

# INFORMATION SYSTEMS (ISMG)

---

## ISMG 5050 - Intermediate Excel for Business (1 Credit)

Spreadsheet software remains one of the essential digital skills required by businesses. In this course, you will learn key Excel skills including creating charts/graphs, filtering information, using pivot tables to summarize data, mastering Excel functions including sumif, countif, and vlookup. Cross-listed with ISMG 3050. Max hours: 1 Credits.

Grading Basis: Letter Grade

Typically Offered: Fall, Spring.

## ISMG 5070 - Introduction to Tableau (1 Credit)

Tableau is a widely used business intelligence (BI) and analytics software that makes it easier for people to explore and understand data. This class introduces data management concepts and terminology, provides basic proficiency in analyzing and exploring data in Tableau. Students will transform raw data to meaningful visualizations and insights, create interactive dashboards and stories, and handle multiple data sources in Tableau. Cross-listed with ISMG 3070. Max hours: 1 Credit.

Grading Basis: Letter Grade

Typically Offered: Fall, Spring.

## ISMG 5080 - SQL Foundations (1 Credit)

Structured Query Language (SQL or "Sequel") is a special-purpose language designed for managing data in a relational database and is necessary for careers dealing with data across many business roles. This class introduces students to data management concepts and terminology. This class will prepare you to extract data from relational databases using SQL syntax shared by many types of databases, such as PostgreSQL, MySQL, SQL Server, and Oracle. Cross-listed with ISMG 3080. Max hours: 3 Credits.

Grading Basis: Letter Grade

Typically Offered: Fall, Spring.

## ISMG 5090 - Introduction to Python for Business (1 Credit)

Python is a high-level programming language used by companies like Google, Facebook, and JP Morgan to solve common business and decision problems. This course introduces the Python programming language and the Pandas data analysis package to enable students to write simple data manipulation and analysis programs. The course uses business applied cases and dataset to enable students to increase decision making efficiency and productivity. It introduces algorithmic thinking skills that are beneficial for every manager in today's data-rich economy and can also serve as a starting point for learning more advanced programming skills. Cross-listed with ISMG 3090. Max hours: 3 Credits.

Grading Basis: Letter Grade

Typically Offered: Fall, Spring.

## ISMG 5939 - Internship (1-3 Credits)

Supervised experiences involving the application of concepts and skills in an employment situation. Repeatable. Max hours: 9 Credits.

Grading Basis: Satisfactory/Unsatisfactory

Repeatable. Max Credits: 9.

## ISMG 6020 - Programming Fundamentals with Python (3 Credits)

This course is designed to provide a thorough introduction to Python and fundamental programming concepts like data structures, networked application program interfaces, files and databases. Principles of object-oriented programming and secure programming practices are demonstrated using programming constructs taken from the business domain. Students are required to design and create their own applications for data retrieval, processing, and visualization. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Recommended prerequisite: ISMG 6080 or equivalent database experience. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Fall, Spring.

## ISMG 6028 - Travel Study Topics (3 Credits)

Join your classmates in an international travel study course to understand the business operations of another culture. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Repeatable. Max hours: 9 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 9.

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

## ISMG 6060 - Analysis, Modeling and Design (3 Credits)

Provides an understanding and application of systems analysis and design processes. Students are exposed to system development life cycle (SDLC), structured systems analysis and design methods, object-oriented analysis and design methods, prototyping and commercial off-the-shelf package software approaches, and joint and rapid application development. Emphasizes the skills required for system analysts such as analytical, interpersonal, technical, fact-finding, and project management skills. Topics include data, process and object modeling, input-output and user interface design, and systems implementation and support. To provide an opportunity to develop these skills, an information system project is completed by a group of students. Students use a Case tool for their group project. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Fall.

**ISMG 6080 - Database Management Systems (3 Credits)**

The success of today's business often hinges on the ability to utilize critical information to make the right decisions quickly and efficiently. Transforming mountains of data into critical information to improve decision making is a skill every business decision maker must possess. This focus course covers the database design topics with a focus on enabling business decision making. Detailed topics include collecting, capturing, querying and manipulating data (using SQL and QBE) for simple to medium complex business applications. Commercial database products are utilized to demonstrate the design of database applications in management, marketing, finance, accounting, and other business areas. Students will be able to design and implement simple to medium complex database applications after successful completion of this course. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Fall, Spring.

**ISMG 6120 - Network Design and Analysis (3 Credits)**

Communication, knowledge sharing, and information acquisition within and between businesses are critical for long term strategic business success. Technological advancements are radically changing the way business communication and knowledge sharing are performed. This course will briefly examine the traditional concepts of local and wide area networks for reference purposes, but then will focus on how newer technologies are changing business practices. Traditional local and wide area network concepts that will be covered in this course include WiFi wide area networks, wireless local area networks, cellular networks, and additional supporting services. Newer technologies that will be covered include social computing, Internet of Things, and artificial Intelligence.

Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Spring.

**ISMG 6180 - Information Systems Strategy (3 Credits)**

Digital strategy is the application of digital technologies to business models to form new differentiating business capabilities. The course starts with the highlights of genesis and importance of IT in organizations, including the relationship between digital technology and competitiveness. Then, the development and management of an effective digital infrastructure are discussed. Realizing that the effective use of digital technology requires the alignment of competitive strategies, business processes, and applications, the course takes a top management perspective on the development of policies and plans that maximize the contribution of digital technologies to organizational goals. A broad overview of how systems support the operational, administrative, and strategic needs of organizations is covered. Cross-listed with BUSN 6610. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Fall, Spring, Summer.

**ISMG 6220 - Business Intelligence Systems and Analytics (3 Credits)**

This course covers business intelligence, analytics, and artificial intelligence technologies and is organized around three types of analytics that are enabled by those technologies: descriptive, predictive, and prescriptive analytics. The theme of artificial intelligence runs throughout the course from business intelligence, to machine learning and deep learning as applied in areas such as computer vision, autonomous vehicles, and robots. The topics will be discussed using concepts and theory, business cases and applications, and hands-on analysis or model building using datasets available in the public domain, with the hands-on analysis and model building being the focus of the course. Students will use a leading BI software and a cloud computing platform to perform analysis and build machine learning models. Note: The recommended prerequisite for this course is ISMG 6080. If you are familiar with SQL and have worked with databases in the past, you satisfy the prerequisite requirement for this course. Cross-listed with BUSN 6812. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Fall, Spring.

**ISMG 6340 - Cloud Computing Concepts, Tools, and Security (3 Credits)**

This course provides an introduction to cloud computing concepts, capabilities, and scenarios where cloud computing technology can be leveraged. Students will learn the basic building blocks of cloud computing, investigate the various types and models of cloud computing, and identify how businesses can implement these technologies. This class uses hands-on labs to give students real-world practice on how to configure and secure a cloud computing environment. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Summer.

**ISMG 6430 - Information Systems Security and Privacy (3 Credits)**

This course is designed to develop knowledge and skills for security of information and information systems within organizations. This course focuses on concepts and methods associated with planning, designing, implementing, managing, and auditing security at all levels and on all systems platforms, including enterprise systems. This course presents techniques for assessing risk associated with accidental and intentional breaches of security as well as disaster recovery planning. The ethical treatment of data is discussed. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Cross-listed with ISMG 4300. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Spring.

**ISMG 6450 - IT Project Management (3 Credits)**

Focuses on how firms successfully manage the adoption of IT. Projects and program management principles are the primary focus of this course. Topics covered include approaches to prioritizing projects, estimating cost and time-to-market, build vs. buy decision, planning, monitoring and controlling implementation, measurement, total cost of ownership, effective management of both behavioral and technical aspects of the project and change management. For the best outcome it is recommended that you complete ISMG 6180 or BUSN 6610 prior to taking this course. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Summer.

**ISMG 6460 - Emerging Technologies (3 Credits)**

Provides an introduction to the expansive array of information technologies that form the infrastructure of a modern business enterprise. Emphasis is placed on learning conceptual technological foundations and understanding the business value of the various technologies. The purpose of the course is to develop the student's ability to discuss recent technological advancements with other IT professionals and management. Technology assessment is emphasized. Prereq: ISMG 6180 or BUSN 6610 (6810). Restriction: Restricted to graduate majors within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Cross-listed with BUSN 6800. Max Hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ISMG 6180 or BUSN 6610 Restriction: Restricted to graduate majors within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Typically Offered: Fall.

**ISMG 6470 - Text Data Analytics (3 Credits)**

This course covers algorithms and tools that are required to perform quantitative analyses of unstructured text data. Concepts and algorithms that will be covered include Zipf's Law, Power Law Distribution, Pattern Discovery, Inverse Document Frequency, measurements of Document Clustering and Similarity and so on. R will be introduced as a practice tool to practice quantitative analysis of text data. After the completion of this course, students will be able to uncover and visualize underlying themes and concepts which might be latent in large text documents. Note: The recommended prerequisite for this course is ISMG 6020. If you are familiar with programming and have worked with programming languages in the past, you satisfy the prerequisite requirement for this course. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Fall.

**ISMG 6480 - Data Warehouse and Administration (3 Credits)**

Management of large, complex data warehouses and operational databases involves technical skills and background needed by information systems professionals as well as tactical and strategic issues faced by information technology managers. This course provides conceptual knowledge, practical skills, and policy background for prospective information systems professionals and information technology managers. The course covers business aspects, conceptual background, and product material about management of data warehouses and operational databases. Assignments and projects involve Oracle skills for database administration and tactical or strategic issues faced by information technology management. Prereq: ISMG 6080. Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Max Hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ISMG 6080 Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors  
Typically Offered: Spring.

**ISMG 6510 - Accounting and Information Systems Processes and Controls (3 Credits)**

Designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. Focuses on financial and information system internal controls and the flow of corporate information through an accounting system. A financial system objective and risk assessment approach issued to present concepts and techniques for evaluating the adequacy of system processes and controls. Cross-listed with ACCT 6510, 4780 and ISMG 4780. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

**ISMG 6800 - Special Topics (3 Credits)**

A variety of advanced topics are offered in this course. Past topics include the human-computer interface, software engineering, artificial intelligence, graphical user interface, project management and electronic commerce. Consult the current 'Schedule Planner' for semester offerings. Note: Seldom offered. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Repeatable. Max hours: 15 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 15.

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

**ISMG 6810 - Business Intelligence in Healthcare (3 Credits)**

Provides students with an overview of how business intelligence is used in the healthcare industry. Students study the evolution of IT in healthcare including digitization of electronic health records and systems integration. Next the course looks at healthcare transformation and the evolution of business intelligence in general. Using case studies and hands on exercises, students learn about different aspects of business intelligence in various subsets of the healthcare industry. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Fall.

**ISMG 6820 - Business Intelligence and Financial Modeling (3 Credits)**

This course will introduce students to the application of business intelligence in a corporate finance setting. Financial data intelligence is essential for effective decision making throughout the firm, in finance directly and in other functions supported by the finance department. Strategy setting, budgeting, and new product development are just a few decision areas where finance personnel play an active role. In this course, we learn how to apply business intelligence software tools to enable finance personnel to access and analyze corporate data in support of critical decision making across the enterprise. Students will also analyze data through the use of financial models built in Microsoft Excel. The development of complex financial models will provide students with valuable hands-on experience with a software tool used widely incorporate finance departments. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Cross-listed with ISMG 4750 and FNCE 4750. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Spring.

**ISMG 6830 - IT Governance and Service Management (3 Credits)**

Deals with interrelated decisions on clarifying the business role of IT, defining integration and standardization requirements for the IT architecture, shared and enabling services for the IT infrastructure and business need for SaaS, and governance of cloud computing, IT outsourcing, and other IT services. Restriction: Restricted to graduate majors within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Recommended Prerequisite: ISMG 6180 or BUSN 6610. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors.

Typically Offered: Spring.

**ISMG 6840 - Independent Study: ISMG (1-8 Credits)**

Instructor approval required. Allowed only under special and unusual circumstances. Regularly scheduled courses cannot be taken as independent study. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Repeatable. Max hours: 8 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 8.

Restrictions: Restricted to graduate majors within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors.



**ISMG 6860 - Ethical Hacking Concepts and Methodologies (3 Credits)**

From a technical perspective, organizations need to know how hackers work so that they can build their security around it and take preemptive measures against future attacks. The goal of ethical hacking is to understand current exploits and assess weaknesses and vulnerabilities of various organizational information systems by attacking them within legal limits. This course is designed to provide students an insight into current hacking tools and techniques used by hackers and security professionals to break into any computer systems. Throughout the course, students will engage in offensive and defensive hands-on exercises stressing ethical hacking and penetration testing that will be conducted in a vendor-neutral virtual environment. Topics include security threats and attack vectors, footprinting and reconnaissance, Google hacking, social engineering, insider threat, network scanning and enumeration techniques, vulnerability assessment, the Dark Web, and attack and defense strategies in emerging technologies, such as the Internet of Things (IoT) and cloud computing. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Cross-listed with ISMG 4860. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Fall, Spring.

**ISMG 6865 - Digital Forensics Analysis (3 Credits)**

From cyberterrorism to identity theft, the digital age has brought about a change in how crime is being committed. The usage of computers and the Internet in crime has led to the emerging field of digital forensics. Most businesses employ digital forensic experts to identify cyber threats, protect against insider threats, reinforce data loss prevention, reduce the risk of identity theft, fraud, and other digital crimes, and aid in the collection of digital evidence for various investigations. This course is designed to provide students the necessary skills to perform an effective digital forensics investigation. It presents a methodological approach to digital forensics, including searching and seizing, chain-of-custody, acquisition, preservation, analysis, and reporting of digital evidence. It covers major forensic investigation scenarios that enable students to acquire necessary hands-on experience on various forensic investigation techniques and standard forensic tools required to successfully carry out a digital forensic investigation leading to the prosecution of perpetrators. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Cross-listed with ISMG 4865. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Fall, Spring.

**ISMG 6885 - Ethics: A Formula for Success (3 Credits)**

Students will learn how to spot and address red flags that foster unethical behavior in both publicly-traded and privately-held businesses. Governance and stakeholder management techniques that incentivize ethical behavior will be highlighted using examples of companies that are financially successful by "doing the right thing." Principle-based ethics are emphasized, namely, integrity, trust, accountability, transparency, fairness, respect, viability, and compliance with the rule of law. Cross-listed with MGMT 3420, MGMT 6420, ISMG 4785. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to graduate business school students.

**ISMG 6890 - IT Risk Management (3 Credits)**

This course provides an overview of IT risk management practices. Students will learn the elements of risk management and the data necessary for performing an effective risk assessment. Various risk management models will be introduced to demonstrate the methods that can be implemented to achieve Confidentiality, Integrity, and Availability of information systems. This class uses hands-on labs to give students real-world practice utilizing Security Information and Event Management (SIEM) software to gain an understanding of how to detect and respond to a cyber threat. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Spring.

**ISMG 6910 - Design Science Practicum (3 Credits)**

This is designed to be one of the final courses in the MS Information Systems degree. "Design Thinking" with user-centered perspectives will serve as a guiding principle to challenge assumptions and refine business problems to perform the final project. The instructor will provide students with tools and methods to identify, define and solve problems. Active discussion and creative presentation are core activities of this capstone course. Students will integrate what they have learned into a final project that can be either real-world problem designed in collaboration with an organization or a research paper on an emerging topic in the field. The final project will have multiple deliverables including a paper and a professional presentation to stakeholders who are directly related with the business problems defined in the project. Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Typically Offered: Fall, Spring.

ISMG 6950 - Master's Thesis (1-8 Credits)

Restriction: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Repeatable. Max hours: 8 Credits.

Grading Basis: Letter Grade with IP

Repeatable. Max Credits: 8.

Restrictions: Restricted to graduate majors and NDGR majors with a sub-plan of NBA within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors

Additional Information: Report as Full Time.

ISMG 7800 - Special Topics (3 Credits)

A variety of advanced topics are offered at the Ph.D. level in this course. Consult the current 'Schedule Planner' for semester offering. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to graduate majors within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors.

Typically Offered: Spring.

ISMG 7840 - Independent Study: Pre-Dissertation Research (1-9 Credits)

Conduct pre-dissertation research under the supervision of a faculty member. Prereq: BUSN 6530. Repeatable. Max Hours: 18 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 18.

Restrictions: Restricted to graduate majors within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors.

ISMG 8990 - Dissertation Development (1-15 Credits)

Supports development of a dissertation in conjunction with a student's advisor. Prereq: Completion of first year and second year papers

(ISMG 7840). Restriction: Restricted to graduate majors within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors. Repeatable. Max hours: 15 Credits.

Grading Basis: Letter Grade with IP

Repeatable. Max Credits: 15.

Restrictions: Restricted to graduate majors within the Business School, graduate majors within the College of Engineering, Design and Computing, PHCS PhD majors and PhD majors.

Additional Information: Report as Full Time.