students with high academic achievement who are interested in enhancing their degree programs by pursuing individual research or study under the guidance of an ISQS faculty member.

4382. Internship in Information Systems and Quantitative Sciences (3). Prerequisite: Approval prior to employment. Permits students to apply the concepts, principles, and techniques learned in the classroom. Up to 3 hours of internships can be applied toward a degree program. Must be taken pass/fail.

4383. Special Topics in Information Systems and Quantitative Sciences (3). Prerequisite: Minimum cumulative 2.5 Texas Tech GPA. Examines specialized problems relating to information systems and quantitative sciences. May be repeated once for credit as topic varies.

4385. Strategic IT and Telecommunications Management (3). Prerequisite: Final semester or ISQS advisor approval. The design, management, and maintenance of information systems to provide strategic organizational advantage.

Graduate Courses

5330. Decision Theory and Business Analytics (3). Provides an overview of business analytics and examines normative and behavioral theories that drive managerial decision-making.

5331. Information Technology and Operations Management (3). Covers current topics in information technology and operations management and examines how to utilize them to gain competitive advantage.


5341. Big Data Strategy (3). Theory and practice of using data to create competitive advantage.

5343. Operations Management and Management Science (3). Prerequisite: ISQS 5345. Fundamentals of the operations management function from a management perspective with an emphasis on the creation of value through the integrated production and distribution of goods and services.

5345. Statistical Concepts for Business and Management (3). Applied statistics using the personal computer, with emphasis on proper presentation and interpretation of statistics in managerial settings. Topics include descriptive statistics, graphical methods, estimation, testing, regression, forecasting, and quality control.

5347. Advanced Statistical Methods (3). Discrete and continuous probability distributions, maximum likelihood, Bayesian methods, simulation, statistical methods for learning, prediction, and decision making. Uses calculus.

5348. Applied Distribution-Free Statistics in Business (3). Prerequisite: ISQS 5345 or consent of instructor. Distribution-free statistical techniques of inference from non-normal populations and tests of nonparametric hypotheses applied to business problems.

5349. Regression Analysis (3). Prerequisite: ISQS 5347. Foundations and major topics of regression analysis, model formulation, and methods to deal with standard and nonstandard regression applications in business.

5359. Individual Study in ISQS (3). Prerequisite: Consent of instructor. Directed individual study of advanced ISQS topics varying with the need of the particular student. Can be repeated for credit if subject matter is different.

5382. Internship in Information Systems and Quantitative Science (3). Prerequisite: Consent of instructor. Permits students to enhance their knowledge within their field of specialization through application of concepts, principles, and techniques learned in the classroom.

6337. Scripting Languages (3). Survey of current business analytics scripting languages.