

# DATA ENGINEERING, MS

## LEARNING OUTCOMES

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1. Design, implement and evaluate the use of analytic algorithms on sample datasets.
2. Explain how a machine-learning model is developed for and evaluated on real world datasets.
3. Design and execute experimental data collection and processing, and present resulting analyses using best practices in human-centered data communications.
4. Apply and customize analytics, systems and human-centered techniques to application-specific data engineering requirements and objectives.
5. Identify tradeoffs among data engineering techniques (analytics, systems and/or human-centered) and contrast design alternatives, within the context of specific data engineering application domains.
6. Survey, interpret and comparatively criticize state of the art data engineering research talks and papers, with emphasis on constructive improvements.
7. Organize, execute, report on, and present a real world data engineering project in collaboration with other researchers/programmers.