ARKA JAIN University

CIRCULAR

Ref. No.AJU/AD/ENGG/153/2022-23 Date: 16.05.2023

A workshop on "Minitab" is going to be organized by school of Engineering& IT, ARKA JAIN University with Institute's Innovation Council - MoE Innovation Cell (IICs) from 30/05/2023 to 01/06/2023 for Students.

Link for registration:https://forms.gle/bFG1hT94curaEa3T6
Mode of learning: Online Mode
Registration fee: Nil
Max no. of Participants: 30

Last Date for Registration: 28.05.2023 (till 7:00.P.M)

Coordinators:

Dr. Amit Prakash Sen (dr.amit@arkajainuniversity.ac.in), 87899599257
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Dr. Chandra Prabha Sahu (dr.chandra@arkajainuniversity.ac.in)

Dr. Ashwini Kumar
Asst. Dean
School of Engineering & IT
ARKA JAIN University, Jharkhand

Asst. Dean
School of Engineering & IT
ARKA JAIN University

"WORKSHOP ON MINITAB"

Date of Event	**30/05/2023 - 01/06/2023**
Name of the Event	**Workshop on "Minitab**
Type of the Event	**Skill Development**
Conducted by	**School of Engineering & IT, ARKA, JAIN University with Institute's Innovation Council - MoE Innovation Cell (IICs)**
Resource Persons	**Dr. Anup Kumar, Asst. Professor, Department of Mechanical Engineering, ARKA JAIN University, Jamshedpur, Jharkhand (dr.anup@arkajainuniversity.ac.in)**
	Dr. Amit Prakash Sen, Asst. Professor, Department of Electrical and Electronics Engineering, ARKA JAIN University, Jamshedpur, Jharkhand (dr.amit@arkajainuniversity.ac.in)
	Dr. Chandra Prabha Sahu, Asst. Professor, Department of Engineering, ARKA JAIN University, Jamshedpur, Jharkhand (dr.chandra@arkajainuniversity.ac.in)
Co-Ordinator	**Dr. Anup Kumar, Dr. Amit Prakash Sen, Dr. Chandra Prabha Sahu**
No. Of Participants	**32**

OBJECTIVE

- To develop proficiency in using Minitab: software for various statistical analyses such as regression, hypothesis testing, ANOVA, and control charts.
- To perform statistical analysis using Minitab and interpret the results, including understanding statistical significance and confidence intervals.
- To gain practical experience in using Minitab software through hands-on exercises and case studies, allowing them to apply the software to real-world problems.
- To create effective visual representations of data using Minitab's graphing and charting tools, including how to choose the appropriate chart type based on the data being analyzed.
- To develop problem-solving skills through applying Minitab software to analyze data and identify potential solutions to problems in their work.

DETAILS:

A workshop on Minitab was organized by the school of Engineering & IT, ARKA, JAIN University with Institute's Innovation Council - MoE Innovation Cell (IICs) from May 30 to June 1, 2023. The workshop aimed to provide participants with practical experience in using Minitab software for data analysis, modeling, and visualization. The Six sessions were conducted over the course of Three weeks, and the sessions covered a wide range of topics related to Minitab, including data analysis, statistical modeling, regression analysis, and quality control. The workshop was attended by 30 participants

The first session conducted by Dr. Anup Kumar introduced to Minitab, which provided an overview of the software and their capabilities. Participants were introduced to the user interface, basic commands, and data import/export functions. The second session conducted by Dr. Amit Prakash Sen focused on data analysis using Minitab. Participants learned how to import data, create plots, and perform basic data analysis operations such as mean, median, mode, and standard deviation. The third session Dr. Chandra Prabha Sahu discussed statistical modeling with Minitab. Participants learned how to create statistical models, perform hypothesis testing, and analyze statistical data using Minitab.

The Fourth session was on regression analysis using Minitab. Participants learned how to perform linear and nonlinear regression analysis, and how to use regression models to predict future trends. The fifth session was on quality control using Minitab. Participants learned how to use statistical process control techniques such as control charts and process capability analysis to monitor and improve quality. The session focused on advanced topics in MATLAB and Minitab, such as data visualization, optimization, and machine learning. The session was a review of the workshop topics and provided an opportunity for participants to ask questions and receive feedback.

The workshop on Hands-on Training Minitab was a great success. The sessions were well-structured and provided participants with practical experience in using Minitab software for data analysis, modeling, and visualization. The feedback received from the participants was positive, and they expressed their satisfaction with the workshop. It is hoped that this workshop will help participants to improve their data analysis skills and use Minitab more effectively in their research and work.

OUTCOMES:

CO 1: Develop a foundational understanding of statistical concepts: Participants will develop a foundational understanding of key statistical concepts such as hypothesis testing, regression analysis, ANOVA, and statistical process control.

CO 2: Gain proficiency in using Minitab software: Participants will gain proficiency in using Minitab software for data analysis, visualization, and quality control, including the ability to use various tools and techniques available in Minitab.

CO 3: Apply Minitab to solve real-world problems: Participants will be able to apply their knowledge of Minitab software and statistical concepts to solve real-world problems in different industries such as manufacturing, healthcare, finance, and others.

CO 4: Develop data analysis skills: Participants will develop skills in analysing and interpreting data using Minitab software, including the ability to identify trends, patterns, and anomalies in data.

CO 5: Enhance decision-making skills: Participants will be able to make better decisions based on the insights gained from their data analysis using Minitab.

Poster of the Event

Figure 1: Poster of the Workshop on Minitab

Photos of the Event

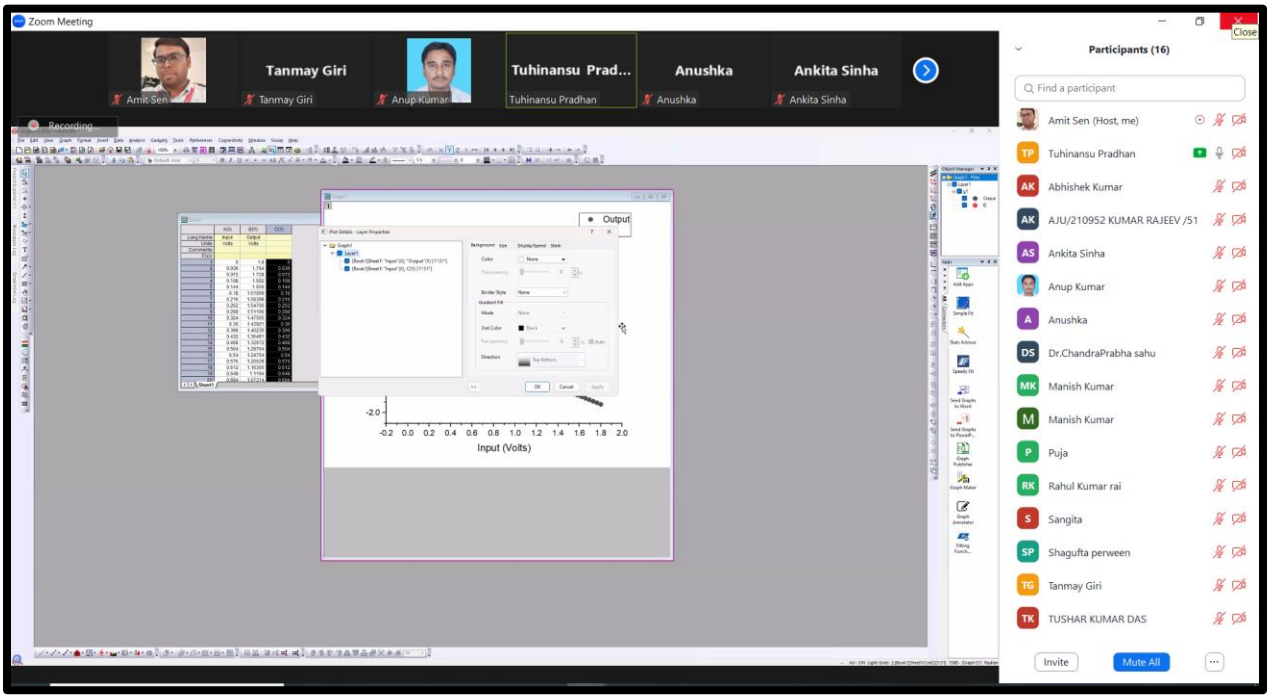


Figure 2: Screenshot of the Event

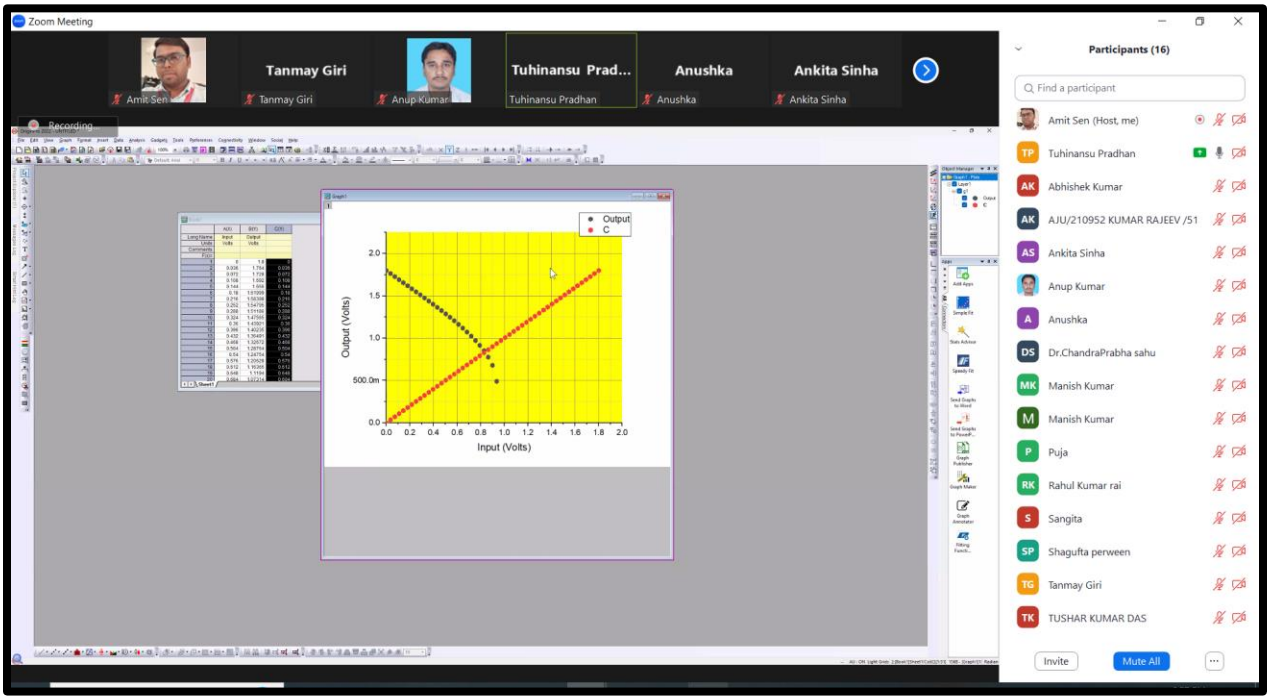


Figure 3: Workshop going on

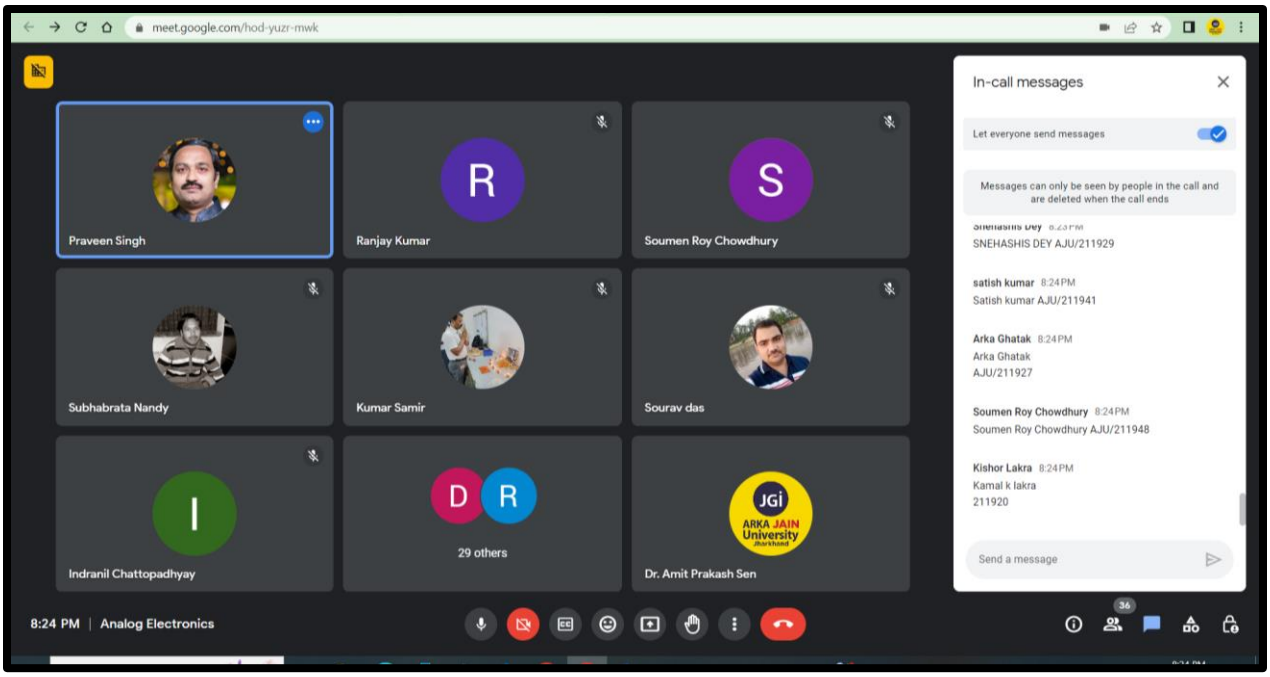
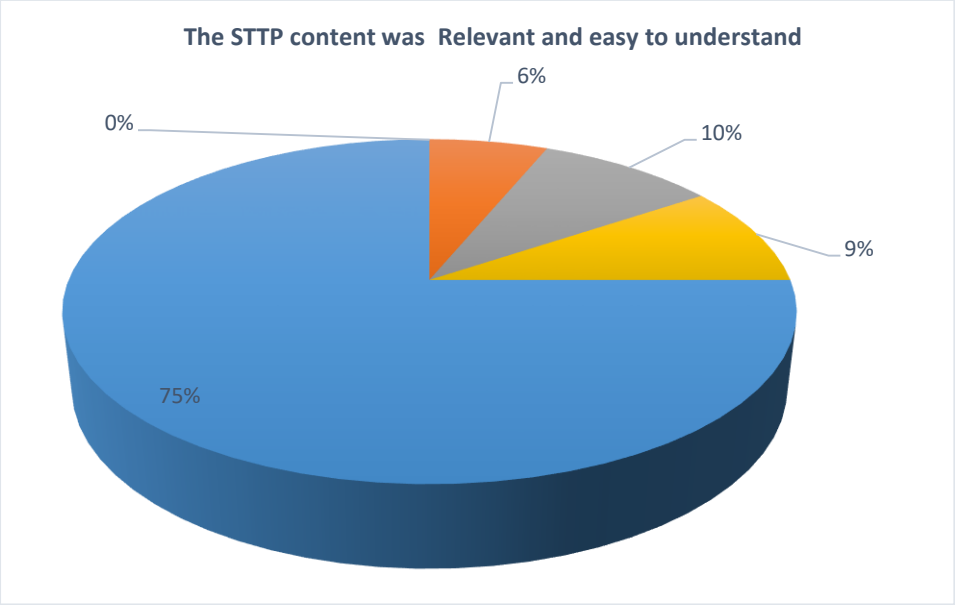
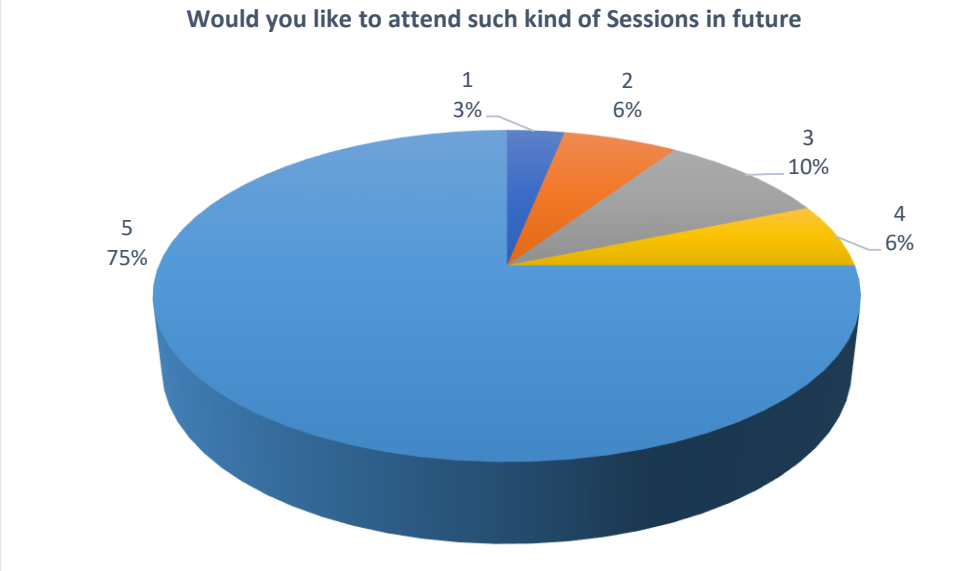


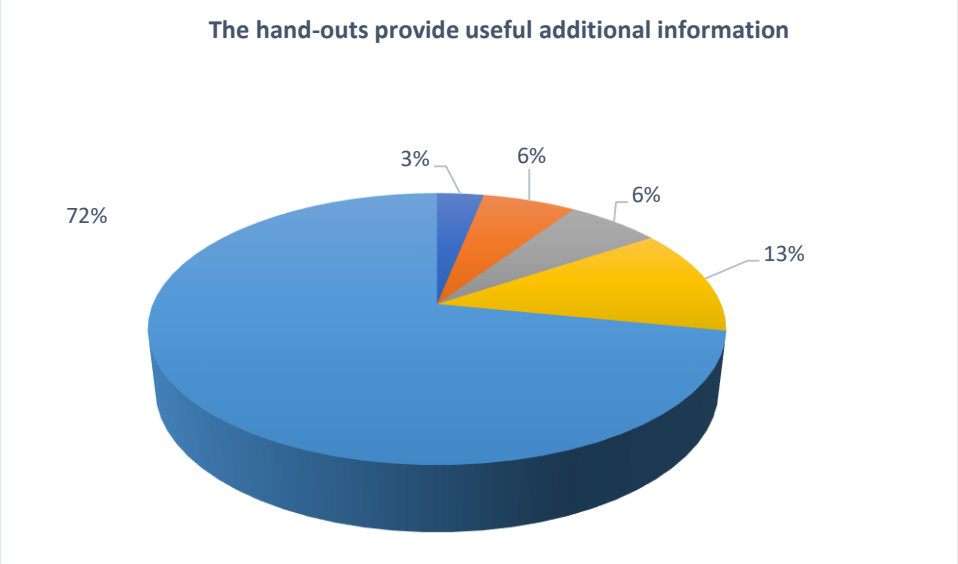
Figure 3: Guest speaker explaining the topic

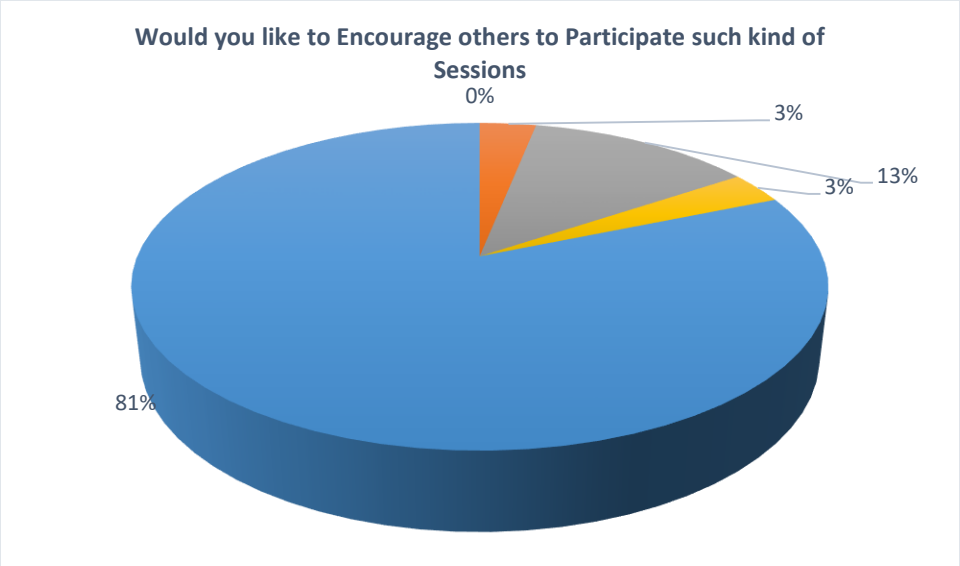
Feedback Analysis

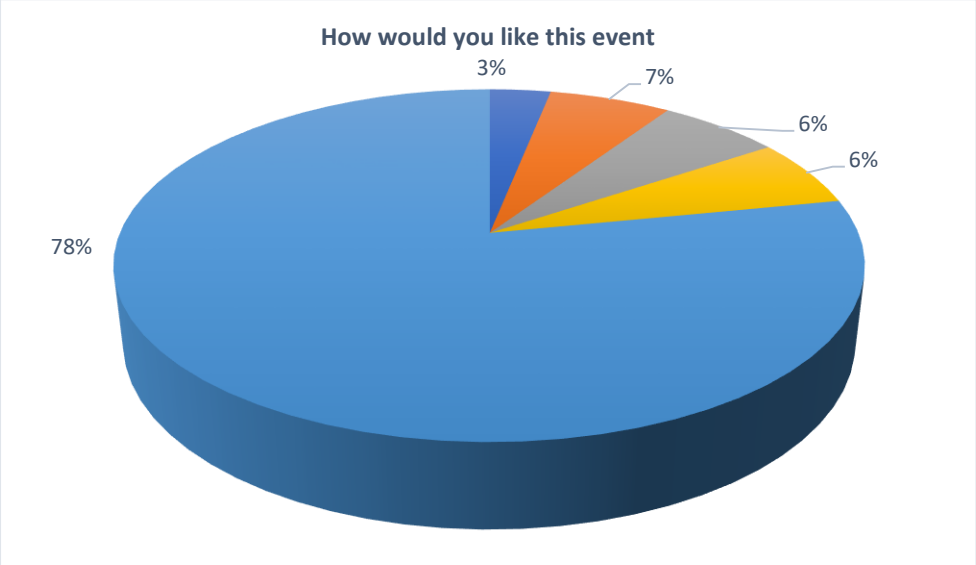
Student Feedback Analysis							
S. no	**Description**	Rating Scale					Total
		1	2	3	4	5	
1	The Workshop content was Relevant and easy to understand	0	2	3	3	24	32
2	Would you like to attend such kind of Sessions in future	1	2	3	2	24	32
3	The hand-outs provide useful additional information	1	2	2	4	23	32
4	The activities were useful learning experiences.	0	1	4	1	26	32
5	The facilitators were responsive to participants' questions	1	1	1	1	28	32
6	Would you like to Encourage others to Participate such kind of Sessions	1	2	1	0	28	32
7	How would you like this event	1	2	2	2	25	32




Would you like to attend such kind of Sessions in future
1
3%
2
6%
3
10%
4
6%
5
75%


The hand-outs provide useful additional information
3%
6%
6%
13%
72%


Would you like to Encourage others to Participate such kind of Sessions
0%
3%
13%
3%
81%


How would you like this event
3%
7%
6%
6%
78%

List of Participants

S.No	Programme	Semester	Enrollment Number (Ex: AJU/123456) {for AJU only) for other: write NA	Name	Institute	Branch	Email Address
1	B.Tech	4th	AJU/211862	Rohit Kumar Sharma	Arka Jain University	Mechanical Engineering	rohitsharma743194@gmail.com
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