DATA ANALYTICS

Learning Outcomes

Master of Data Analytics (M.D.A.)

1. **COMMUNICATE:** Graduates will be able to effectively communicate technical knowledge, including ideas, data analysis, findings, or decision justification in written formats in a manner appropriate to the audience.
2. **APPLY/CREATE:** Graduates will be able to analyze large data sets to support data-driven decision making.
3. **KNOW:** Graduates will demonstrate their understanding of technologies used to develop, optimize, and deploy large-scale data analytics techniques.
4. **THINK:** Graduates will be able to discriminate between descriptive, diagnostic, predictive, and prescriptive analytics and the techniques used in each.
5. **PROFESSIONAL PRACTICE:** Graduates will demonstrate knowledge of and ability to practice the professional standards of engineering and professional behavior.

Master of Science (M.S.)

1. **COMMUNICATE:** Graduates will be able to effectively communicate technical knowledge, including ideas, data analysis, findings, or decision justification through oral presentations and writing.
2. **APPLY/CREATE:** Graduates will be able to formulate valid research questions and methods of inquiry to further the discipline of analytics and its application.
3. **KNOW:** Graduates will demonstrate understanding, and application in research, of machine learning and statistical analysis techniques.
4. **THINK:** Graduates will be able to discriminate and determine the application of descriptive, diagnostic, predictive, and prescriptive analytics, and the techniques used in each, to their research problems.
5. **PROFESSIONAL PRACTICE:** Graduates will demonstrate knowledge of and ability to practice the professional standards of analytics research and professional behavior.