

**Certificate in Statistical Data Analysis Using SPSS**

DEPARTMENT OF EDUCATION School of Social Sciences and Humanities. University of Management and  
Technology, Lahore

## **Introduction**

If you are stuck somewhere between data and analysis techniques as mid-career researcher or you are a novice, worried about your research work due to lack of skills in data analysis, this course on data analysis through SPSS is designed for you. This will provide you training on use of the Statistical Package for Social Sciences (SPSS) software that is widely used in statistical analysis in social sciences. During the course, you will proceed from basic concepts of SPSS to higher level techniques of data analysis using SPSS, thus improving your skills in data analysis.

## **Learning outcomes:**

After successful completion of the course, the participants will be able to;

- use the basic functions of SPSS
- prepare data file
- Enter data
- Clean data
- Apply parametric and non-parametric statistical tests
- Interpret the output and graphs

## **Eligibility for Admission**

There is no strict eligibility criteria, however, the participants are expected to have bachelors or masters degree. The working knowledge of computer and quantitative research will be sufficient for the course.

## **Instructional strategy**

The main part of the course will be carried out in lab. So the teaching will be a combination of theory (lecture) plus practice (in computer lab). In addition to this the other teaching methods including lectures, discussions, assignments, videos and quizzes will also be used.

## **Assessment Mechanism**

UMT rules employed at master/BS levels will be followed for students' assessment and examination: quiz, written assignments, presentations, field project, final assessment etc.

## **Award of Certificate**

The award of certificate to the students will be subject to: A) Securing minimum 2 CGPA or 60% marks as per rules of UMT B) Submission of allocated assignment C) 80% attendance in course.

**Class schedule: two days a week Friday and Saturday** (schedule can be adjusted as per discussion with students)

**Class;** 4.00 hours per day

**Contact hours:** 48

**Time:** 3:00 to 7.00pm ( depend on availability of lab)

## **Fee**

UMT Faculty and Participants: 12,000/- PKR

Other university Students: 15,000/- PKR

Professionals: 20, 000/- PKR

## **Modules**

The course will be divided into six modules.

1. Introduction to SPSS
2. Basic statistics ( type of data and types of scales)
3. Exploratory data analysis ( frequency, graphs, mean and SD)
4. Testing of hypothesis ( inferential statistics)
5. Multivariate analysis
6. Mediation and moderation analysis ( regression)
7. Interpretation and presentation of data

## **Contact Details**

<b>Prof Dr Mumtaz Akhter</b> Dean SSSH Phone: +92 42 111300 200 Fax: +92 42 5184789 Email: ssh.dean@umt.edu.pk	<b>Prof. Dr Rizwan Akram Rana</b> Chairperson Department of Education UAN: +92 42 111 300 200. Tel: +92 42 35212801-10 (ext: 3542) rizwan.akram@umt.edu.pk	<b>Dr. Fariha Gull</b> Associate Professor Department of Education UAN: +92 42 111 300 200. Tel: +92 42 35212801-10 (ext: 3527) fariha.gul@umt.edu.pk
--	--	--