

# INFT: INFORMATION TECHNOLOGY (GRADUATE)

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## **INFT 6015 Database Design and Management (3 Credits)**

This course provides an in-depth treatment of working with Relational DBMS, and manages databases with particular reference to MySQL using PHP. It also provides some coverage of all the developments, issues, challenges and directions in securing databases. Some current trends in database management systems, such as No-SQL database systems will also be discussed.

## **INFT 6040 Advanced Internet Application Development (3 Credits)**

Students will gain hands-on experience with HTML5 and CSS3 in this course and learn how to create and build web sites. They will also learn how to program with JavaScript & jQuery and build interactive web pages and user-centered interfaces that support responsive design. The study will also teach students how to use PHP to create dynamic web sites and provide them with the foundational knowledge in database-driven web sites developed with the help of MySQL and SQL.

## **INFT 6045 IT Security Policies & Procedure (3 Credits)**

The course provides a system and management view of information security policies and methodologies, regulator mandates, business drivers, legal considerations and the evolving role of IT leaders to plan and implement successful sets of systems security procedures and frameworks.

## **INFT 6050 Mobile Systems Development (3 Credits)**

The course provides an in-depth coverage of benefits and challenges of mobile system planning, design, development, and management. Students will learn how to design a mobile business system that motivates business innovation and delight their users, that can be deployed on multiple mobile platforms.

## **INFT 6055 Digital Forensics (3 Credits)**

Identifying, preserving and extracting electronic evidence. Students learn how to examine and recover data from operating systems, core forensic procedures for any operating or file system, understanding technical issues in acquiring computer evidence and how to conduct forensically sound examinations to preserve evidence for admission and use in legal proceedings.

## **INFT 6065 Ethical Hacking and Network Defense (3 Credits)**

This course provides an in-depth analysis of how to effectively protect computer networks. Students will examine tools and penetration testing methodologies used by ethical hackers. In addition, the course provides a thorough examination of what and who an ethical hacker is and how important they are in protecting systems from cyberattacks. An analysis of federal and state computer crime laws will be conducted, as well as changes in penalties for illegal computer hacking. Prerequisites: INFT 6132 Network Administration .

## **INFT 6070 Cybersecurity Risk Analysis and Management (3 Credits)**

This course examines risk management and its application to Cyber Security. The course will help the student identify information security risks, evaluate those risks, and make risk-based decisions given organizational resource constraints. Students will learn foundational concepts in risk management and will be introduced to risk management standards and approaches, both qualitative and quantitative, for risk analysis. In this course we also explore key cyber security frameworks such as the ISO 27001 security standard and NIST, as well as skills relevant to be an auditor. The ISO 27001 is a globally recognized standard for the implementation of cyber security controls. Prerequisites: INFT 6142.

## **INFT 6122 Essentials of Information Technology (3 Credits)**

This first course in information technology develops foundational skills in computer system and basic computer programming. Students will learn Introduction to computer information technology and basic programming: Architecture of digital computers, design of algorithms for solving various problems, and basic skills in computer programming. Algorithm design, flow charting, and debugging; elements of good programming style. Course may be instructed in any programming language.

## **INFT 6127 Information Technology in Organizations (3 Credits)**

In this course, students will learn about the foundations of effectively managing and utilizing information in a business environment. The course will help them gain knowledge and skills to be able to take active roles in making IS decisions. Students will also gain a clear understanding of how information systems can not only support or limit the operations of a business, but also provide the business with new opportunities. IT students need to become knowledgeable and active participants in information systems decisions. The course help student begin to form and point of view of how information systems will help, hinder and create opportunities for any organizations. It is intended to provide a solid foundation of basic concepts relevant to using and managing information.

## **INFT 6132 Network Administration (3 Credits)**

This course focuses on the planning, design, configuration, operation, and management of computer networks containing data communication devices, servers, workstations, and networked applications and support systems. It introduces students to administrative techniques inherent to basic operating systems, and also to enterprise management systems required by larger organizations. Students examine and discuss issues of scalability, performance management, and integration of internal resources with external resources such as cloud-based systems. Plan, prepare, and operate various enterprise-grade network management systems such as virus protection, intrusion detection, and workstation, server, and work performance, and fault-monitoring systems.

## **INFT 6137 Enterprise Systems Architecture (3 Credits)**

The course offers broad systems perspective that provides a holistic approach to systems architecture. The course covers the latest in new and emerging technologies. All instructional contents are designed to give students the appropriate level and coverage of technical topics needed for ongoing professional success. The learning material are in simple terms to provide a holistic approach to both hardware and software.

**INFT 6142 Computer Systems Security (3 Credits)**

The course covers today's newest technologies, attacks, standards, and trends. The course contents include complete, timely coverage of all aspects of computer security, including users, software, devices, operating systems, networks, and data. Reflecting rapidly evolving attacks, countermeasures, and computing environments. The introduces best practices for authenticating users, preventing malicious code execution, using encryption, protecting privacy, implementing firewalls, detecting intrusions, and more. Students start by mastering the field's basic terms, principles, and concepts. Next, they apply these basics in diverse situations and environments, learning to "think like an attacker" and identify exploitable weaknesses. Then they will switch to defense, selecting the best available solutions and countermeasures. Finally, students will go beyond technology to understand crucial management issues in protecting infrastructure and data.

**INFT 6147 Enterprise Information Security Management (3 Credits)**

Students will learn about the conceptual foundations and key elements of IT security and look at its various implementations from physical security to application development security in this course. They will gain a clear understanding of how to recognize and address today's IT security vulnerabilities in different platforms from cloud-based to mobile through effective management strategies. The course will also teach students how to develop information governance policies and procedures for companies to help them safeguard their information while conducting their operations.

**INFT 6152 Enterprise Web Systems (3 Credits)**

The course provides the knowledge and skills you need to know to for scale products and services for any requirement. This course contents covers new technologies, strategies, and lessons, as well as new case studies from the real world IT practice. The impact on scalability, including architecture, process, people, organization, and technology. Students will learn updated strategies for structuring organizations to maximize agility and scalability. Using this guide's tools and advice, students can systematically clear away obstacles to scalability—and achieve unprecedented IT and business performance.

**INFT 6157 Data and Application Security (3 Credits)**

The course provides an in-depth coverage of all the developments, issues, challenges and directions in securing data and applications. It focuses on threats to data and applications security including access control violations, integrity violations, unauthorized intrusions and sabotage. Students will learn how to choose a security strategy and how to apply it.

**INFT 6996 Special Topics in INFT (3 Credits)**

The content of this course will vary by term and section. Students may repeat this course for credit as long as the topic differs. Please refer to the Term Guide for course topic offerings.

**INFT 7005 Cyber Security Integration Strategies (3 Credits)**

The new emphasis on physical security, resulting from the terrorist threat, has forced many cyber security professionals to struggle to maintain their organization's focus on protecting information assets. In order to command attention, they need to emphasize the broader role of cyber security in the strategy of their companies. Until now, however, most books about strategy and planning have focused on the production side of the business, rather than operations. The required readings in this course will integrate the importance of sound security policy with the strategic goals of an organization. It provides IT professionals and management with insight into the issues surrounding the goals of protecting valuable information assets. The text reiterates that an effective cyber security program relies on more than policies or hardware and software, instead it hinges on having a mindset that security is a core part of the business and not just an afterthought.

**INFT 7010 Information Integration Strategies (3 Credits)**

Students will develop strategies for the successful adoption of an enterprise 3.0 paradigm and the technical solutions that best apply in specific situations. Students will find clear guidelines for using Web 3.0 technologies and standards in a productive way to align with business goals, increase efficiency, and provide measurable bottom line growth. Foster collaboration and accelerate information dissemination with blogs and wikis Implement strategies to achieve business intelligence, analytics, and semantic web goals.