Students in the Area of Information Systems and Quantitative Sciences (ISQS) train for and participate in the revolution in information technology that is changing business, personal behavior and social behavior throughout society. Coursework provides opportunities to gain expertise in technology innovation, business intelligence, web application development, data security, project management, systems analysis and design, and the business analyst communication role connecting technical Management Information Systems (MIS) personnel with functional area professionals. Upon graduation, undergraduates have accepted positions at industry leaders such as Apple, Google, Hewlett-Packard, National Instruments, PricewaterhouseCoopers, Sungard, USAA and many others.

Students in our M.S. in MIS program learn cutting-edge business analytics tools and processes that enable them to contribute immediately to companies' big data, business intelligence and business analytics needs. Ph.D. students receive world-class research training through their coursework. Recent Ph.D. graduates have taken jobs at universities such as Cleveland State University, University of Montana, University of Portland, University of Rhode Island, and Rochester Institute of Technology.

Students learn from ISQS faculty members who are award-winning teachers. In addition, our MIS faculty ranks among the most successful research faculty in the world. Over the past 10 years, the MIS faculty ranks 40th among universities worldwide for research published in the top-tier journals, including MIS Quarterly, Information Systems Research, Journal of Management Information Systems, and Journal of the Association for Information Systems, as well as Management Science and Organizational Behavior and Human Decision Processes.

EXCELLENCE IN INNOVATION

“Technological innovation is the cornerstone of improvements in the everyday lives of people in the United States and around the world. It propels increases in productivity, communications, information search, consumerism, literacy and quality of life. ISQS area coursework prepares students to be technology innovators who can make a lasting impact on people’s personal and professional lives.”

Glenn J. Browne, Ph.D.
Area Coordinator and Jerry S. Rawls Professor of Information Systems

EXCELLENCE IN BUSINESS INTELLIGENCE

“As organizations look for ways to find value in old and new data, the Area of ISQS gives students the tools, methods and concepts of business intelligence, which traces data from their sources to data warehouses to analytics and performance measurement. Business intelligence training is in great demand in industry as the amount of data available from consumers and suppliers grows exponentially and the need to make sense of the data increases commensurately. Knowledge of business intelligence enables our graduates to help boost the performance of organizations by enabling data-driven decision making.”

Donald R. Jones, Ph.D.
James C. Wetherbe Professor of Information Systems

EXCELLENCE IN WEB APPLICATIONS

“Web Application Development is the driving force behind the hundreds of thousands of apps available on smartphones, tablets and computers. The Area of ISQS provides training and hands-on experience in web application development, which enables students to develop rich user interfaces to connect consumers with suppliers of products and services. These connections add significantly to the experience of consumers using smart devices and to companies attempting to grow their enterprises.”

Jaeki Song, Ph.D.
Jerry S. Rawls Associate Professor of Information Systems
CURRICULUM OVERVIEW

The Area of ISQS provides coursework at the undergraduate level in Management Information Systems (MIS) and Operations Management (OM) and coursework at the graduate level in MIS, OM and Business Statistics. Overall, students in all ISQS programs learn how to use data for analytical decision making to improve short-term and long-term outcomes for both individuals and organizations. The MIS degree, in particular, has both technical and behavioral tracks to satisfy companies’ needs for technical expertise and all aspects of human-computer interaction.

ACADEMIC PROGRAMS

- Bachelor of Business Administration (B.B.A.) in Information Systems and Quantitative Sciences (concentrations in Business Systems Analysis, Telecommunications/Networking and Web Application Design are available)
- Master of Science (M.S.) in Management Information Systems
- Master of Business Administration (MBA) for Working Professionals
- IIBA Academic Certificate in Business Analysis *
- ISQS Undergraduate Certificate in MIS *
- Certificate in Business Analytics **
- Doctor of Philosophy (Ph.D.) in Business Administration (concentrations in Management Information Systems or Business Statistics)

*Undergraduate Certificate
**Graduate Certificate

SAMPLE COURSES

- Business Intelligence
- Mobile Application Development
- Business Systems Analysis
- Telecommunications Security Theory
- Advanced Linux Networking
- Project Management
- Strategic Information Technology Management
- Internet Programming
- Systems Analysis
- Systems Design
- Database Management Systems

CENTER FOR ADVANCED ANALYTICS AND BUSINESS INTELLIGENCE

The Center for Advanced Analytics and Business Intelligence (CAABI) promotes the study of business intelligence and research and teaching on topics such as big data, business analytics and statistics. The center hosts a Big Data Symposium every spring semester that attracts local, national and international participants and visitors.

CAABI provides students with the ability to leverage information in databases and data warehouses for improved knowledge discovery and decision making in areas such as customer relationship management, forecasting, fraud and waste detection, market segmentation, web traffic and e-commerce analysis, automated data and text mining, real-time targeted advertising and marketing, bioinformatics, medical informatics and genomics.

ISQS STUDENT ORGANIZATION

Association of Information Technology Professionals (AITP) | texastechnaitp.org

AITP was named the top student organization at Texas Tech University in both 2011 and 2012

For a complete list of organizations, visit undergrad.ba.ttu.edu/studentorgs.