## INFORMATION SYSTEMS (IS)

**IS 5000 - Enterprise Architecture and Systems Infrastructure**  
**Credit(s): 0 or 3 Credits**  
Explores the process of translating business vision and strategy into information systems applications that support the business function. The scope of the course covers the people, processes, data, technologies and their relationships to one another and to the external environment.  
(Offered occasionally)  
**Restrictions:**  
Enrollment limited to students in the Schl for Professional Studies college.

**IS 5010 - Financial Technologies**  
**Credit(s): 3 Credits**  
Financial Technologies (FinTech) examines the market disruption occurring at the intersection of information technology and the financial services sectors. Course topics include payment infrastructure methods, business models, services, financial regulations and ethics, and future FinTech trends.  
**Restrictions:**  
Enrollment limited to students in the Schl for Professional Studies college.

**IS 5020 - Blockchain Technologies**  
**Credit(s): 3 Credits**  
Blockchain Technologies defines a blockchain (a secure system of recording transactions) and provides an overview of how the blockchain can be applied to a variety of business environments. Course topics include the overall blockchain landscape, concepts, and use cases to understand the potential business value and hurdles of blockchain technologies.  
**Restrictions:**  
Enrollment limited to students in the Schl for Professional Studies college.

**IS 5030 - Building Blockchain Applications**  
**Credit(s): 3 Credits**  
Building Blockchain Applications identifies and assesses toolsets used to develop blockchain products, applies those products to current business models, and integrates a key feature of the blockchain (smart contracts). This course covers blockchain programming, highlighting both existing challenges and the types of situations best suited for blockchain-based technology.  
**Prerequisite(s):** IS 5010 with a grade of C or higher  
**Restrictions:**  
Enrollment limited to students in the Schl for Professional Studies college.

**IS 5040 - Applications of Cryptocurrency**  
**Credit(s): 3 Credits**  
Applications of Cryptocurrency examines how cryptocurrencies utilize the blockchain to transfer value to consumers and businesses by creating innovative, low cost, and convenient services. This course will focus on popular cryptocurrencies, such as Bitcoin and Ethereum, and emphasizes the benefits of implementing a cryptocurrency strategy.  
**Prerequisite(s):** IS 5010 with a grade of C or higher  
**Restrictions:**  
Enrollment limited to students in the Schl for Professional Studies college.

**IS 5100 - Information Systems Strategy and Management**  
**Credit(s): 0 or 3 Credits**  
Explores the issues and approaches to evaluate technology evolution and formulate strategies to create efficient and effective information systems plans and policies. This course covers the concepts and tools used to understand how technology change creates new organizational opportunities based on disruptive innovation-growth.  
(Offered occasionally)  
**Prerequisite(s):** IS 5000 with a grade of C or higher  
**Restrictions:**  
Enrollment limited to students in the Schl for Professional Studies college.

**IS 5200 - Software Development**  
**Credit(s): 0 or 3 Credits**  
Explores the current programming methods and practices used to specify, design, build, test, and deliver reliable software applications and systems. Topical areas include software assurance, reliability and security principles.  
(Offered occasionally)  
**Prerequisite(s):** IS 5000 with a grade of C or higher; IS 5100 with a grade of C or higher  
**Restrictions:**  
Enrollment limited to students in the Schl for Professional Studies college.

**IS 5300 - Ethical and Societal Implications of Technology**  
**Credit(s): 0 or 3 Credits**  
Examines ethical value systems and how they impact society from a technology perspective. The course emphasizes the importance of thinking critically and drawing conclusions using ethical frameworks. Emphasis is placed on understanding the roles and responsibilities that information technology professionals have in directing organizations and developing emerging technologies.  
(Offered occasionally)  
**Prerequisite(s):** IS 5000 with a grade of C or higher  
**Restrictions:**  
Enrollment limited to students in the Schl for Professional Studies college.

**IS 5400 - Managing a Secure Enterprise**  
**Credit(s): 0 or 3 Credits**  
Covers security principles, controls, and monitoring technologies from both a network defense and offensive perspective. The course provides a broad look at system continuity, risk management and the tools used for network security. The course culminates in the design and implementation of a systematic plan for defending organizational networks from internal and external threats.  
(Offered occasionally)  
**Prerequisite(s):** IS 5000 with a grade of C or higher  
**Restrictions:**  
Enrollment limited to students in the Schl for Professional Studies college.

**IS 5500 - Advanced Software Development**  
**Credit(s): 0 or 3 Credits**  
Builds upon the concepts and principles discussed in IS5200 and focuses on how to develop robust transaction processing applications using multiple data sources. Topical areas covered include concepts and applications relating to server-side application development and cloud-based storage access.  
(Offered occasionally)  
**Prerequisite(s):** IS 5000 with a grade of C or higher  
**Restrictions:**  
Enrollment limited to students in the Schl for Professional Studies college.
IS 5600 - Mobile and Web Application Development
Credit(s): 0 or 3 Credits
Cultivates essential skills required to create robust, secure, and high performance applications that run in the mobile and web environments. This course emphasizes industry standard theory and design techniques used for positive and effective interface development and user experience. (Offered occasionally)
Prerequisite(s): IS 5000 with a grade of C or higher
Restrictions:
Enrollment limited to students in the Schl for Professional Studies college.

IS 5910 - Internship Experience in Information Systems
Credit(s): 3 Credits
This course provides students with an opportunity to complete an internship that requires them to apply the concepts and skills learned in their specific program of study. Prior to registration, students intending to complete this course are expected to have a formal letter from the organization providing details of the work expected from the student during the 8-weeks that constitute the length of the internship. The letter must be signed by an individual with appropriate authority from the organization sponsoring the internship. In addition, the internship is subject to approval by the program director who will assess the alignment between the internship's requirements and the learning outcomes of the program. Students intending to take this course must submit details to demonstrate such alignment, in addition to the letter from the sponsoring organization. The final grade in the course is determined on the basis of (a) an assessment by the supervisor at the sponsoring organization of the degree to which the student met the internship expectations in terms of work artifacts submitted; and (b) an assessment by the program director of a reflection essay, submitted by the student, that explains how the internship experience prepared the student for professional work in the field of study. The course may be taken as an elective, subject to the conditions specified above.
Prerequisite: Current Graduate GPA of 3.0.
Restrictions:
Enrollment limited to students in the Schl for Professional Studies college.
Attributes: Special Approval Required

IS 5960 - Masters Research Project I: Workforce Center Certification Track
Credit(s): 1 Credit
The Master's Research Project (MRP) emphasizes a synthesis and demonstration of the competencies gained during a student's time in the MS Information Systems program. This is the first course in a three-part sequence of courses. At the end of this credit hour, students will have identified the purpose and scope of the problem they intend to address.
Prerequisite(s): ORLD 5050 with a grade of C or higher; IS 5000 with a grade of C or higher; IS 5100 with a grade of C or higher; IS 5200 with a grade of C or higher; IS 5300 with a grade of C or higher
Restrictions:
Enrollment limited to students in the Schl for Professional Studies college.
Attributes: Special Approval Required

IS 5961 - Masters Research Project II
Credit(s): 1 Credit
The Master's Research Project (MRP) emphasizes a synthesis and demonstration of the competencies gained during a student's time in the MS Information Systems program. This is the second course in a three-part sequence of courses. At the end of this credit hour, students will have created an applied research design that includes a proposal for addressing the organizational problem that was identified and described in IS 5960/5961.
Prerequisite(s): AA 5221 with a grade of C or higher; (IS 5960 with a grade of C or higher or IS 5961 with a grade of C or higher)
Restrictions:
Enrollment limited to students in the Schl for Professional Studies college.
Attributes: Special Approval Required

IS 5962 - Masters Research Project III
Credit(s): 1 Credit
The Master's Research Project (MRP) emphasizes a synthesis and demonstration of the competencies gained during a student's time in the MS Information Systems program. This is the third course in a three-part sequence of courses. At the end of this credit hour, students will have implemented an applied research project consistent with their approved project, written a formal report of findings and recommendations, and delivered a formal presentation summarizing the project.
Prerequisite(s): IS 5962 with a grade of C or higher
Restrictions:
Enrollment limited to students in the Schl for Professional Studies college.
Attributes: Special Approval Required

IS 5963 - Masters Research Project IV
Credit(s): 1 Credit
The Master's Research Project (MRP) emphasizes a synthesis and demonstration of the competencies gained during a student's time in the MS Information Systems program. This is the fourth course in a three-part sequence of courses. At the end of this credit hour, students will have demonstrated the ability to deliver a formal presentation summarizing the project.
Prerequisite(s): IS 5963 with a grade of C or higher
Restrictions:
Enrollment limited to students in the Schl for Professional Studies college.
Attributes: Special Approval Required