TROCAIRE COLLEGE


# PROGRAM-LEVEL - STUDENT LEARNING OUTCOMES
## – Data Analytics- A.A.S.
## Division of Arts and Sciences

**Program Director:** Sanjay Gilani **Date Updated: Fall 2020**

| PLAN |
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| **EXPECTED PROGRAM LEARNING OUTCOME** |
| **All students completing this program are expected to have achieved the following learning objectives:** |
| **OBJECTIVE 1:** At the end of the program, the student will be able to describe the purpose, potential uses, and methods of data collection and analyses in a variety of industries. |
| **OBJECTIVE 2:** At the end of the program, the student will be able to apply data mining methodologies. |
| **OBJECTIVE 3:** At the end of the program, the student will be able to apply programming to the extract, transfer, and load (ETL) process. |
| **OBJECTIVE 4:** At end of the program, the student will be able to demonstrate competency with data science practices and methodologies using the Cross-Industry Standard Process for Data Mining (CRISP_DM). |
| **OBJECTIVE 5:** At the end of the program, the student will be able to use common data analysis and management tools (e.g., SQL, DBMS applications, etc.) demonstrate proficiency designing, creating, querying and managing databases for analytic processing. |
| **OBJECTIVE 6:** At the end of the program, the student will be able to validate patterns and relationships in large data sets using statistical tools. |
| **OBJECTIVE 7:** At the end of the program, the student will be able to create and modify customizable tools for data analysis and visualization per the evaluation of characteristics of the data and the nature of the analysis. |
| **OBJECTIVE 8:** At the end of the program, the student will be able to demonstrate ability to manage a project from the design stage to the final report. |
| **OBJECTIVE 9:** At the end of the program, the student will be able to work collaboratively with team members in assembling, analyzing, and reporting data findings. |
| **OBJECTIVE 10:** At the end of the program, the student will be able to produce clear, written reports of data findings. |