DECISION SCIENCE (DSCI)

DSCI 300 | PRESCRIPTIVE BUSINESS ANALYTICS
Units: 3  Repeatability: No
Prerequisites: ITMG 100 and (MATH 130 or MATH 150 or MATH 151) and (ECON 216 or ECON 217)
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. (Note: ECON 217, not ECON 216, may be taken concurrently if it is taken during the fall or spring semester, and it is the first attempt in ECON 217. If the first attempt in ECON 217 is unsuccessful then ECON 217 cannot be taken concurrently.).

DSCI 303 | OPERATIONS MANAGEMENT
Units: 3  Repeatability: No
Prerequisites: DSCI 300 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
Units: 1-3  Repeatability: Yes (Can be repeated for Credit)
Prerequisites: MATH 130 or MATH 150 or MATH 151
Topics of current interest in business administration. Course content and structure will differ depending on instructor. Consult your advisor for course description for any given semester. May be repeated once for credit.

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.