

# INFORMATION TECHNOLOGY (IT)

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## IT 101: Computer Applications

This is an introductory course in Continuing and Professional Studies for students with no prior computer experience. The course is designed to teach students to use informatics that combine computer science, information processing, data-base management, word processing, spreadsheets and information presentation skills to facilitate management and processing of industry-related data.

**Credits:** 3

**College:** School of Business

**Schedule Type:** By Appointment - 1 student, By Appointment - 2 students, By Appointment - 4 students, Lecture, On-Line

## IT 201: Learning and Technology

This course will utilize the concepts of information literacy including retrieving, evaluating, managing, and communicating information to research topics related to occupational therapy. Students will use tools such as Microsoft Office applications, university library resources, the free web, and other technology to find and communicate information with a focus on evaluation for credibility and ethical use of sources. Introduction to evidence-based practice and application to occupational therapy through lecture, hands on projects and group work will help students to build skills in research methods.

**Credits:** 3

**College:** Jefferson College of Humanities & Sciences

**Schedule Type:** By Appointment - 1 student, By Appointment - 3 students, By Appointment - 4 students, Lecture, On-Line

## IT 211: Intro to Information Systems

This course introduces the student to the field of information systems (IS). Students will learn a holistic approach to both the hardware and software design of information systems and how they are utilized in the business world. Both a business and technical focus will be covered with concrete examples of current technologies and related managerial issues. Coverage is given to the latest information technologies, emerging trends and ethical practices using real-world examples, and company case studies showing information systems in action.

**Credits:** 3

**College:** School of Business

**Schedule Type:** By Appointment - 2 students, Lecture, On-Line

## IT 221: Hardware & Operating Systems

This course provides an introduction to computer hardware and operating systems. The course will cover a broad array of topics, familiarizing the student primarily with the personal computing environment, but also with that of enterprise technologies. Topics include desktop and laptop computer hardware; tablet and smart phones; peripherals such as printers and scanners; wearables; networking; and Windows, Linux, MacOS, iOS, and Android operating systems. Prerequisite: IT 211 Note: This course may provide you with the knowledge for the CompTIA A+ certification exam. While the course may provide you with the knowledge necessary to sit for the examination, the University cannot guarantee your eligibility either to take the exam or to become certified.

**Credits:** 3

**College:** School of Business

**Prerequisites:** IT 211 or ITX 211 [Min Grade: D]

**Schedule Type:** By Appointment - 1 student, By Appointment - 2 students, Hybrid, Lecture, On-Line

## IT 241: Software Development

Entry level course in which students practice software development using elementary selection, looping, method, string, array, and object constructs implemented in a modern programming language.

**Credits:** 3

**College:** School of Business

**Prerequisites:** (IT 211 or ITX 211) and (IT 221 or ITX 221) [Min Grade: D]

**Schedule Type:** By Appointment - 1 student, Hybrid, Lecture, On-Line

## IT 315: Information Technology I

This course prepares future managers to be effective organizers and users of modern information technologies. Emphasizing a global perspective of information technology and related business issues, students learn to view IT in broad terms and function as ?internal consultants? to functional areas in an organization. The course covers office and manufacturing automation, telecommunications, decision-support systems and executive information systems. Students learn to integrate the informational needs of the organization with suppliers, customers and other decisionmaking entities. Course introduces management techniques to support effective employees whose actions are guided by the power of modern information technologies.

**Credits:** 3

**College:** School of Business

**Schedule Type:** By Appointment - 2 students, Lecture, On-Line

## IT 317: Information Technology II

This course introduces the fundamentals of computer application development. Students will develop basic facility in digital media, electronic publishing, and decision support systems. The course also includes the use of information technologies for the automation of both office and factory environments.

**Credits:** 3

**College:** School of Business

**Schedule Type:** By Appointment - 4 students, Lecture, On-Line

## IT 320: Database Management

This course will provide an introduction to the creation and management of electronic databases. Topics covered include database design, relationships, normal forms, structured query language, importing data and creating reports and forms. Data-modeling techniques will also be covered.

**Credits:** 3

**College:** School of Business

**Prerequisites:** IT 317 [Min Grade: D]

**Schedule Type:** By Appointment - 1 student, By Appointment - 2 students, Lecture, Online By Appointment 8 Week, On-Line

## IT 321: Systems Analysis & Design

The final project brings all course topics together in a group project designed to address a real-world network scenario. The course relies on weekly discussions and scenario-based exercises requiring synthesis of knowledge the student has learned to that point in the course, analysis of the scenario, and design of an optimal solution.

**Credits:** 3

**College:** School of Business

**Prerequisites:** (IT 211 or ITX 211) and (IT 221 or ITX 221 or ITX 211) [Min Grade: D]

**Schedule Type:** By Appointment - 1 student, Hybrid, Lecture, On-Line

**IT 322: Network Management**

In this course, students learn basic concepts of network management. Topics include network devices and protocols, transport mediums, switching and routing, virtualization, security, troubleshooting, needs analysis, and a set of selected topics that changes based on current and future trends in the networking space. The course starts with the OSI model as a framework describing the layers of a network, and how these layers work in concert to enable the services a modern network must provide. The final project brings all course topics together in a group project designed to address a real-world network scenario. The course relies on weekly discussions and scenario-based exercises requiring synthesis of knowledge the student has learned to that point in the course, analysis of the scenario, and design of an optimal solution. Note: This course may provide you with the knowledge for the CompTIA Network+ certification exam. While the course may provide you with the knowledge necessary to sit for the examination, the University cannot guarantee your eligibility either to take the exam or to become certified.

**Credits:** 3**College:** School of Business**Prerequisites:** (IT 211 or ITX 211) and (IT 221 or ITX 221) [Min Grade: D]**Schedule Type:** Hybrid, On-Line**IT 323: Cloud Management**

This course introduces the concepts of cloud computing, and reviews how these technologies fit into the modern IT landscape. Specific topics include cloud architecture models: public, private, and hybrid, and the benefits and drawbacks of each. Software as a Service (SaaS), Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Desktop as a Service (DaaS) will be reviewed. Cloud security will be discussed, as will emerging cloud technologies currently nascent to the industry. Students will perform critical analysis and design of cloud services meeting client needs, as described by the instructor. Note: This course may provide you with knowledge for the CompTIA Cloud Essentials+ certification exam. While the course may provide you with the knowledge necessary to sit for the examination, the University cannot guarantee your eligibility either to take the exam or to become certified.

**Credits:** 3**College:** School of Business**Prerequisites:** (IT 211 or ITX 211) and (IT 221 or ITX 221) [Min Grade: D]**Schedule Type:** By Appointment - 1 student, Hybrid, Lecture, On-Line**IT 324: Cybersecurity Management**

This course provides an introduction to key concepts of cybersecurity including vulnerability assessment, virus and malware attacks, system and network intrusion and detection, system and network defense, firewalls, and VPNs. The course explores the evolving and dynamic nature of cybersecurity threats, and the changing ways in which these threats are mitigated. The final project will require student teams to prepare a response plan to a multi-vector cyber-attack, as well as detail the quantitative and qualitative costs and effects of the attack, as well as a set of corrective action plans (CAPs) that identify remediation treatments to attempt to prevent such attacks in the future. Note: This course may provide you with the knowledge for the CompTIA Security certification exam. While the course may provide you with the knowledge necessary to sit for the examination, the University cannot guarantee your eligibility either to take the exam or to become certified.

**Credits:** 3**College:** School of Business**Prerequisites:** (IT 211 or ITX 211) and (IT 221 or ITX 221) [Min Grade: D]**Schedule Type:** Hybrid, Lecture, On-Line**IT 325: IT Process & Service Mgmt**

This course focuses on the essential process techniques for successfully designing, developing, deploying, and managing IT services. Students will become familiar with operations management processes, and the ITIL framework. Students will learn techniques for process and service design. The methods and tools learned from the course will be presented and used in the class projects.

**Credits:** 3**College:** School of Business**Prerequisites:** (IT 211 or ITX 211) and (IT 221 or ITX 221) [Min Grade: D]**Schedule Type:** By Appointment - 1 student, Hybrid, Lecture, On-Line**IT 410: Needs Assessment**

This course provides an introduction to assessing the informational needs of an organization. Topics covered include equipment requirements, information design and technology integration as they impact the needs of an organization. Special attention will be given to usability studies and design development.

**Credits:** 3**College:** School of Business**Schedule Type:** By Appointment - 1 student, By Appointment - 3 students, Lecture, Online By Appointment 8 Week, On-Line**IT 498: Information Tech Capstone**

The information technology capstone builds 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 of viable solutions to meet an identified technology need in a business or institutional environment. You will prepare a proposal that includes a project description, deliverables, completion dates, and associated learning.

**Credits:** 3**College:** School of Business**Prerequisites:** IT 311 and IT 331 and IT 351 and IT 361 [Min Grade: D]**Schedule Type:** By Appointment - 1 student, Lecture, On-Line**IT 499: Project Management**

This course focuses on strategic management of technology projects. Acting as a project manager, students learn techniques to elicit the support and acceptance of new technologies within organizations. Through the creation of a project plan, students learn how to integrate informational technologies into an organization's mission.

**Credits:** 3**College:** School of Business**Prerequisites:** IT 410 [Min Grade: D]**Schedule Type:** By Appointment - 2 students, By Appointment - 3 students, Lecture, Online By Appointment 8 Week, On-Line