INFORMATION SYSTEMS AND TECHNOLOGY (IT)

IT104: Introduction to Cybersecurity
Entities and organizations must be able to protect not only their network infrastructure, but also their personnel and customers from data loss and identity theft. This course introduces the topic of cybersecurity and how it has evolved over the last several decades. In this course, you will examine the concepts and challenges of cybersecurity from its evolution over the past decades to the increasing cyber threats that exist today. Evolving trends that impact cybersecurity will be discussed, including the use of mobile devices, cloud computing, and the increased sophistication of attacks. You will study cybersecurity's role in physical and cyber incidents. Cybersecurity design is examined from a high level, as is the role of the cybersecurity professional in today's information technology environment. This course is designed, among other things, to provide you with the foundational knowledge necessary to pursue relevant certifications. While the course may provide you with the knowledge necessary to sit for an examination, Kaplan University cannot guarantee your eligibility either to take an exam or to become certified.
Quarter Credit Hours: 5 | Prerequisite: None

IT111: Programming Concepts
This course exposes you to programming language and concepts. You will practice modularization using a variety of methods; learn the value of creating reusable objects; and apply programming techniques of assignment, iteration, and decision-making.
Quarter Credit Hours: 5 | Prerequisite: None

IT111M1: Elements of Object Programming
Recognize the elements of object programming: classes, objects, and methods to application development.
Quarter Credit Hours: 1 | Prerequisite: None

IT111M2: Parameters and Arguments
Apply the programming constructs of parameters and arguments.
Quarter Credit Hours: 1 | Prerequisite: None

IT111M3: Iteration, Assignment, and Decision-Making
Apply the programming constructs of iteration, assignment, and decision-making.
Quarter Credit Hours: 1 | Prerequisite: None

IT111M4: Functions
Apply the programming constructs of functions.
Quarter Credit Hours: 1 | Prerequisite: None

IT111M5: Storyboards for Design
Implement programming design concepts through creation of storyboards.
Quarter Credit Hours: 1 | Prerequisite: None

IT117: Website Development
In this course, you investigate Internet technologies. You learn the concepts of web development along with web page design. By creating an individual online portfolio or biography using HTML, HTML5, and CSS (Cascading Style Sheets), you develop skills for today and tomorrow. This course will enable you to self-promote and demonstrate your skills to an audience via the web.
Quarter Credit Hours: 5 | Prerequisite: None

IT117M1: Website Project Planning
Complete a detailed plan for a website project in a formal design document.
Quarter Credit Hours: 1 | Prerequisite: None

IT117M2: HTML and Images
Apply HTML and images to create professional web pages.
Quarter Credit Hours: 1 | Prerequisite: None

IT117M3: CSS and HTML
Integrate CSS with HTML to create a visually appealing website.
Quarter Credit Hours: 1 | Prerequisite: None

IT117M4: HTML Forms
Develop HTML forms with form-field validation.
Quarter Credit Hours: 1 | Prerequisite: None

IT117M5: Constructing Functional Websites
Construct a well-designed and fully functional website using HTML and CSS.
Quarter Credit Hours: 1 | Prerequisite: None

IT133: Microsoft Office Applications on Demand
This course teaches students to use the current Microsoft Office suite of applications. Topics include an introduction to Word, Excel, PowerPoint, and cloud-based file management systems. Students will also learn how to analyze appropriate software applications to address solutions within a profession.
Quarter Credit Hours: 5 | Prerequisite: None

IT133M1: Operating System and Services
Use the computer operating system and cloud-based services to set preferences and manage files.
Quarter Credit Hours: 1 | Prerequisite: None

IT133M2: Word Processing Skills
Create documents using various functions of word processing software.
Quarter Credit Hours: 1 | Prerequisite: None

IT133M3: Spreadsheet Skills
Create spreadsheets using basic spreadsheet functions.
Quarter Credit Hours: 1 | Prerequisite: None

IT133M4: Computer Presentation Skills
Create computer-generated, on-screen presentations.
Quarter Credit Hours: 1 | Prerequisite: None

IT133M5: Software Solutions and Analysis
Analyze appropriate software applications to address solutions within a specific discipline.
Quarter Credit Hours: 1 | Prerequisite: None

IT153: Spreadsheet Applications
This course examines spreadsheet concepts including calculations, formulas, built-in functions, and spreadsheet design. You will create spreadsheets and manipulate data to solve business problems. The course further explores topics such as charts, data tables, pivot tables, and what-if analysis.
Quarter Credit Hours: 5 | Prerequisite: None

IT163: Database Concepts Using Microsoft Access
This course is an introduction to relational database management systems. You will use a relational database management system to create and maintain a database. You will create filters, sorts, queries, forms, and reports. Emphasis will be placed on the skills needed to meet user requirements.
Quarter Credit Hours: 5 | Prerequisite: None
IT190: Information Technology Concepts
You will explore concepts of information technology including hardware, software, and networks. You will also gain a practical understanding of how computer hardware and operating systems work. Topics include personal computer configuration and maintenance, along with the essentials of system software installation and administration.
Quarter Credit Hours: 5 | Prerequisite: None

IT190M1: Hardware Components
Describe hardware components.
Quarter Credit Hours: 1 | Prerequisite: None

IT190M2: Software Applications
Explain different types of software applications.
Quarter Credit Hours: 1 | Prerequisite: None

IT190M3: System Software
Discuss the functions of system software.
Quarter Credit Hours: 1 | Prerequisite: None

IT190M4: Computer Network Components
Describe the components of a computer network.
Quarter Credit Hours: 1 | Prerequisite: None

IT190M5: Computer and Network Security
Explain how to secure and protect computers and computer networks.
Quarter Credit Hours: 1 | Prerequisite: None

IT212: Software Development Concepts
This course introduces the fundamentals of software engineering, demonstrating how the fundamentals are the same across multiple programming languages. The core principles found in every programming language are investigated. You will design, develop, debug, and test simple applications using your choice from the programming language options.
Quarter Credit Hours: 5 | Prerequisite: IT117 | Corequisite: IT234 (recommended)

IT213: Software Development Concepts
This is an intermediate course in the design and development of programs offering students a choice of implementation and demonstrating how design and programming concepts are universal. Students will apply software design techniques, software process models, object-oriented programming concepts, and secure data-handling techniques. Students will design, develop, debug, and test intermediate-level applications using their choice from the programming language options.
Quarter Credit Hours: 5 | Prerequisite: None

IT214: Foundations of Web Design
This is a fast-paced course in web design. You will learn the basic concepts of web page design. The concepts begin with the planning stages of site mapping and storyboards. Elements such as tables, forms, rollover buttons, hyperlinks, text formatting and management, navigation systems, and inserting multimedia will be explored. By creating an individual online portfolio or biography and implementing the current versions of Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS), you will develop skills for today and tomorrow.
Quarter Credit Hours: 5 | Prerequisite: IT111 and IT117 (or equivalent)

IT222: Introduction to Cloud Computing
This course is a survey of cloud computing from both a business and a personal perspective. Cloud computing is an emerging technology that impacts all IT professions, including network, web, and application development as well as network security. You will learn the key characteristics and benefits of cloud computing. The course will cover features of private, public, hybrid, and community clouds.
Quarter Credit Hours: 5 | Prerequisite: None

IT232: Software Design and Development Concepts
This is an intermediate course in web design. You will learn how to create appropriate web graphics using popular image editing tools. Throughout the course, you will create a collection of custom graphics that will be displayed in an e-Portfolio layout. Topics will include resizing, resolution, optimization, digital photo enhancement, custom banner and button creation, and more.
Quarter Credit Hours: 5 | Prerequisite: IT214
IT261: Desktop Administration
This course prepares networking students to install, configure, and administer a desktop operating system. You will learn to automate operating system installation, set up and manage user accounts, and configure local file systems. You will learn to configure and troubleshoot both local and network printers, manage and troubleshoot access to shared folders, and recover from system failures.
Quarter Credit Hours: 5 | Prerequisite: None

IT262: Certified Ethical Hacking I
This course covers the tools and procedures needed to perform ethical hacking. Ethical hacking, which is also known as penetration testing, is a procedure employed by organizations where the tester attempts to penetrate or compromise a computer or network. In so doing, organizational vulnerabilities are brought to light, which allows the organization to mitigate the vulnerabilities uncovered. This course is designed, among other things, to provide you with the foundational knowledge necessary to continue your studies for the EC-Council Certified Ethical Hacker certification. While the course may provide you with the knowledge necessary to sit for the examination, Kaplan University cannot guarantee your eligibility either to take this exam or become certified.
Quarter Credit Hours: 5 | Prerequisite: None

IT273: Networking Concepts
This course introduces the concepts behind today’s networks. It outlines current network design, explaining the OSI Model and the methods of carrying data over wired and wireless media. Other topics include network design components, such as topologies and access methods, administration of network operating systems, and troubleshooting methods for data transmission and recovery.
Quarter Credit Hours: 5 | Prerequisite: None

IT273M1: Networking Concepts
Appraise network architectures, models, topologies, and structures used in networking.
Quarter Credit Hours: 1 | Prerequisite: None

IT273M2: Networked Environments
Distinguish the various types of network media, TCP/IP core protocols, and IPv4 addressing schemes typically used in a networked environment.
Quarter Credit Hours: 1 | Prerequisite: None

IT273M3: Data Transmission
Analyze LAN switching methods and related devices used for data transmission.
Quarter Credit Hours: 1 | Prerequisite: None

IT273M4: Wide Area Networks and Wireless Technologies
Analyze wide area networks and wireless technologies used in organizational or individual computing.
Quarter Credit Hours: 1 | Prerequisite: None

IT273M5: Global Interconnectedness
Practice global interconnectedness as it applies to Information Technology.
Quarter Credit Hours: 1 | Prerequisite: None

IT275: Linux System Administration
This introductory Linux course prepares you to install, configure, and administer Linux as a network operating system. You will learn both command line and graphical user interface administration with full-feature Linux distributions. Emphasis is placed on applied skills that address real-world challenges such as managing file structure, network services, and system security.
Quarter Credit Hours: 5 | Prerequisite: IT273

IT277: Certified Information Systems Security Professional I
This course covers the essential material comprising the first two study domains in the Certified Information Systems Security Professional (CISSP) Common Body of Knowledge (CBK). These two domains include asset security and access management. The information covered is vital in gaining a threshold understanding of the field of cybersecurity, and will enable you to implement access control methods, prevent access control attacks, and select controls and countermeasures based on security evaluation models. This course is designed, among other things, to provide you with the foundational knowledge necessary to pursue CISSP certification. While the course may provide you with the knowledge necessary to sit for the examination, Kaplan University cannot guarantee your eligibility either to take this exam or become certified.
Quarter Credit Hours: 5 | Prerequisite: None

IT278: Network Administration
In many organizations, the network administrator is the wizard behind the curtain. Network connections between users and computers seem to magically perform the transmissions required for daily operations. In this course, you are introduced to basic network administration. You install and configure a network operating system in a virtualized environment and practice administrative tasks. You perform hands-on exercises demonstrating server management, user account creation, file access, storage backup, and security settings.
Quarter Credit Hours: 5 | Prerequisite: None

IT278M1: Network Operating Systems
Examine the features, editions, roles, and installation methods of a network operating system.
Quarter Credit Hours: 1 | Prerequisite: IT273

IT278M2: Network Access Administration
Administer server roles, features, storage options, file and print services, and file and folder permissions.
Quarter Credit Hours: 1 | Prerequisite: IT273

IT278M3: Active Directory Configuration
Configure Active Directory including domains, organizational units, user accounts, and group policy while ensuring compatibility with global networks.
Quarter Credit Hours: 1 | Prerequisite: IT273

IT278M4: TCP/IP, DNS, and DHCP Configuration
Configure TCP/IP, DNS (Domain Name System), and DHCP (Dynamic Host Configuration Protocol) on a network server.
Quarter Credit Hours: 1 | Prerequisite: IT273

IT278M5: Virtualization Management
Manage virtualization using Hyper-V.
Quarter Credit Hours: 1 | Prerequisite: IT273
IT279: Certified Information Systems Security Professional II
This course covers the essential material comprising three study domains in the Certified Information Systems Security Professional (CISSP) Common Body of Knowledge (CBK). These three domains are security engineering, network security, and software development security. The information covered is vital in gaining a threshold understanding of the field of cybersecurity, and will enable you to assess the vulnerabilities of security solutions, design secure communication channels, and apply security controls in the software development environment. This course is designed, among other things, to provide you with the foundational knowledge necessary to pursue CISSP certification. While the course may provide you with the knowledge necessary to sit for the examination, Kaplan University cannot guarantee your eligibility either to take this exam or become certified.
Quarter Credit Hours: 5 | Prerequisite: IT273

IT286M2: Device and Infrastructure Security
Investigate device and infrastructure security, access control, authentication, and authorization.
Quarter Credit Hours: 1 | Prerequisite: IT273

IT286M3: Protections Measures
Explain the protection of wireless networks and cloud services, and the hardening of hosts and applications.
Quarter Credit Hours: 1 | Prerequisite: IT273

IT286M4: Cryptography
Examine cryptography methods, vulnerabilities, threats, and malicious attacks.
Quarter Credit Hours: 1 | Prerequisite: IT273

IT286M5: Security Awareness and Enforcement
Explore social engineering, security administration, disaster recovery, and incident response.
Quarter Credit Hours: 1 | Prerequisite: IT273

IT288: Security+ Certification Prep
This course focuses exclusively on CompTIA's Security+ Certification exam. Currently the SY0-401 exam consists of six domains. Time will be spent on each of the following: network security, compliance and operational security, threats and vulnerabilities, application data and host security, access control and identity management, and cryptography. This course is designed, among other things, to provide you with the foundational knowledge necessary to continue the pursuit of the Security + certification. While the course may provide you with the knowledge necessary to sit for the examination, Kaplan University cannot guarantee your eligibility either to take this exam or become certified.
Quarter Credit Hours: 5 | Prerequisite: IT286 or permission of the Department Chair

IT296: Associate’s-Level Information Technology Internship
This course is designed to build on the concepts of all information technology courses you have taken as a part of your degree plan. The externship provides students practical job experience in the information technology field. The externship provides students an opportunity to learn about the IT career field through practical, real-world experiences and mentoring from an IT professional. This experience will enrich students’ technology skills and provide a better understanding of the level of expertise needed to be successful in their career.
Quarter Credit Hours: 5 | Prerequisite: Completion of all core courses; minimum GPA of 2.0

IT299: Associate's Capstone in Information Technology
This course introduces you to the principles of project management. You will gain knowledge of the project management skills and processes needed to select, initiate, and plan a project. You will explore the project management knowledge areas. Topics include creating the project charter, developing project scope statements, creating the project schedule and budget, and risk planning.
Quarter Credit Hours: 6 | Prerequisite: None
IT301M1: Project Management Framework
Analyze the Project Management Framework to identify relationships between process groups and knowledge management areas.
Quarter Credit Hours: 1 | Prerequisite: None

IT301M2: Triple Constraints Management
Create project artifacts to effectively establish project management triple constraints.
Quarter Credit Hours: 1 | Prerequisite: None

IT301M3: Project Risk and Resource Management
Create project artifacts to plan and manage project risk and resources.
Quarter Credit Hours: 1 | Prerequisite: None

IT301M4: Project Execution Management
Create project artifacts to effectively manage and control project execution.
Quarter Credit Hours: 1 | Prerequisite: None

IT301M5: Project Management Ethics and Integrity
Explain why ethics and integrity are important to the field of IT.
Quarter Credit Hours: 1 | Prerequisite: None

IT301M6: Project Management Global Interconnectedness
Practice global interconnectedness as it applies to your field of study.
Quarter Credit Hours: 1 | Prerequisite: None

IT302: Human Computer Interaction
This course introduces you to the field of human computer interaction (HCI). You will survey HCI history and theory, and examine standard principles that are necessary to produce effective interface designs for the consumer. You will also learn about development methodologies, evaluation techniques, task analysis, and prototyping. Activities include observation and analysis of various types of interfaces, plus the use of professional tools to create a new interface design.
Quarter Credit Hours: 6 | Prerequisite: 200-level or above IT course; upper-level students only

IT302M1: HCI Theories and Principles
Examine human-computer interaction theories and principles.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT302M2: HCI Principles and the Discovery Process
Evaluate human-computer interaction principles and the discovery process.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT302M3: Text and Typography in Design
Relate the value of screen components, color theories, and typography in human-computer interaction.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT302M4: Auditory Components
Assess auditory components, accessibility, and redundancy concepts for human-computer interaction.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT302M5: Haptics
Assess the future of haptics in interface design.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT302M6: Interface Design
Design a user interface with appropriate professional tools.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT303: Application Development, Virtualization, and the Cloud
This advanced computer virtualization course will include hands-on practice and is designed for individuals who have an understanding of operating systems and programming concepts. Students study several methods of applying virtualization locally and in a hosted environment. Students will create a workable software program within a virtual server and in a cloud service solution.
Quarter Credit Hours: 6 | Prerequisite: IT222 and IT232

IT316: Computer Forensics
This course explores the pervasive nature of illegal and unauthorized activity occurring in cyberspace: computer crime. You will learn about the many types of computer crime and the structured procedures deployed in its investigation. This will include a systematic investigative approach of both corporate and criminal-related offenses. You will learn data-retrieval principles including onsite data collection, laboratory data retrieval, and live network data retrieval. You will learn how current computer forensics tools are used for data acquisitions to data analysis. This course will also discuss how computer crimes present unique vulnerabilities to computer systems due to the global nature of the Internet.
Quarter Credit Hours: 6 | Prerequisite: None

IT316M1: Computers and Criminal Behavior
Examine the relationship of computers and criminal behavior.
Quarter Credit Hours: 1 | Prerequisite: None

IT316M2: Computer Forensics as a Profession
Describe the field of computer forensics and investigations as a profession.
Quarter Credit Hours: 1 | Prerequisite: None

IT316M3: Computer Forensics Processes
Analyze the processes involved in computer forensics.
Quarter Credit Hours: 1 | Prerequisite: None

IT316M4: Data Acquisition Methods
Examine various data acquisition methods.
Quarter Credit Hours: 1 | Prerequisite: None

IT316M5: Computer Forensics Tools
Compare current computer forensic tools.
Quarter Credit Hours: 1 | Prerequisite: None

IT316M6: Data Analysis and Validation Techniques
Recommend techniques of data analysis and validation for high-tech investigations.
Quarter Credit Hours: 1 | Prerequisite: None

IT331: Technology Infrastructure
This course explores the concepts and purpose of information technology infrastructure. Emphasis is placed on expanding your knowledge of computer networks and data transmissions and applying those concepts to an organization’s technology requirements.
Quarter Credit Hours: 6 | Prerequisite: 200-level or above IT course; upper-level students only

IT331M1: Networking Skills for Project Success
Describe how networking skills can improve project success.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only
IT331M2: Key Infrastructure Components
Analyze the functions of key components in information technology infrastructure.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT331M3: IT Infrastructure Planning
Plan an effective IT infrastructure based on the needs of an organization.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT331M4: Wide Area Network Technologies
Evaluate Wide Area Network (WAN) technologies.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT331M5: Global Interconnectedness in Technology Infrastructure
Practice global interconnectedness as it applies to your field of study.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT331M6: Network Security Design
Formulate a network security design.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT332: Principles of Information Systems Architecture
This course introduces you to the background of information systems architecture. You will learn a holistic approach to both hardware and software architecture design from a broad systems perspective. Both a business and technical focus will be covered with concrete examples of current technologies and related managerial issues.
Quarter Credit Hours: 6 | Prerequisite: IT331

IT332M1: Binary Language
Analyze the language of computers.
Quarter Credit Hours: 1 | Prerequisite: IT331

IT332M2: The Computer as a System
Analyze the computer as a system.
Quarter Credit Hours: 1 | Prerequisite: IT331

IT332M3: System Architecture Components
Evaluate CPU, RAM, input, output, and peripheral devices as components used in system architecture.
Quarter Credit Hours: 1 | Prerequisite: IT331

IT332M4: Data Communication and Networking
Assess data communication and networking options for a computer system.
Quarter Credit Hours: 1 | Prerequisite: IT331

IT332M5: Data Storage and Protection
Recommend data storage and data protection technology for a computer system.
Quarter Credit Hours: 1 | Prerequisite: IT331

IT332M6: Computer Operating Systems
Differentiate between various computer operating systems.
Quarter Credit Hours: 1 | Prerequisite: IT331

IT350: Advanced Database Concepts
This course incorporates advanced concepts of the database language Transact-SQL (T-SQL) for creating efficient database implementations. You will use the T-SQL programming language and connect to an MS SQL Server database for displaying organized information to users. You will explore the various fundamental features of the T-SQL language such as DataTypes, Sets, and Builtin functions. You will explore the programmability of SQL by creating stored procedures; learn how to format a result set by sorting, filtering, and grouping; apply advanced SQL query techniques such as subqueries and common table expressions; use Report Builder to generate analytical reports from your data; and examine the use of non-SQL relational databases.
Quarter Credit Hours: 6 | Prerequisite: IT234

IT358: Intermediate Oracle Query Design
This course covers intermediate to advanced concepts of database query design and reporting tools using Oracle. You will practice Oracle SQL functions and PL/SQL programming, including triggers and stored procedures, to execute queries and functions.
Quarter Credit Hours: 6 | Prerequisite: IT234 or IT350

IT374: Linux Security
This course introduces Kali Linux as a penetration testing and security auditing platform with advanced tools to identify, detect, and exploit any vulnerabilities uncovered in the target network environment. You will explore several security assessment tools necessary to conduct penetration testing in their respective categories, such as target scoping, information gathering, discovery, enumeration, and vulnerability. You will develop practical penetration testing skills by demonstrating hacker tools and techniques that reflect real-world attack scenarios from a business perspective in today’s digital age.
Quarter Credit Hours: 6 | Prerequisite: IT275

IT375: Windows Enterprise Administration
This advanced course in Microsoft Windows enterprise administration prepares you to install, configure, and manage key network services and Active Directory. You will perform administrative tasks such as network service installation and configuration; Active Directory installation; Group Policy design and configuration; and network and Active Directory security configuration. You will learn the theory behind Active Directory design and operation; and complete hands-on labs and projects that develop the skills needed for real-world settings.
Quarter Credit Hours: 6 | Prerequisite: IT278

IT375M1: Windows Server Installation
Install Windows 2012 operating system into a virtual machine or hardware chassis.
Quarter Credit Hours: 1 | Prerequisite: IT278

IT375M2: Windows Server Advanced Configuration
Configure Windows 2012 operating system including administration tools.
Quarter Credit Hours: 1 | Prerequisite: IT278

IT375M3: Windows Server Active Directory Configuration
Configure Active Directory and policy functions in a new domain on Windows 2012 operating system.
Quarter Credit Hours: 1 | Prerequisite: IT278

IT375M4: Network Services and Components
Configure network services and components.
Quarter Credit Hours: 1 | Prerequisite: IT278

IT375M5: Network Policy
Implement network policy and monitoring to specific situations.
Quarter Credit Hours: 1 | Prerequisite: IT278
IT390M6: Incident Response Strategies
Differentiate incident response strategies.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT391: Advanced Software Development Including Web and Mobility
This course focuses on advanced design and programming concepts and techniques offering you a choice of implementation and demonstrating how advanced concepts apply across a variety of languages. You will develop advanced software, web, and mobile applications, while applying concepts related to data structures, algorithms, web services, graphics, mobile, and multimedia. You also learn how to create interactive applications across a variety of platforms (traditional applications, websites, and mobile applications).
Quarter Credit Hours: 6 | Prerequisite: IT232, IT234, and IT302

IT395: Certified Ethical Hacking II
This course continues concepts introduced in IT262 covering the tools and procedures needed to perform ethical hacking. More advanced penetration testing procedures are covered as well as how to incorporate the knowledge learned into a cohesive set of procedures to help organizations find potential vulnerabilities. This course is designed, among other things, to provide you with the foundational knowledge necessary to continue the pursuit of the EC-Council Certified Ethical Hacker certification. While the course may provide you with the knowledge necessary to sit for the examination, Kaplan University cannot guarantee your eligibility either to take this exam or become certified.
Quarter Credit Hours: 6 | Prerequisite: IT262

IT400: Ethics in Cybersecurity
New innovations within information technology continue to evolve around the world, creating ethical challenges and concerns for information technology professionals. This course will examine ethical and legal concerns with the use of information technology. Ethical issues will be examined as they relate to common information systems. Additional topics including privacy, regulations, as well as societal and cultural influences on decision making will be examined.
Quarter Credit Hours: 6 | Prerequisite: None

IT401: Project Management II
This course is the second of two project management courses and explores more advanced topics. Students will gain knowledge of the project management skills and processes needed to execute, control, and close a project. Topics include planning project resources, developing the project team, conducting procurements, measuring project performance, controlling work results, and applying professional responsibility.
Quarter Credit Hours: 6 | Prerequisite: IT301

IT402: IT Consulting Skills
This course will introduce you to the theory and practice of IT consulting. You examine the processes and techniques associated with the consulting field. Business aptitude skills will be taught including communication, ethics, presentation, and leadership skills. Additionally, project definition and analysis, project planning, gathering user and project requirements, executing projects, time management, and the history of consulting will be examined. Through case studies, you prepare a project proposal and a persuasive presentation for an organization.
Quarter Credit Hours: 6 | Prerequisite: 200-level or above IT course; upper-level students only

IT402M1: Consulting and Ethics
Justify ethical decisions with IT consulting.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only
IT402M2: Time and Resource Management
Generate time management and analysis representations.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT402M3: Interpersonal Skills
Develop skills for negotiation, decision-making, and other people-related processes with IT consulting.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT402M4: Consulting History and Global Views
Appraise historical and international facets of IT consulting.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT402M5: The Consulting Project Proposal
Create a project proposal with a unique vision.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT402M6: Persuasive Presentations
Generate persuasive materials for IT consulting.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

IT410: Certified Information Systems Security Professional III
This course primarily addresses two domains in the Certified Information Systems Security Professional CBK (Common Body of Knowledge). The two domains are (1) security assessment and testing and (2) security operations. The security assessment and testing domain explores vulnerability assessments and secure software testing strategies. The domain of security operations details how to manage change and respond to incidents. There will also be a discussion of two important topics that were not examined in Domain 1 of the CISSP I course. These topics are professional ethics and legal and regulatory issues. This course is designed, among other things, to provide you with the foundational knowledge necessary to pursue CISSP certification. While the course may provide you with the knowledge necessary to sit for the examination, Kaplan University cannot guarantee your eligibility either to take this exam or become certified.
Quarter Credit Hours: 6 | Prerequisite: IT279

IT411: Digital Forensics
In this course, students learn about computer forensics and techniques used to perform computer forensics examinations. Students learn how to gather and protect evidence used in prosecuting computer crimes. Topics in this course include acquiring digital evidence, bookmarking data, file signature analysis, hash analysis, and other forensic techniques. This course is designed, among other things, to provide the student with the requisite knowledge to sit for the EnCase Certified Examiner (EnCE) exam. While the course may provide the student with the knowledge necessary to sit for the examination, Kaplan University cannot guarantee the student's eligibility either to take this exam or become certified.
Quarter Credit Hours: 6 | Prerequisite: IT286

IT411M1: Digital Forensic Concepts and Techniques
Examine digital forensic concepts and techniques.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT411M2: Securing Digital Evidence
Plan appropriate methods to secure digital evidence.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT411M3: Examining Forensic Data
Apply various types of forensic analysis tools for data recovery to forensic scenarios.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT411M4: Audits and Investigations
Prepare audits and investigations of electronic computing devices.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT411M5: Analyzing System Files and Artifacts
Analyze forensic data from computers to investigate security breaches.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT411M6: Current Practices and Trends
Investigate current practices and trends in digital and network forensics.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT412: Information Systems Security
Businesses must be able to protect their networks and infrastructures from security attacks. In this course, you learn to investigate system vulnerabilities and implement security solutions. Topics in this course include access control, application security, business continuity and disaster recovery planning, cryptography, information security and risk management, compliance and investigations, operations security, physical security, security architecture and design, telecommunications, and network security. This course is designed, among other things, to provide you with the requisite knowledge to sit for the Certified Information Systems Security Professional exam. While the course may provide the knowledge necessary to sit for the examination, Kaplan University cannot guarantee your eligibility either to take this exam or become certified.
Quarter Credit Hours: 6 | Prerequisite: IT286

IT412M1: Information Security Concepts
Examine information security concepts.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT412M2: System Vulnerability and Threats
Analyze system vulnerabilities and threats.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT412M3: Cryptography Techniques
Choose data encryption techniques and confidentiality best practices.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT412M4: Operational Security and Incident Planning
Employ solutions that provide protection against system attacks.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT412M5: Disaster Recovery Planning
Develop information backup and data persistence procedures.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT412M6: Network Security Policies and Procedures
Design network security policies and procedures.
Quarter Credit Hours: 1 | Prerequisite: IT286

IT441: Directed Studies, School of Information Technology
In this course, students in the School of Information Technology will engage in an independent, directed-study project focused on a student-submitted topic of inquiry. The student will select a topic of inquiry that is of interest and relevant to his or her professional goals.
Quarter Credit Hours: 1 | Prerequisite: CM220; upper-level students only
**IT442: Directed Studies, School of Information Technology**
In this course, students in the School of Information Technology will engage in an independent, directed-study project focused on a student-submitted topic of inquiry. The student will select a topic of inquiry that is of interest and relevant to his or her professional goals.
Quarter Credit Hours: 2 | Prerequisite: CM220; upper-level students only

**IT443: Directed Studies, School of Information Technology**
In this course, students in the School of Information Technology will engage in an independent, directed-study project focused on a student-submitted topic of inquiry. The student will select a topic of inquiry that is of interest and relevant to his or her professional goals.
Quarter Credit Hours: 3 | Prerequisite: CM220; upper-level students only

**IT444: Directed Studies, School of Information Technology**
In this course, students in the School of Information Technology will engage in an independent, directed-study project focused on a student-submitted topic of inquiry. The student will select a topic of inquiry that is of interest and relevant to his or her professional goals.
Quarter Credit Hours: 4 | Prerequisite: CM220; upper-level students only

**IT445: Directed Studies, School of Information Technology**
In this course, students in the School of Information Technology will engage in an independent, directed-study project focused on a student-submitted topic of inquiry. The student will select a topic of inquiry that is of interest and relevant to his or her professional goals.
Quarter Credit Hours: 5 | Prerequisite: CM220; upper-level students only

**IT446: Directed Studies, School of Information Technology**
In this course, students in the School of Information Technology will engage in an independent, directed-study project focused on a student-submitted topic of inquiry. The student will select a topic of inquiry that is of interest and relevant to his or her professional goals.
Quarter Credit Hours: 6 | Prerequisite: CM220; upper-level students only

**IT458: Oracle Database Administration**
This course covers database administration using Oracle tools. You will focus on the following: installing database management software and utilities, controlling access to data and resources, troubleshooting an Oracle database, the backup and recovery of Oracle databases, and resolving common performance problems using Oracle.
Quarter Credit Hours: 6 | Prerequisite: IT358

**IT460: Systems Analysis and Design**
This course provides an overview of the system development life cycle (SDLC), including the modification and design process. You will learn to choose a system development methodology and evaluate the impact on the organization’s strategic plan. It emphasizes the factors for effective communication with users and team members and all those associated with development and maintenance of the system.
Quarter Credit Hours: 6 | Prerequisite: 200-level or above IT course; upper-level students only

**IT460M1: Information Systems Concepts**
Compare various types of information systems.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

**IT460M2: Developing Logical Systems Models**
Develop logical models for a proposed system.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

**IT460M3: Object Modeling**
Apply object-oriented modeling tools and techniques in designing information systems.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

**IT460M4: Development Strategies**
Practice team dynamics by participating in a role-play activity.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

**IT460M5: Systems Architecture**
Integrate models and diagrams.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

**IT460M6: Systems Implementation**
Design systems implementation.
Quarter Credit Hours: 1 | Prerequisite: 200-level or above IT course; upper-level students only

**IT471: Routing and Switching II**
This course is the second of two routing and switching courses and explores more advanced topics. You will design, configure, reconfigure, and maintain network routing and switching devices. You will also learn advanced concepts in protocols, resource access, and disaster recovery. Emphasis is placed on planning, proposing, and securing network infrastructure.
Quarter Credit Hours: 6 | Prerequisite: IT388

**IT471M1: IP Addressing Schemes**
Prepare an IP scheme for a small network to submit for management approval.
Quarter Credit Hours: 1 | Prerequisite: IT388

**IT471M2: Routing and Switching Configuration**
Configure routing and switching devices per plans and specifications.
Quarter Credit Hours: 1 | Prerequisite: IT388

**IT471M3: Advanced Routing and Switching Concepts**
Explore advanced network routing and switching concepts.
Quarter Credit Hours: 1 | Prerequisite: IT388

**IT471M4: Network Design**
Prepare network designs based on specific criteria.
Quarter Credit Hours: 1 | Prerequisite: IT388

**IT471M5: Disaster Recovery with WANs**
Prepare a disaster recovery plan for a routed infrastructure.
Quarter Credit Hours: 1 | Prerequisite: IT388

**IT471M6: Network Health**
Prepare routing and switching proposals for management approval.
Quarter Credit Hours: 1 | Prerequisite: IT388

**IT478: Web Servers and Security**
This course teaches you to install and configure popular web server software. You will learn to determine user access levels, as well as server authentication and server-side programming. Various issues involving web security are discussed, including web/client security and intrusion detection and recovery.
Quarter Credit Hours: 6 | Prerequisite: IT273
IT479: Bachelor's-Level Cybersecurity Internship
This course is taken at the conclusion of the cybersecurity degree and incorporates practical job experience with the skills and knowledge gained from prior coursework. You will work with instructors and other students on real-world projects that may include security system design, forensic analysis, or recommendations for an organization's security infrastructure. This course will enable you and your team members to practice your problem-solving talents. Along with timelines and project plans, your team will consider other business constraints. As is a requirement for most information technology projects, each security project may include evaluation mechanisms, hands-on demonstrations, examples for stakeholders, and a final roll-up of future project improvements. Internships must be preapproved by the Dean prior to the start of the term. Students who fail this course on the first attempt may not reenroll in this course without the Dean's approval.
Quarter Credit Hours: 6 | Prerequisite: Last term or permission from the Dean

IT481: Advanced Software Development
This course addresses advanced software design and development concepts, offering you a choice of implementations demonstrating how the concepts apply across a variety of languages. You will apply analysis and benchmarking, database creation and usage, data in motion and data at rest security, threading, reentrancy, and advanced testing concepts. You will also learn how to package software for distribution.
Quarter Credit Hours: 6 | Prerequisite: IT350 and IT391

IT484: Cybersecurity Policies
This course teaches you how to defend organizational resources by implementing and maintaining cybersecurity policies. Cybersecurity policies are used to support defense of data availability, integrity, and confidentiality. By establishing and applying effective security policies, organizations can keep valuable data safe. Topics include applying cybersecurity policies to access controls, cybersecurity operations and administration, risk analysis, incident response, and recovery. This course also teaches you cybersecurity policies for securing publically available resources and Web applications.
Quarter Credit Hours: 6 | Prerequisite: IT388

IT488: Software Product Development Using Agile
This project-based course concludes the multiplatform software development series of courses and allows you to apply your learning to the development of a software product in an agile team software development environment. You will explore the concepts of agile development and then implement those concepts as you work on an agile development team, designing and developing a software product using an agile software development life cycle, from concept to packaged product.
Quarter Credit Hours: 6 | Prerequisite: IT481 and IT350

IT489: Bachelor's-Level Information Technology Internship
This course gives you practical job experience in the information technology field. The internship provides you with an opportunity to learn about the IT career field through practical, real-world experiences and mentoring from an IT professional. This experience will enrich your technology skills and provide a better understanding of the level of expertise needed to be successful in your career. Internships must be preapproved by the Dean prior to the start of the term. Students who fail this course on the first attempt may not reenroll in this course without the Dean's approval.
Quarter Credit Hours: 6 | Prerequisite: Last term or permission from the Dean

IT497: Bachelor's Capstone in Cybersecurity
The Bachelor's Capstone in Cybersecurity is designed to build on the concepts of all information technology and security courses you have taken as a part of your degree plan. The capstone project integrates problem-solving techniques and the development and implementation of viable, student-developed solutions to meet an identified technology or design need in a business or institutional environment. You will be directed to work collaboratively to achieve the learning objectives for this course.
Quarter Credit Hours: 6 | Prerequisite: Last term or permission from the Program Chair

IT499: Bachelor's Capstone in Information Technology
The Bachelor's Capstone in Information Technology is designed to build on the concepts of all information technology courses you have taken as a part of your degree plan. The capstone project integrates problem-solving techniques and the development and implementation of viable, student-developed solutions to meet an identified technology or design need in a business or institutional environment.
Quarter Credit Hours: 6 | Prerequisite: Last term or permission from the Program Chair