



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

Tel. Office: 8448186947, 8448186950 www.maims.ac.in

Skill Enhancement Certificate Course Introduction to Data Analytics (using Excel) 16th August-31st October, 2019

Report

Data Analytics courses will give insights into how to apply data and analytics principles in business. Learning analytics, data visualization, and data science methodologies through this course will make students capable of driving better business decisions and ROI. It will help them in generating meaningful results from the data by the application of various statistical methods with ease. Thus, it encouraged the seasoned faculty of MAIMS to design a skill enhancement course in data analytics using Excel for all the Students of MAIMS.

This Certification Course was the initiative of Department of Business Administration for 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 had been used to conduct various statistical tests and make an inference about the data. A total of 125 students completed the course. The course was of 30 hours, divided in 20 sessions of one & half hour each. Every session was followed with a practical assignment related to it. After the completion of the week (2 sessions), a feedback form was floated to get the viewpoint of the students. A total of 10 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. Parul Kumar, Dr. Bharti Chaudhary, Ms. Sumedha Dutta, Ms. Shilpee Aggarwal, Ms. Preeti Bansal, Mr. Inderpal Singh, and Mr. Nakul Anand. Certificates were given only to such students who successfully qualified all the four parameters, namely, attendance, feedback forms, assignments, and quizzes.



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The credit for this ambitious initiative goes to Dr. Manoj Verma (HOD, Business Administration) & his team, who worked under the able guidance of the Prof. M. K Bhat Director, MAIMS. Their constant support and encouragement helped in successful accomplishment of this program.

***Convener – Dr. Parul Kumar, Senior Assistant 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.

Excel had been used to conduct various statistical tests and make an inference about the data. Specifically, the course covered in-depth lessons for Introduction to Data Analytics, Data Analytics: Importance & overview, Types of Data Analytics, Descriptive Analytics, Predictive Analytics, Data Analytics Benefits: Decision-making, Data cleaning & preparation in Excel, Use of Graphs – trend lines, Histogram, multiple axis graph in Excel, Analyzing data with Pivot Table (Excel), Data Validation, Vlook & Hlook up, Frequency distribution, Analyzing data with Pivot Table (Excel), Frequency distribution, Hypothesis testing – t test and z test, Working with Distributions (Normal, Binomial, Poisson), Population and Sample Data, Normal Distribution, Hypothesis Testing, Advance Excel functions & Interpretation of Data. 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.



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Objectives of the Course:

- Basics of Data analytics using Excel
- 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.

Course content:

This course is organized into 20 sessions as per details below:

Lec. No.	Topics	Resource Person
1	Introduction to Data Analytics	Prof. V.K. Khurana
2	Data Analytics: Importance & overview	Ms. Shilpee Aggarwal
3	Types of Data Analytics	Dr. Bharti Chaudhary
4	Descriptive Analytics	Mr. Inderpal Singh
5	Predictive Analytics	Ms. Preeti Bansal
6	Data Analytics Benefits: Decision-making	Ms. Sumedha Dutta
7	Data cleaning & preparation in Excel	Mr. Nakul Anand
8	Use of Graphs – trend lines, Histogram, multiple axis graph in Excel	Dr. Bharti Chaudhary
9	Analyzing data with Pivot Table (Excel)	Dr. Parul Kumar
10	Data Validation	Ms. Shilpee Aggarwal
11	Vlook & Hlook up	Ms. Sumedha Dutta
12	Frequency distribution	Mr. Nakul Anand
13	Analyzing data with Pivot Table (Excel)	Ms. Preeti Bansal
14	Frequency distribution	Mr. Nakul Anand
15	Hypothesis testing – t test and z test	Mr. Inderpal Singh



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16	Working with Distributions (Normal, Binomial, Poisson), Population and Sample Data	Ms. Shilpee Aggarwal
17	Normal Distribution	Dr. Sumedha Dutta
18	Hypothesis Testing	Dr. Bharti Chaudhary
19	Advance Excel functions	Ms. Preeti Bansal
20	Interpretation of Data	Dr. Parul Kumar



Maharaja Agrasen Institute of Management Studies

Department of Business Administration

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, they can easily start their careers as research analyst or data analyst.

The certification course was conducted from August 16, 2019 to September, 30, 2019 in MAIMS campus. The duration of the course was 30 hours along with the two MCQ quizzes & 20 assignments. Each class consists of a one & a half hour session along with the videos, a practice exercise, a quiz, and a reference guide. The course was conducted in 2 batches because of 125 students. The classes of 1st Batch were conducted on Monday, Wednesday and Friday and the classes of 2nd Batch were conducted on Tuesday, Thursday and Saturday. All the classes were offline. The timings of the classes were 3:00 pm to 4:30 pm. The valedictory of the course was conducted on 31st October 2019.

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: 20 of 1.5 hour each

Total number of enrolled students: 125

Total number of students certified: 125

List of Top Performers of the Certificate Course

Name	Institute
NIYATI KHULBE	MAIMS
HARSH AUGUSTINE KUJUR	MAIMS
APOORVA SHARMA	MAIMS



Maharaja Agrasen Institute of Management Studies
Department of Business Administration