimensionality approaches are developed for miniaturizing of RCC beam models. The scope of study is limited to beam structures only.



The main objective of this project is to study dimensionality approach, where dimensional relation between model and actual beam is established for dimensional similarities such as deflection, stress, and failure pattern. The model is analyzed using software's such as MATLAB, ANSYS etc.

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.

Prof. Mr.M.D.Thorat.

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.



Prof. Mr.R.D.Kapase.

“Development and Analysis of Low cost sheet structure using agricultural waste.”

Prof. Mr.R.D.Kapase.

A new approach to the production of sheet structure was carried out by using agricultural waste wheat straw. This work aims to characterize and evaluate the possibilities of using the wheat straw and technological tests were conducted on sheet structures. This project has the advantages of reducing atmospheric pollution due to burning of wheat straw and conversion of waste in to useful products. Recycling waste as useful material is a very important environmental management tool for achieving sustainable development. The effect of alkaline treatment of wheat straw with sodium hydroxide where investigated. The purpose of this thesis was to develop an economical, sustainable and environmentally friendly sheet structures.



A new environmentally friendly technology for turning agricultural residues like straw into quality value-added composite products using conventional Polyvinyl alcohol resins has been developed and currently being scaled-up within the framework of an funded project. The implementation of the new technology will result in waste materials (agriwaste) being efficiently utilised as a sustainable resource for the industrial manufacture of commodity products like wheat straw structure reducing the amounts of agricultural wastes and eliminating the pollution occasioned by the burning of such residues.

STUDENT ACHIEVEMENTS-TOPPERS (ACADEMIC YEAR 2014-15)

CIVIL ENGINEERING DEPARTMENT

Sr. No.	Class	Name of the student	Percentage
1	FY - CE	Ms. Masal Vidya Aabaji	93.87%
2	FY - CE	Ms. Shirke Aparna Kishor	92.67%
3	FY - CE	Ms. Surwase Nikita Rajkumar	91.07%
4	SY -CE	Ms. Sonavane Sayali Aravind	86.67%
5	SY -CE	Ms. Abdagire Akshada Ankush	86.67%
6	SY -CE	Ms. More Vishakha Popat	86.22%
7	TY - CE	Ms. Gurav Arati Ramkrushna	91.00%
8	TY - CE	Ms. Raut Tejal Sunil	88.75%
9	TY - CE	Ms. Lengare Amruta Laxman	88.75%

We know very well that the need of Total station in the Civil Engineering field. So to utilize the modernization of the equipments used in civil engineering related projects we should know it's advantages and the way how to use it.

So for achieving these strengths of civil engineering, We have smoothly conducted one week training program of Total Station By Mr. Gaikwad sir . By this our faculty members grabbed an opportunity to get the knowledge regarding the use of Total Station.

It is the equipment by which all the works related to the civil projects can be done, Hence we can achieve the output by the single equipment in short time. Total Station is the mostly used equipment now a days for all kind of civil related works. It gives horizontal, vertical as well as inclined distances at the same time, So we can work in both plane i.e. horizontal and vertical.

After this program we have arranged one week training to our students regarding Total Station. So that our students should also get the knowledge related to the advance civil engineering equipments.

ME Appeared:

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

UPCOMING EVENTS

- Two days CIP session is Scheduled in month of September 2016
- One day 'ERECTUS' is Scheduled in the month of Sept 2016
- Industrial visit for third year students in Aug 2016

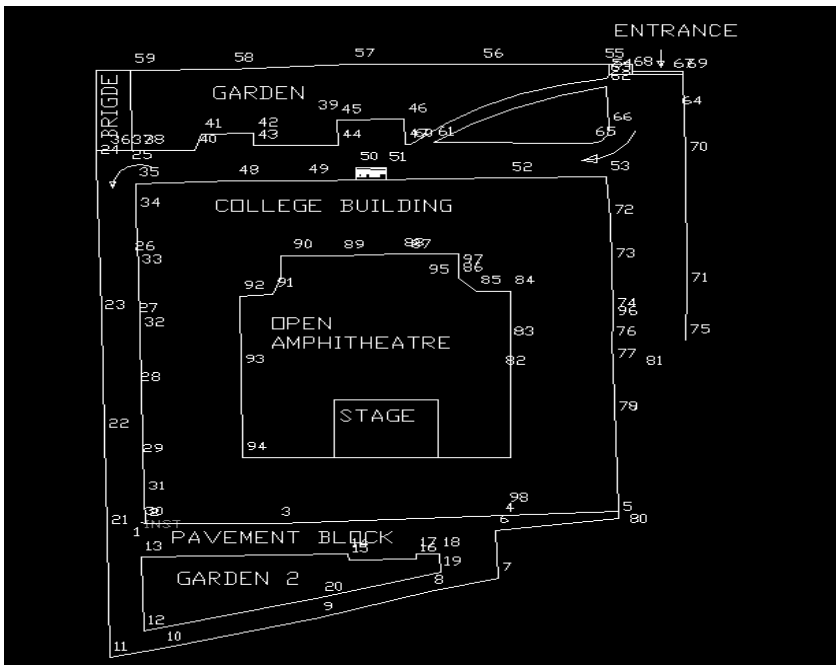


Fig. Plan of College building prepared by our students using Total Station Equipment

CO-CURRICULAR & EXTRA CURRICULAR EVENTS

- Prof. Ms R.T. Shiraskar has published poster on project topic, "Use of flat slab building in high seismic zone " in PGCON, Pune.
- Prof. Mr. P. D. Dandge received ISTE (Indian Society of Technical Education) Student Membership.

EDITORIAL

It gives us great pleasure to present third volume of our departmental newsletter " C-STRUCT " to you which gives us the 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