Data Analytics *Training* Manual

Training Manual for Studio-Based Learning

What is Studio-Based Learning?

Studio-Based Learning (SBL) is an educational approach that emphasizes hands-on, project-centered activities where students engage in the design, creation, and critique of their work. This method is commonly used in disciplines such as art, architecture, design, and engineering, but can be adapted to various fields. In this method, students typically work on projects, exercises, and collaborative activities in a dedicated studio space rather than traditional classroom settings

"Studio-based learning is an educational approach that emphasizes active, hands-on learning within a studio environment. "

Syllabus

Foundation of Data analytics
○ Introduction to Data Analytics ○ Using Excel for Data Analytics.

Descriptive Analytics

- Visualization and exploring data
- Introduction to Probability
- Sampling and Estimation
- Confidence Intervals
- Hypothesis Testing
- Analysis of variance
- Correlation Analysis

Predictive Analytics

- Trend line and Regression analysis
- Simple linear regression
- Multiple linear regression
- Logistic regression
- Decision tree
- Clustering
- Spreadsheet Modeling and Analysis
- Monte Carlo simulation and risk analysis

Prescriptive Analytics

- Linear Optimization
- Applications of linear Optimization
- Integral Optimization
- Decision Analysis
- Stochastic Models
- Six Sigma

Let's take one step at a time