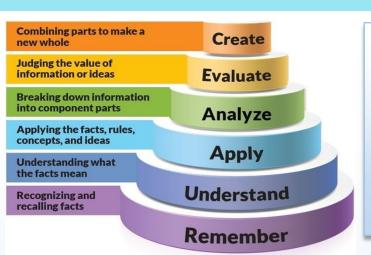


# SCHOOL OF CIVIL ENGINEERING

# ┍ SKILL COURSE – DATA ANALYSIS ≪

# NEWSLETTER





### **Upcoming Events**

Date	Events
22nd Apr' 24	Earth Day
25th Apr' 24	TY & Final Year Practical Exam
01st May' 24	Maharashtra Day
03rd May' 24	SY Project Review –III
22nd May' 24	SY Teaching End



#### **Announcement and Activities**

We are delighted to announce that our Third Year Civil Engineering students, Mr. Vedant Sontakke, Mr. Sandeep Sakunde, and Mr. Yash Sangale, have won the prize for best Paper in the "Land and Climate Change on Disasters Section" at the National Conference on Water and Climate organized by the School of Civil Engineering, Vellore Institute of Technology, Chennai.



#### **About the Newsletter**

Welcome to our vibrant weekly newsletter – your dedicated source for connection, inspiration, and skill-building! Immerse yourself in our curated content, featuring insightful updates, expert perspectives, and some nifty tips and tricks in Data Analytics, accompanied by comprehensive course notes. Join us in making this newsletter a dynamic space where information meets inspiration, creating a rich learning experience for all of us.

Best regards.





Dr. Prasad Bartake serves as Technical Manager in Engineering and Research International LLC at AbuDhabi UAE. He has done PhD from IIT Bombay and having expertise in Geotechnical investigation and analysis.

In research, data analysis has utmost importance as entire outcome of the study depends on the same. Let us see how to achieve the best data analysis in general:

**Defining purpose of the data analysis:** Reason for data analysis andoutcome of the analysis needs to be clear, because this will decide the type and amount of data required for the analysis. e.g. If new road is at design stage, then it requires traffic volume data. So purpose is road design and one of the data require is traffic volume.

**Collection of data:** This can be historical data e.g. earthquakes, rain, traffic volume etc. or present data generated through various activities e.g. surveys, field or laboratory experiments.

**Arranging the data:** Upon collection of information, it is required to input in programming e.g. in Excel format. It is also required to organize it in the sequence manner. e.g. Analyzing yearly rainfall data in monthly format reveals patterns and variations in monthly precipitation distribution.

**Interpreting the data:** In this initial step is to overview the data and eliminate the bad data points or error if any. This can be done by plotting thedata in graphical format or arranging it in Excel format.

In geotechnical engineering, probability of liquefaction in case of seismic event for a particular site is evaluated based on the field data and mathematical equations. This data analysis has huge significance to proposed construction as it decides safety measures such as ground improvement or deep foundation etc. can be taken which otherwise would not have considered and structure would be unsafe in case of earthquake.



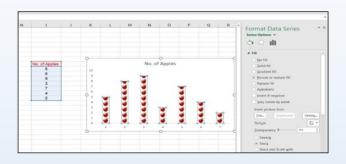


# SCHOOL OF CIVIL ENGINEERING SKILL COURSE - DATA ANALYSIS &

#### **Additional Excel Tips:**

## Pictograpgh

- First of all, just select your data to create a bar chart. For this, go to Insert Charts 2-D Clustered Bar Chart.
- After that, select the data bars in the chart and go to Right Click Format Data Series Option.
- From here, go to "Fill" section and select "Picture or Texture Fill" option and once you do this, you'll get an insert picture option.
- Now it's time to insert the picture and we have three options for this. Click on the "File" option and upload the image you have downloaded.



#### **Remove Duplicates**

- 1. Select cells or the entire dataset.
- 2. Go to Data → Data Tools → Remove Duplicates.
- 3. In the "Remove Duplicates" window, select or deselect columns.
- 4. Click OK.
- 5. Excel removes duplicate rows, displays a message with removed values, and shows unique values left.



Miss Vaishnavi Pande, a final-year B.Tech student, has secured a position at Gigafactory as a project coordinator, witha competitive package of 4 LPA. This accomplishment marks a significant milestone in her career journey and reflects herdedication and skills in the field of engineering.





Mr. Swapnil V. Gole (Final Year BTech)

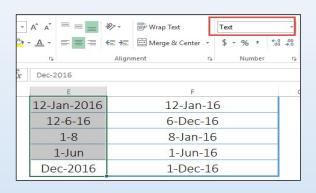


Ms. Shraddha S. Gadge (TY BTech)



#### **Text to Dates**

- 1. **Select cells:** Highlight the cells containing the text to convert.
- 2. **Format Cells**: Right-click and choose "Format Cells" or press Ctrl + 1.
- 3. **Date Format**: In the Format Cells dialog, select "Date" under the "Number" tab.
- 4. Choose format: Pick the desired date format from the list.
- 5. **Apply:** Click "OK" to convert the text to dates in the chosen format.



### Tips of the Week

Hello Excel enthusiasts! Discover essential tips and tricks to streamline your work in Excel, making tasks easier and more efficient. Elevate your skills and maximize productivity with these invaluable Excel hacks.

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(QR Code for Excel Champs)



