A. COURSE DESCRIPTION

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

In this course, students will learn to transform, organize, and visualize data with spreadsheet tools such as Excel. They will also query data from a relational database using Structured Query Language (SQL) and create data presentations using a business intelligence tool like Tableau.

This course will use Cisco Networking Academy training materials for Data Analytics Essentials.

B. COURSE EFFECTIVE DATES: 05/02/2024 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Gather data.
2. Investigate and clear data.
3. Transform data with Excel.
5. Implement relational databases and SQL basics.
6. Implement structured queries.
7. Prepare data with presentations with Tableau.
8. Understand ethics and bias in data.
9. Create and present a portfolio based on a data visualization project.

D. LEARNING OUTCOMES (General)

1. Explain how data analytics projects are organized.
2. Perform initial data gathering and investigation using a spreadsheet.
3. Use Excel functions and formulas to transform data for analysis.
4. Obtain appropriate data for analysis.
5. Perform statistical analysis on data.
6. Formulate a structured query to extract & combine data from multiple tables. © 2022 Cisco and/or its affiliates. All rights reserved.
7. Formulate a structured query using SQL.
8. Create visualizations using Tableau.
9. Explain the ethical issues and biases that can affect data analytics.
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted