Laboratory Plan

(OMS)

Lab1

Introduction to crystal ball and its applications

Activities

- Installation of the software
- Understanding the software

Lab2

Fitting probabilities to the given data

Activities

- Snap fit tool application
- Assigning probability distributions

Lab2

Selection of cell phone plan on the basis of forecasted cost

Activities

- Data analysis
- Assigning assumptions
- Development of Mathematical model

Lab3

Forecasting the cycle time of a machining process

Activities

- Data analysis
- Assigning assumptions
- Development of Mathematical model

- Analysis of forecasting report

Lab4

Analysis of a manufacturing assembly process

Activities

- Data analysis
- Assigning assumptions
- Development of Mathematical model
- Analysis of forecasting report
- Sensitivity analysis

Lab 5

Exploring the analysis tools of crystal ball

“Evaluation of Reliability of a spring”

Activities

- Tornado Chart
- Spider Chart
- Scenario Analysis
- Correlation matrix

Lab 6

Inventory Control System

- Decision Variables
- Decision Matrix
- Cell preferences