



Maharaja Agrasen Institute of Management Studies

Affiliated to Guru Gobind Singh Indraprastha University, Delhi, INDIA

Maharaja Agrasen Chowk, Sector-22, Rohini, Delhi-110086, INDIA; www.maims.ac.in

Under the Aegis of IQAC

Skill Enhancement Certificate Course

Data Analytics 3.0

March 19, 2022 - May 14, 2022

Report

Data Analytics is the need of an hour. In this dynamic & ever-changing environment, predicting the future has become more relevant, especially with the availability of enormous amount of data. Excel & SPSS (Statistical Package for Social Sciences) are the prominent tools in data analytics. They help generating meaningful results from the data by the application of various statistical methods with ease. Many companies have now been looking for a skilled professional, who understand the research methodology, statistical techniques, data presentation & working on statistical software. Thus, it encouraged the seasoned faculty of MAIMS to design a skill enhancement course in data analytics using Excel & SPSS for final year students.

This Certification Course was the initiative taken under the aegis of IQAC in association with the course was started in association with PCJ School of Management, Maharaja Agrasen University, Baddi, HP for all the Research scholars, faculty & undergraduate students across the country. students of MAIMS. The prime objective of the course was to equip the students with the basics of research methodology & various quantitative data analysis techniques. Excel & SPSS had been used to conduct various statistical tests and make an inference about the data. Specifically, the course covered in-depth lessons for advance excel commands, formulas, charts/plots followed by descriptive analysis, parametric & nonparametric tests, correlation, regression, normality, and factor analysis. A total of 77 students enrolled in the course. The course was of 31.5 hours, divided in 21 sessions of one & half hour each. Every session was followed with a practical assignment related to it. After the completion of the week (3 sessions), a feedback form was floated to get the



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viewpoint of the students. A total of 21 such feedback forms were filled by the students. The students were assessed based on the assignment submitted, MCQ test on Excel and MCQ test on SPSS.

It was a great learning experience for the students as well as for the faculty. The sessions were conducted by Prof. (Dr.) Vijay Kumar Khurana, Dr. Bharti Chaudhary, Dr. Sumedha Dutta, Dr. Shilpee Aggarwal, Dr. Preeti Bansal, Dr. Deepak Dagar, Mr. Inderpal Singh, Dr. Usha Nair, Ms. Anu Goyal and Ms. Shruti Yadav. Certificates were given only to such students who successfully qualified all the four parameters, namely, attendance, feedback forms, assignments, and quizzes. The credit for this ambitious initiative goes to Prof. Vijay Kr. Khurana (HOD, Business Administration) & his team, who worked under the able guidance of the Prof. Ravi Kumar Gupta, Director, MAIMS. Their constant support and encouragement helped in successful accomplishment of this program.

***Convener – Dr. Bharti Chaudhary, Associate Professor**

**** Co- Convener- Dr. Shilpee Chaudhary, Associate Professor**

About the Course

Courses on research methodology are often well packed with methods and techniques of data analyses, ‘but’ with limited understanding of the logic underlying the various techniques, methods, and research design. Keeping this challenge in mind, the present course has been designed for students who keen to do research & data analysis in the years to come. The students will learn how data analysts describe, predict, and make informed business decisions in the specific areas of marketing, human resources, finance, and operations. Analytics talent demand is much more than the available skilled supply. The students would be able to become employable in this fast-growing new age field by demonstrating the skills learnt through this course.



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Excel & SPSS had been used to conduct various statistical tests and make an inference about the data. Specifically, the course covered in-depth lessons for advance excel commands, formulas, charts/plots followed by descriptive analysis, parametric & nonparametric tests, correlation, regression, normality, and factor analysis. Many companies have now been looking for a skilled professional, who understand the research methodology, statistical techniques, data presentation & working on statistical software. Thus, this course would build the data analysis skills among the students.

S.NO	TOPICS	Resource Person
1	Types of Data- Nominal, ordinal, ratio & interval	Prof . V.K. Khurana
2	Conditional Formatting — Manage, rules, data bars, color scales, Cleaning Data in Excel	Mr. Inderpal Singh
3	Sorting & Filter -Number and Text filters, data filters	Dr. Shilpee Aggarwal
4	ANOVA	Ms. Shruti Yadav
5	Tables & Graphs	Ms. Preeti Bansal
6	Descriptive Analysis & Frequency distribution	Mr. Inderpal Singh
7	Hypothesis testing — t test and z test	Dr.Sumedha Dutta
8	Pivot Table	Dr.Deepak Dagar
9	Macros	Dr.Deepak Dagar
10	Working in SPSS: Entering data, variable labels, value labels	Ms. Anu Goyal
11	Descriptive Analysis & Crosstabulation	Dr. Shruti Yadav
12	Chart Creation Basics - box plot, histogram, PP plots	Mr. Inderpal Singh
13	Correlation & Regression	Ms.Preeti Bansal
14	Systematic Literature Review	Dr. Shilpee Aggarwal
15	T-test & ANOVA	Dr. Bharti Chaudhary
16	Mann Whitney Test, Wilcoxon test	Dr.Sumedha Dutta
17	Correlation & Regression	Dr. Usha Nair
18	Exploratory Factor Analysis	Dr. Bharti Chaudhary
19	Research writing: Introduction	Dr. Bharti Chaudhary
20	Research Design: Concept & Types	Dr. Sumedha Dutta
21	Ethics of Research writing	Dr. Shilpee Aggarwal



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Objectives of the Course:

- Application of Research Methodology
- Understanding of different types of data
- Able to describe, predict & make informed decisions
- Application in the specific areas of marketing, human resources, finance, and operations.
- Quantitative Data Analysis

Course content:

This course is organized into 21 sessions as per details below:

Course Outcomes:

- Students will be able to analyze and work with large data sets and make meaningful interpretations.
- Students will also be able apply correct statistical tests on different types of data
- Students will be able to add value to their research projects.
- With advance knowledge of Excel & SPSS, they can easily start their careers as research analyst or data analyst.

The certification course was conducted from March 19, 2022 to May 14, 2022 via the online platform of Google Meet. The duration of the course was 31.5 hours along with the two MCQ quizzes & 21 assignments. Each class consists of a one & a half hour session along with the videos, a practice exercise, a quiz, and a reference guide. Classes were scheduled for thrice a week.



Following is the criteria based on which students are eligible for the certification:

- Attending regular classes using laptop.
- Submission of all Assignments.
- Participation in all Quizzes.
- Submission of the feedback form on timely basis.

Total Sessions: 21 of 1.5 hour each

Total number of enrolled students: 77

Total number of students certified: 31



Glimpses of the Event

The screenshot displays a Google Meet session with the following participants in a 4x9 grid:

Shikhar Upadhyay	KUSHAAN KATARA	Hasrat Jaspal	NAMAN KAUR 20...	Sharmila Singh	Aishwarya Lekhw...	KRITI HURIA	HARSHITA KHAN...	BHAVYA SARIN
MUSKAN YADAV	Pinky Saini	leena chaudhary	SAKSHAM JAIN	Chanchal Tiwari	Vaishnavi Saxena	RONIT SINGH SE...	PRIYANSHU GUPTA	Harshit Sadhwani
ABHISHEK KUMA...	manisha sarma	ISHIKA GARG	AASHISH NUKHRA	SANSKAR AGGA...	ALAN SEBASTIAN	GAGANDEEP KA...	Megha Singh	KINSHUK SHARMA
HARSHITA GHAI	Nishtha Yogi	ANISH SACHDEVA	You can't unmute someone else	Akash Tewari	Vishesh Tiwari	TANNU -	5 others	You

The interface includes a 'Track Attendance' button, a toolbar with icons for mute, video, chat, and more, and a Windows taskbar at the bottom showing the time as 16:19 and the date as 3/24/2022.



meet.google.com/uuc-csxy-noo

00:00:23

H Harshit Sadhwani	H HARSHITA KHA...	C Chanchal Tiwari	Hasrat Jaspal	P PRIYANSHU GUP...	Vaishnavi Saxena	H HARSHIT WADH...	R RASHIKA BANSAL
G Gautam Sharma	M Mohak MITTAL	K KUSHAAN KATA...	A Akash Tewari	T TANNU -	V Vibha Bhalla	G GAGANDEEP KA...	T TUSHAR TUTEJA
Pankaj Vimal	A AASHISH NUKH...	leena chaudhary	B BHAVYA SARIN	A ANISH SACHDEVA	Y YASH TANWAR	14 others	You

13:05 | uuc-csxy-... Track Attendance

2022-05-08T07_34....csv Show all

39°C Haze

meet.google.com/hyv-vhzy-iqz

15:54 | hyv-vhzy-iqz

You're presenting to everyone Stop presenting

Purpose of the Literature Review

- 1) Identifies areas of prior scholarship
- 2) Describe the relationship of each source to the others that you have examined
- 3) Identifies ways to interpret, and new light on any gaps in, previous research
- 4) Places each source in the context of its contribution to the understanding of the specific issue, area of research, or theory under review
- 5) Points the way forward for further research

Hasrat Jaspal	P PRIYANSHU GUPTA	K KUSHAAN KATARA
NAMAN KAUR 203...	H HARSHITA KHAND...	A Akash Tewari
H Harshit Sadhwani	A Akash Tewari has joined	

15:54 | hyv-vhzy-iqz

39°C Haze