

MASTER'S PROJECT

MATH 8960

Course Description:

An applied project, designed and executed under the supervision of both a faculty and industry advisor. In the project the student will apply their mathematical and/or statistical skills to an applied problem. The student will present their results via a written report and oral presentation.

1 – 6 credits

Prerequisites:

Permission of faculty advisor and graduate program chair.

Overview of content and purpose of the course:

The purpose of this course is for students to complete an applied project under the supervision of both a faculty and industry advisor. This course will give students the opportunity to apply their learned mathematical and/or statistical skills in a real-world environment. This experience will benefit the students in their future jobs and job searches.

The objectives will vary depending on the nature of the project, however, in general, students will develop skills to:

- use mathematics to analyze a 'real-world' scenario or develop a solution to a 'real-world' problem
- collect, analyze, visualize, and interpret data.
- communicate their findings effectively via both written and verbal means.

Topics:

Topics will be specific to the individual project. As such, topics vary widely from project to project. For example, projects could include:

- developing a visualization solution to present data in a way that is useful to the company.
- developing a statistical time-series model to predict future trends.
- developing an optimization model to increase efficiency and reduce costs.

Methods:

There are no class meetings. Students work under the supervision of their advisors; individual meetings and guided study.

Student role:

Students are expected to interact with their advisors to discuss the project and to work independently towards completion of the project goals.

Textbook:

Research materials will be recommended according to candidate need, project focus, and related issues.

February 2016