Maharaja Agrasen Institute of Management Studies
(A Unit of Maharaja Agrasen Technical Education Society)
Affiliated to GGSIP University; Recognized u/s 2(f) of UGC
Recognized by Bar Council of India; ISO 9001: 2015 Certified Institution
Sector 22, Rohini, Delhi -110086, India; www.maims.ac.in

DEPARTMENT OF BUSINESS ADMINISTRATION, MAIMS
Under the Aegis of IQAC and
In Association with PCJSM, Maharaja Agrasen University, Baddi, HP
Skill Enhancement Certificate Course
"Data Analytics-2.0"
July - September 2021
Valedictory Program: 21st September 2021

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 skilled professionals, who understand the research methodology, statistical techniques, data presentation & can work on statistical software. Thus, it encouraged the faulty team of MAIMS to design a skill enhancement course in data analytics using Excel & SPSS for budding business leaders.

This Certification Course was the initiative taken under the aegis of IQAC in association with ThinkQuest Club & PCJ School of management, MAU, BAddi, HP. The credit for this ambitious initiative goes to Prof. (Dr.) Ravi Kumar Gupta, Director - MAIMS and Prof. Vijay Kr. Khurana (HOD, Business Administration).

The course was started for all the college students including MAIMS students, research scholars, and teachers across the country. The primary 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 76 students enrolled in the course.

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It was a great learning experience for the students as well as for the faculties. The sessions were conducted by Prof. (Dr.) Vijay Kumar Khurana, Dr. Bharti Chaudhary, Dr. Shilpee Aggarwal, Dr. Sumedha Dutta, Dr. Parul Kumar, Dr. Deepak Dagar, Ms. Preeti Bansal, Mr. Inderpal Singh, and Mr. Nakul Anand.

The certification course was conducted from July 13, 2021 to September 3, 2021 via the online platform of Google Meet. Total course duration was 31.5 hours, which was divided in 21 sessions of one & half hour each. Every session was followed with a practical assignment. After the completion of around one week (3 sessions), a feedback form was floated to get the viewpoint of the students. 7 such feedback forms were filled by the participants. Overall feedback was also conducted at the end. Feedbacks have been highly encouraging.

The participants were assessed based on the assignment submitted, MCQ test on Excel and MCQ test on SPSS. Certificates were given only to such students who successfully qualified on the basis of four parameters, namely, attendance, feedback forms, assignments, and quizzes. During the valedictory program on 21st Sep 2021, 38 participants were awarded which certificate of completion. Out of which 10 participants were awarded with certificate of excellence, including 4 participants who were awarded with cash prize of Rs.500/- each. List of such participants is given in subsequent pages.

The credit for this ambitious initiative goes to Prof. (Dr.) Ravi Kumar Gupta, Director - MAIMS & Prof. Vijay Kr. Khurana (HOD, Business Administration). Their constant support and encouragement helped in successful execution of this certificate course.

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*Convener – Dr. Bharti Chaudhary, Associate Professor - Business Administration
** Co- Convener- Dr. Shilpee Chaudhary, Associate Professor - Business Administration

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About the Certificate 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 are 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 field by demonstrating and utilizing the skills learnt through this course.

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 are looking for skilled professionals, 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.

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 like marketing, human resources, finance, and operations etc.
- Conducting Quantitative Data Analysis

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Course Contents:

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

S. No.	Topic(s)	Resource Person(s)
1	Types of Data- Nominal, ordinal, ratio & interval	Prof. V.K. Khurana
2	Filter -N umber and Text filters, data filters	Ms. Shilpee Aggarwal
3	Sorting -Sort by colou r, reverse list and randomize list	Dr. Bharti Chaudhary
4	Conditional Formatting — Manage, rules, data bars, colour scales	Mr. Inderpal Singh
5	Use of Graphs — trend lines, Histogram, multiple axis graph	Dr. Bharti Chaudhary
6	Cleaning Data in Excel - removing, use of min & max	Dr.SumedhaDutta
7	Data Screening through Descriptive Analysis	Mr. Nakul Anand
8	Tables — Structured references, table styles and quick analysis, duplicates	Ms. Preeti Bansal
9	Macros	Dr.DeepakDagar
10	Frequency distribution	Ms. Shilpee Aggarwal
11	Pivot Table	Dr.DeepakDagar
12	Hypothesis testing — t test and z test	Dr.Sumedha Dutta
13	ANOVA	Mr.Nakul Anand
14	Correlation & Regression	Ms.Preeti Bansal
15	Working in SPSS: Entering data, variable labels, value labels	Mr.Nakul Anand
16	Chart Creation Basics - box plot, histogram, PP plots	Mr. Inderpal Singh
17	Descriptive Analysis & Crosstabulation	Ms. Shilpee Aggarwal
18	Mann Whitney Test, Wilcoxon test	Dr.Sumedha Dutta
19	T-test & ANOVA	Dr. Bharti Chaudhary
20	Correlation & Regression	Ms. Preeti Bansal
21	Exploratory Factor Analysis	Dr. Bharti Chaudhary

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Planned 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.

Course Implementation:

The certification course was conducted from July 13, 2021 to September 3, 2021 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.

Assessment & Certifications:

Following are 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.

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Top Performers of the Certificate Course

1.

Ms. Neelam Basera
Research Scholar
G. B. Pant University
Pantnagar, Uttarakhand
Aggregate Score: 80%
(Cash Prize Rs. 500/-)

2.

Ms. Sakshi Garg
BBA Student
MAIMS
Aggregate Score: 79.0 %
(Cash Prize Rs. 500/-)

3.

Ms. Smriti Shukla
Research Scholar
Symbiosis International
University
Aggregate Score: 77 %
(Cash Prize Rs. 500/-)

4.

Ms. Esha Gulati
BBA Student
MAIMS
Aggregate Score: 77.6 %
(Cash Prize Rs. 500/-)

5.

Ms. Lopamudra
Bhattacharjee
Research Scholar
University of Calcutta
Aggregate Score: 76 %

6.

Ms. Ritika Taneja
BBA Student
MAIMS
Aggregate Score: 74.6 %

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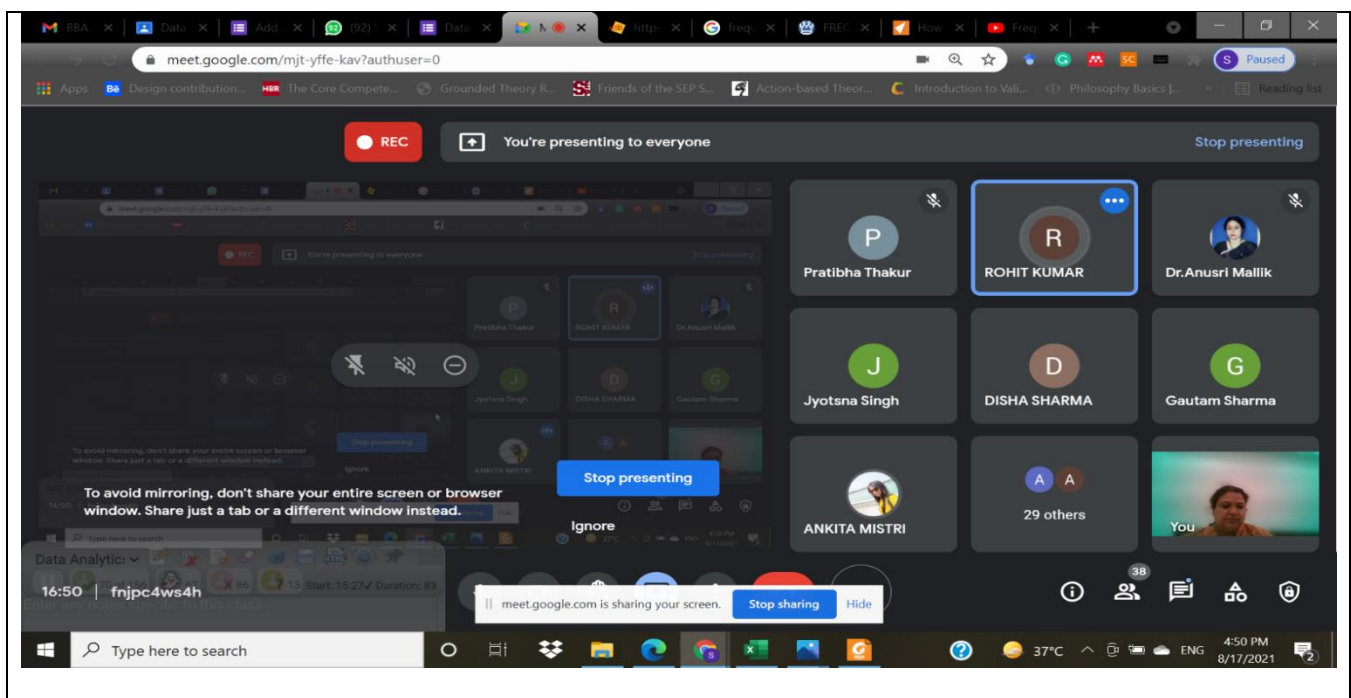Sector 22, Rohini, Delhi -110086, India; www.maims.ac.in

7.

Dr. Anusri Mallik
Faculty
IGNOU
Aggregate Score: 76 %

8.

Ms. Aditi Goel
BBA Student
MAIMS
Aggregate Score: 72 %

9.

Dr. Pratibha Thakur
Faculty
Kalindi College, DU
Aggregate Score: 73.5 %

10.

Ms. Anshika Batla
BBA Student
MAIMS
Aggregate Score: 70%

Glimpses of the Certificate Course Classes & Valedictory Session

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