

IT

Courses

IT 100 Computer Programming Foundations

3 Credits. 2 Lecture Hours. 3 Lab Hours.

A course on fundamental concepts related to programming. Topics include: problem solving and developmental tools, design techniques such as flow charting and pseudo coding, and testing techniques used in programming.

Prerequisites: AFL 085 and AFM 092 or appropriate placement test scores

IT 101 .NET Programming 1

3 Credits. 2 Lecture Hours. 3 Lab Hours.

An introduction to concepts of object-oriented software development using Visual Basic .NET. Topics include: application design methods, stages of software development, interaction with the .NET framework, and modular programming concepts utilizing procedures and functions.

Prerequisites: AFL 085 and AFM 092, or equivalent placement test scores

IT 102 .NET Programming 2

3 Credits. 2 Lecture Hours. 3 Lab Hours.

A continuation of IT 101. Topics include: object-oriented design and implementation using the .NET framework, developing class modules, and accessing and writing to external data storage and databases using ADO.NET and SQL.

Prerequisites: IT 101

IT 103 .NET Programming 3

3 Credits. 2 Lecture Hours. 3 Lab Hours.

A continuation of IT 102. Topics include: creating, debugging, and maintaining web-based database applications using the .NET framework.

Prerequisites: IT 102 and IT 111

IT 105 Information Technology Concepts

3 Credits. 2 Lecture Hours. 3 Lab Hours.

A course on information technology fundamentals. Topics include: the internet, software, hardware, input/output (I/O) and storage, operating systems, communications and networks, database management, security, system development, programming, enterprise computing, and numbering systems. The course is delivered through online instruction only.

Prerequisites: AFL 085 and AFM 092, or appropriate placement test scores

IT 110 HTML with CSS and JavaScript

3 Credits. 2 Lecture Hours. 3 Lab Hours.

A course on internet programming using HTML, CSS, and JavaScript. Topics include: HTML commands, cascading style sheets, JavaScript commands, web applications (apps), and dynamic web pages.

Prerequisites: None

IT 111 Database Design and SQL 1

3 Credits. 2 Lecture Hours. 3 Lab Hours.

A course on fundamentals of relational database design and implementation using Microsoft SQL Server. Topics include: SQL Enterprise Manager, fundamentals of database design and normalization, data import and export, Structured Query Language (SQL), indexes and keys, views, and stored procedures.

Prerequisites: AFL 085 and AFM 092, or appropriate placement test scores

IT 112 Database Design and SQL 2

3 Credits. 2 Lecture Hours. 3 Lab Hours.

A continuation of IT 111. Topics include: advanced stored procedures using transact SQL, user defined functions, triggers, user defined data types, full text searching, replication, database maintenance plans, and designing data models from abstract requirements.

Prerequisites: IT 111 (minimum grade C)

IT 115 Operating Systems Administration 1

3 Credits. 2 Lecture Hours. 3 Lab Hours.

A course on the Windows operating system used on PCs. Topics include Windows utilization and management, utilities, managing disks, disaster recovery, troubleshooting, user management, productivity tools, and performance issues. This course prepares students for a Microsoft Certification exam.

Prerequisites: AFL 085 or appropriate placement test score

IT 116 Operating Systems Administration 2

3 Credits. 2 Lecture Hours. 3 Lab Hours.

A continuation of IT 115. Topics include: managing software problems; managing virtualization; and client configuration, development, deployment, and security. This course prepares students for a Microsoft Certification exam.

Prerequisites: IT 115

IT 140 PHP and MySQL**4 Credits. 3 Lecture Hours. 3 Lab Hours.**

A course in PHP web programming with a MySQL database. Topics include: PHP language, syntax, variables, and forms; MySQL database design; connecting to a MySQL database using PHP; inserting, editing, and deleting MySQL data using PHP; and building dynamic web pages using PHP and MySQL.

Prerequisites: Take IT 101, IT 110 and IT 111 (minimum grade of C for all)

IT 150 Logistics and Distribution Technology**3 Credits. 2 Lecture Hours. 2 Lab Hours.**

A course on technologies and software used in supply chain management for freight, air, and maritime logistics operations. Topics include: barcodes, RFID, Wi-Fi tags, logistics and inventory software, high frequency tracking, and passive/active tracking.

Prerequisites: SCM 105

IT 161 Java Programming 1**3 Credits. 2 Lecture Hours. 3 Lab Hours.**

A course on fundamentals of the Java programming language. Topics include: data types, variables, basic command line input/output, decisions, loops, procedures, string manipulation, arrays, object-oriented development, event programming, and database programming.

Prerequisites: IT 101

IT 162 Java Programming 2**3 Credits. 2 Lecture Hours. 3 Lab Hours.**

A continuation of IT 161. Topics include: Java Server Pages (JSP) and complex database applications using Java and JSP.

Prerequisites: IT 161

IT 210 System Design and Implementation**3 Credits. 2 Lecture Hours. 3 Lab Hours.**

A course on methodologies and techniques of the system development life cycle. Topics include: system design, project management for IT, system implementation, programming design, and system testing techniques.

Prerequisites: BPA 130

IT 215 Scripting**3 Credits. 2 Lecture Hours. 2 Lab Hours.**

A course on task automation and configuration management using Microsoft PowerShell programming language. Topics include: modifying existing PowerShell scripts, and creating new scripts to automate common tasks.

Prerequisites: NETB 155

IT 220 Emerging Topics in Computer Software Development**3 Credits. 2 Lecture Hours. 3 Lab Hours.**

A course on current topics related to Computer Software Development such as data reporting, XML, and other new concerns.

Prerequisites: IT 101, IT 110, IT 111