

Development of models for bus fleet maintenance and replacement

Faculty advisor: Prof. Viliam Makis

The objective is to develop stochastic models for group and opportunistic maintenance as well as replacement of a fleet of buses in large organizations such as TTC, considering service requirements, budgeting constraints and other regulations. Several case studies will be analyzed and an extensive sensitivity analysis will be performed to study the impact of various parameters on replacement decisions.

Note: In addition to the listed topics, topics in the area of process/quality improvement, maintenance, reliability, production and inventory control are possible, interested students should contact Prof. Makis, e-mail: makis@mie.utoronto.ca.