Information Systems Technology B.A.S.

Programming Track

General Education Hours Required: 36.0

ITE AS Core Hours Required: 45.00

Prof Core Req Hours Required: 39.0

Common Core Hours Required: 24.0

CET4505	**Computer Operating Systems** This course is a study of the fundamental concepts, structures and organizations of operating systems. It includes the study of processes, threads, multi-tasking, concurrency and deadlocks, memory management and file management along with virtualization.
CIS4891	**Senior Capstone Project** Students will develop a comprehensive Information Technology Project working in a team environment. The process of this project will expose them to the challenges of real world team based technology development including analysis, design, development, testing, and implementation.
CNT3502	**Computer Networks and Distributed Processing** Students will study architectures, protocols, and layers in distributed communication networks, and develop client-server applications. Topics include the OSI and TCP/IP models, transmission fundamentals, flow and error control, switching and routing, local and wide-area networks, wireless networks, and client-server models
CTS4408	**Database Administration** This course introduces students to the methods and tools utilized in the administration of industry standard database management systems. Students will be exposed to topics such as client-server architecture, planning and installation, server configuration, user management and performance optimization. Students will gain knowledge of practical database administration tasks such as backup and restoration, security configuration, and replication management.

CIS3303	**Object Oriented Analysis and Design** The Unified Modeling Language (UML) is a world-class visual language for analysis and design of object-oriented systems. This course examines the various graphical tools and their applications in the context of extended case studies.
ISM4323	**Information Security Policy Administration** Information Security Policy Administration examines the managerial aspects of information security policy and risk mitigation. Policy development includes security management planning, risk management, disaster recovery, data security, virus management, and personnel issues. Risk mitigation includes the ability to analyze risk, evaluate costs, and determine appropriate action.
ISM4480	**Principles of Electronic Commerce** This course is designed to familiarize students with management approaches to effectively define and implement e-commerce systems. The course addresses the digital economy, e-commerce strategy, marketing, e-commerce models, and management and regulatory issues.
MAN3025	**Principles of Management and Supervision** This course focuses on the foundations of management, including terminology, basic concepts, and different theories of management. The course also encompasses reflective readings and analyses for students to identify their particular strengths and weaknesses as managers and addresses real-world situations, asking for their responses to the same. Behavioral, decision-making, and communication styles are examined.
Programming Track | Hours required: 15.0	
CGS4183	**Web Design for E-Commerce** This course introduces the student to the concepts and principles of designing software tools used in web applications for electronic commerce.
COP3665	**Application Development for Mobile Devices** This course introduces the student to development techniques for mobile devices. The course will cover the most widely used mobile development environments with an introduction to the mobile application frameworks, user interface, sensors, and data management. Emphasis will be place on the Apple development environment and development tools using Xcode and the Objective-C programming language. Students will also learn to design, code, troubleshoot, and integrate mobile device applications, as well as become familiar with app store business techniques, distribution and issues.

COP4813	**Web Applications Programming** This course introduces students to advanced concepts in the creation of applications utilizing the web. Students will be exposed to topics such as client-server communications, dynamic data presentation, software design, planning and architecture. Students will get knowledge and practice in designing applications, which utilize web technology created using enterprise level programming languages and tools.
COP3667	**Mobile Device Programming** This course covers the methods and tools utilized in the creation of native applications for mobile devices, specifically the Android platform. Students will sharpen mobile application design techniques, technical development skills specific to the Android platform, and mobile application deployment strategies. Students will get knowledge of practical native application design and direct utilization of hardware features such as GPS, cameras and storage as it applies to the Android environment.
MAN4583	**Project Management** This course is designed to prepare students to manage projects across multiple business functions; including marketing, human resources, logistics and information technology projects. Future managers will apply the most current project management methodologies and strategies to real-world business scenarios.