A Three days National Workshop was conducted on Applied Statistical Methods Using SPSS & AMOS in Educational Research to equip researchers with basic and advance data analysis techniques. The resource persons were Dr. G. Shanmugasundaram, Central University, Pondicherry, Dr. K. Thiyagu, Central University, Kerala and Dr. Alma from Stella Matutina college of Education. There is a need for advancement of research skills to meet the demands of quality in Educational research. The participants were trained to make the data ready for editing, transformation, cleaning and analysis using SPSS and AMOS. The workshop also helped in learning how to interpret and report the findings. The topics covered included Data tabulation and Filtration, Descriptive statistics, Parametric and non-parametric tests, Simple linear and Multiple regression analysis, Univariate and Multivariate analysis, Factor Analysis, Discriminant Analysis, AMOS Graphics, Structural equation modeling and Types and Path analysis Models.