BTE 41333: Data Analysis for Research

Level: 4000	Number of Credits : 03

Course Description

This course is designed to provide knowledge pertaining to analyze data, interpret the results, and present the findings. It discusses key concepts of data analysis while providing practical exposure to use of techniques and software to analyze data, interpret results, and draw conclusions on various business phenomena.

Intended Learning Outcomes

At the end of the course, the student will be able to;
- Describe data analysis techniques
- Determine the most appropriate data analysis techniques.
- Apply statistical software to analyse data and derive appropriate statistics,
- Present and interpret the results derived from qualitative and quantitative data analysis techniques.

Teaching/Learning Methods

Lectures, seminars, group discussions, and lab-sessions

Methods of Assessment

| In-course Assessments | : 30% |
| End Semester Examination | : 70% |

Course Contents
1. Overview of quantitative data analysis
2. Data preparation
3. Data analysis techniques
4. Hypothesis testing
5. Univariate data analysis
6. Bi-variate data analysis
7. Multivariate data analysis
8. Overview of qualitative data analysis
9. Qualitative data analysis techniques
10. Interpretation and report writing

Recommended Readings
1. Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E., *Multivariate Data Analysis*, Cengage Learning/ The latest edition
2. Matthew, B. M., Huberman A. M., and Saldana, *Qualitative Data Analysis: A Methods Sourcebook*, SAGE Publications, Inc/ The latest edition
3. Field, A. *Discovering Statistics using IBM SPSS Statistics*, Sage Publication/ The latest edition

4. Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. *A primer on partial least squares structural equation modeling (PLS-SEM)*, Sage publications/ The latest edition
5. Byrne, B. M. *Structural Equation Modelling with Amos: Basic Concepts, Applications, and Programming*, Routledge/ The latest edition