A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 0
Lab Hours/Week: 0
OJT Hours/Week: *
Prerequisites: None
Corequisites: None
MnTC Goals: None

This course provides an understanding of the use of statistical and quantitative models to effectively manage and utilize information for the purpose of business decision making. Concepts covered include data analysis, probability theory, decision making models, statistical inference and estimation, hypothesis testing, analysis of variance, regression analysis, time series analysis, optimization models, and simulation. Competency in Microsoft Excel is required.

B. COURSE EFFECTIVE DATES: 05/07/2016 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Analysis of Variance, Regression & Time Series
2. Apply Models to Business Decision Making
3. Data Analysis & Probability Theory
4. Decision Making Models
5. Hypothesis Testing
6. Optimization Models and Simulation
7. Statistical Inference & Estimation
8. Understand Use of Statistical and Quantitative Models

D. LEARNING OUTCOMES (General)

1. Apply computer simulation models in the business environment
2. Apply the basic concepts and applications of probability theory
3. Evaluate and apply the concepts behind decision making under uncertainty
4. Apply the concepts behind sampling and statistical inference
5. Apply optimization modeling techniques, including linear programming
6. Apply the concepts relating to the relationship between variables, including the use of regression analysis, time series analysis, and forecasting
7. Evaluate, analyze, and use the information in data sets

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus
G. SPECIAL INFORMATION

None noted