

# INFORMATION SYSTEMS MANAGEMENT (INFOMGT)

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## **INFOMGT 7010 Data Visualization and Communication 3 Credits**

One of the skills that characterizes great business data analysts is the ability to communicate practical implications of quantitative analyses to any kind of audience member. Even the most sophisticated statistical analyses are not useful to a business if they do not lead to actionable advice, or if the answers to those business questions are not conveyed in a way that non-technical people can understand. This course provides a specialized focus on how to become a master at communicating business-relevant implications of data visualization analyses. The course content includes how to streamline data analyses and highlight their implications efficiently using visualizations. By the end of the course, students will be able to make effective visualizations that harness the human brain's innate perceptual and cognitive tendencies to convey conclusions directly and clearly. Additionally, students will gain experience in designing and presenting business "data stories" that use these visualizations, capitalizing on business-tested methods and design principles.

**Components:** Class

## **INFOMGT 7020 Data Driven Decision Making 3 Credits**

Sound business decision-making requires robust data. However, raw data can only go so far without effective interpretation and analysis to inform decision-making. Big data adoption in businesses has grown three-fold between 2015 and 2018. As more companies begin to realize the power of incorporating big data into business decision-making, working professionals will require the tools necessary to effectively adopt a real-world approach to data driven decision making. This course will guide students in becoming more data literate from an organizational perspective. Business and tech are becoming so intertwined that there's a growing demand for hybrid professionals. These professionals need to be able to think creatively, be digitally savvy, have a business understanding, and be comfortable with data. In this course, students will explore how emerging technology is likely to influence data analysis and modeling and discover how to develop their plan for deploying data-driven insights within their business.

**Components:** Class

## **INFOMGT 7110 Data Management and Ethics 3 Credits**

This course will engage students in activities and discussion related to the critical ethical issues arising from the widespread distribution of big data and information systems management in the Internet age. It blends historical perspectives on data with ethics and case examples to help students develop a workable understanding of current ethical issues in information systems management. Ethical concepts addressed in the course include: access and use of private versus public data sources; data ownership and proprietary rights; differences between secure, private, confidential, and open data; proper use versus the abuse and misuse of statistics, maps, and graphs; fallacious reasoning; deduction versus inference from data; bias versus objectivity in the interpretation of data; data falsification and cases of scientific fraud; and the proper referencing of sources versus plagiarism. Importantly, these issues will be addressed throughout the lifecycle of data - from collection to storage to analysis and application. Course assignments will emphasize application of ethical models and reflexivity on theory, giving students an in-depth exploration of ethical issues in information systems management. Students will be exposed to practical ethical challenges that they may face in their future careers in information systems management.

**Components:** Class

## **INFOMGT 7840 Capstone in Information Systems Management 3 Credits**

Students will draw upon and synthesize knowledge and skills learned throughout the program by applying it to a topic or case study as assigned. Capstone work (minimum 150 hours) will be completed in partnership with site mentor/supervisors. A substantive work project deliverable demonstrating summative application of coursework taken in the program will be expected. This course is the final course of the program.

**Components:** Independent Study

**Prereqs/Coreqs:** P. All required core courses in the program, as well as two courses from one of the elective areas