DECISION SCIENCE (DSCI)

DSCI 294 | SPECIAL TOPICS IN DECISION SCIENCE
Units: 1-4 Repeatability: Yes (Repeatable if topic differs)
An overview and analysis of selected topics in decision science. The course may be repeated if the topic changes. Prerequisites may change depending on the topic.

DSCI 300 | PRESCRIPTIVE BUSINESS ANALYTICS
Units: 3 Repeatability: No
Core Attributes: Quantitative reasoning comp
Prerequisites: ITMG 100 and (MATH 130 or MATH 150 or MATH 151) and (ECON 216 or ECON 217 (Can be taken Concurrently))
Prescriptive business analytics focuses on helping decision makers solve complex business problems. Students develop skills necessary to define, analyze, and solve problems in all areas of business including operations, marketing, and finance. Students utilize spreadsheets to model, analyze, and develop solution alternatives for a variety of business problems. Among the tools students utilize are modeling, influence diagrams, decision trees, Monte Carlo simulation, optimization techniques, and sensitivity analysis.

DSCI 303 | OPERATIONS MANAGEMENT
Units: 3 Repeatability: No
Prerequisites: DSCI 300 and ITMG 100 and (ECON 216 or ECON 217) and (MATH 130 or MATH 150 or MATH 151)
Students employ a managerial perspective to develop a strategic view of operations and supply chain management in a wide range of contemporary contexts (with a primary focus on process management within and across organizations). Students develop critical skills and master material relating to the fundamental role played by operations in the competitive performance of an organization. Among the critical skills and areas of mastery students develop are process analysis, process design, process improvement, supply chain management, capacity planning & control, inventory management, quality planning, quality control, strategic improvement techniques and risk management. The course incorporates concerns for corporate social responsibility.

DSCI 494 | SPECIAL TOPICS IN DECISION SCIENCE
Units: 1-4 Repeatability: Yes (Repeatable if topic differs)
Prerequisites: MATH 130 or MATH 150 or MATH 151
An in-depth analysis of selected topics in decision science. The course may be repeated if the topic changes. Prerequisites may change depending on the topic.

DSCI 499 | INDEPENDENT STUDY
Units: 1-3
Prerequisites: MATH 130 or MATH 150 or MATH 151
Independent study including empirical research and written reports. A maximum of 3 units of independent study may be used to satisfy requirements for the major.