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| Programme | : MBA (Financial Services) |
| Course Code | : FSC211 |
| Course Title | : Quantitative Techniques and Research Methodology |
| Number of Credits | : 4 |
| Effective from AY | : 2020-21 |

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| Need of the Course | :To familiarize students with the meaning and importance of carrying out successful research, its wide applications in various fields of study and the importance of making calculated decisions in the present globalised business world. | |
| Description of the Course | :This course is designed to motivate the students to identify research gap, identification and collection of relevant data (uni-variate, bi-variate, and multi-variate data sets) and finally analysis of data using various statistical techniques starting from reliability/normality testing, organising, describing, relationship and prediction, and testing the significance. Students are also familiarized with intellectual honesty and ethics while preparing a research report. | |
| Objectives of the Course | 1. To understand the significance of research. 2. To develop research questions, objective and related hypothesis. 3. To learn how to process the data and interpret results. | |
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| Course Content | | |
| Unit 1 | : Introduction to Research | 8 Hours |
| Steps in the process of Research – Types of Research – Identification of Research Gap –Develop Research Questions, related Objectives and Hypothesis – Importance of Data (primary/secondary) identification, collection and analysis. [<i>Self-study of reading relevant research papers</i>]. | | |
| Unit 2 | : Data Analysis-I | 16 Hours |
| Uni / Bi / Multi Variate Data – Organising sample data – Describe the nature of sampling distribution – Analysing relationships and prediction (Predictive Analytics) – Application of probability and probability distributions (Binomial / Poisson / Normal). [<i>self-study of reading relevant research papers</i>] [<i>Includes practical problems</i>]. [<i>Using Ms-Excel</i>] | | |
| Unit 3 | :Data Analysis-II | 18 Hours |
| Importance of Theory of Estimation and Testing of Hypothesis (Large and Small Sample Testing, Non-Parametric Testing). [<i>self-study of reading relevant research papers</i>] [<i>includes practical problems</i>] Multi-variate data analysis using Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM). [<i>Self-study of reading relevant research papers</i>]. [<i>Using Ms-Excel</i>] | | |
| Unit 4 | :Report Writing | 6 Hours |
| What constitutes a research report – Types of reports – Intellectual honesty and ethics (Plagiarism, Cheating, Fabrication and Falsification, Multiple Submission, Misuse of Academic Materials, Complicity in Academic Dishonesty).[<i>Self-study of reading relevant research papers</i>]. | | |
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| Pedagogy | <p>The following methods and forms of study are used in the course</p> <ul style="list-style-type: none">• Lectures, Case Studies and Practicals.• Self-study on carrying out literature review and preparing content analysis.• Self-study of solving home assignments using MS Excel and other statistical software, working with psychometric and econometric data and also doing research based on the web. |
| Reference/Readings | <ol style="list-style-type: none">1. Chawla, Deepak and Sondhi, Neena. Research Methodology: Concepts and Cases. 2/e, 2016, Vikas Publishing House Private Ltd.2. Cooper, Donald R and Schindler, Pamela S, Business Research Methods, 9/e, 2006, Tata McGraw Hill.3. Krishnaswami, O. R, Ranganathan. M and Harikumar P. N. Research Methodology. 1/e, 2016. Himalaya Publishing house.4. Gupta, S.C. Fundamentals of Statistics. 17/e, 2019. Himalaya Publishing House.5. Aizel, Amir D and Sounderpandian, Jayavel. Complete Business Statistics, 6/e, 2019. Tata McGraw Hill. |
| Course Outcome | <p>Upon completion of the course the students will be able to:</p> <p>CO1: Successfully complete Content Analysis.</p> <p>CO2: Identify and collect relevant data and use appropriate tool for analysing the data.</p> <p>CO3: Ensuring intellectual honesty and ethics while preparing research report.</p> |