



FIRST YEAR COURSES

SWD:C#1 C# Programming Part 1

Students will be introduced to Visual C#, a relatively new language the goal of which is to provide the ease of working with Visual Basic with the flexibility and power of the Java and C++ languages. C# is a fully object oriented language that harnesses the power of the .NET Framework. Part 1 will cover: Intro to Programming; User interface design; Variables, constants & calculations; Decisions & conditions; Menus, common dialogs, methods.

SWD:JJ1 Java Script & JQuery Part 1

JavaScript is an open source client-side scripting language that can be embedded within HTML script to add dynamic content. JQuery is an open source JavaScript library used by Web developers to navigate HTML documents, handle events, perform animations and add Ajax interactions to Web pages. Part 1 will cover: Introduction to JavaScript; working with operators and expressions; utilizing arrays, loops and conditional statements; Introduction to JQuery

SWD:PRG Introduction to Programming - VB

Students are introduced to computer program design and development using Visual Basic. Emphasis is on object oriented programming and basic computer language structures that are common to all programming languages.

SWD:HTM HTML & Web Design Fundamentals

Develop Websites with XHTML utilizing tables, CSS, iframes and video with emphasis on Web standards and design.

SWD:HTX XHTML – XML

Students will receive in-depth instruction in XHTML, a scripting language that enables a document to display on the internet. The student will learn to: Develop a Web Page; Develop a Web site; Work with Cascading Style Sheets; Create Web tables; Utilize Web forms; Enhance Web sites with sound and video; Develop a Web site with Frames; Create an XML document

SWD:AP1 Active Server Pages (ASP) Part 1

Students are introduced to ASP.NET, a server-side Web development environment to build dynamic Web sites, Web applications and XML Web services. Part 1 will show students, within the context of ASP Web objects, how to: utilize MS VS to create well-formed Web pages; utilize variables, data types, expressions and operators; employ functions and control structures; Employ ASP Web forms, Web server controls, complex Web controls, data validation; manipulate strings and employ regular expressions with C#;

CSF:ACC Microsoft® Access

Students will learn how to structure a database, create and format database elements including tables, queries, and reports and how to manage and maintain databases.



Software Engineering & Web Development

Course Descriptions

ITA:3CF Computing Fundamentals, *Internet and Computer Core Certification (IC³)*

Gain foundational understanding of computing including: knowledge and use of computer hardware and peripherals, software, and operating systems. Students must pass the Computing Fundamentals exam toward earning their IC³ Certification.

ITA:3LO Living Online, *Internet and Computer Core Certification(IC³)*

Learn aspects of working in an Internet or networked environment including basic knowledge of networks and the Internet, skills in specific applications such as email, Web browsers, Web literacy, ergonomics, security, and Internet ethics. Students must pass the Living Online exam toward earning their IC³ Certification.

ITA:3CF Key Applications, *Internet and Computer Core Certification(IC³)*

Students learn three applications (word processing, spreadsheet, and presentation software) and the commonalities of features between programs. Students must pass the Key Application exam toward earning their IC³ Certification.

SWD:C#2 C# Programming Part 2

Students will progress to C# Part 2, the next in the logical sequence of topics from C# part 1. Part 2 will introduce the following topics: Multiform projects; Lists, loops & printing; Arrays; database Applications; Report generators.

SWD:JJ2 Java Script & JQuery Part 2

Students will progress to JavaScript Part 2, the next in the logical sequence of topics from part 1. In Part 2 the student will: Work with Objects; Create special effects; Work with windows and frames. In JQuery Part 2, the student will: Create Wrapped Element Sets; Manipulate Element properties and attributes; Employ the JQuery Event Model; Work with animation and effects; Advanced navigation.

SWD:PHN Designing Phone Applications

Learn how to develop diverse mobile application for today's smart phones in the Android operating systems using Java and the Eclipse Development Environment

BMT:PSF Adobe® Photoshop Fundamentals

Photoshop is the industry's most used photo-editing software. Students will learn how to select pixels; work with layers, gradients, adjustments and brushes; create special effects, and improve productivity. Students will have the opportunity to earn an Adobe Certified Associate (ACA) certification.



SECOND YEAR COURSES

SWD:AP2 Active Server Pages (ASP) Part 2

Students will progress to ASP Part 2, the next in the logical sequence of topics from part 1. Part 2 will introduce the following topics in the context of ASP Web objects: Discuss and utilize debugging techniques and tools; introduce the basics of working with SQL Server databases; Maintain state with query strings, hidden form fields & post back/view state; Work with cookies and user profiles, maintain session and application state

SWD:SQ1 SQL Server Part 1

Students will: Understand tables, records and fields in the context of SQL Server; Utilize column data types and other properties; Design relational database tables; Manipulate database data; Write SQL (Structured Query Language); Interface Web applications and Win Apps to SQL Server; Create and use stored procedures.

CSF:NET Introduction to Networking

Understand the fundamentals of TCP/IP protocol and the network architecture; students will learn about the layers of the Open Systems Interconnection Model and the role of the server in computer networks.

BMT:ENT Entrepreneurship - Owning your Future

Discover strategies to generate ideas for business ventures and begin building your business from the ground up. Learn how the global economy and the legal environment of business laws and regulations affect business practices.

SWD:AP3 Active Server Pages (ASP) Part 3

In ASP part 3, students will work with advanced topics in ASP that concentrate on the interface of ASP front-ends with SQL Server back-ends. Students will work on lecture-based class projects, individual projects and team projects.

SWD:AP4 Active Server Pages (ASP) Part 4

In ASP part 4, students apply and extend concepts acquired in SWD:AP4 with lecture-based class projects, individual projects and team projects.

BMT:PRF Professional Success Strategies

Learn the strategies to succeed professionally including: professional behavior, appearance, and hiring ethics and regulations. Course includes career planning, job seeking, and interviewing.

SWD:FA1 Financial Accounting 1

Learn the principles of recording accounting transactions, accruals, receivables, payables, sales, purchases and the accounting cycle. Create and interpret financial statements such as the balance sheet and income statement.



Software Engineering & Web Development

Course Descriptions

ITA:CAP IT Academy Capstone Project

During the second year, students of the IT Academy will collaborate, plan, design, build, and implement a simulated company and will integrate their knowledge and skills across program majors including a business and marketing plan, website, acquisition of technology, and more.

BMT:QB QuickBooks® Financial Software

QuickBooks is the most widely used software for small businesses. Students will learn how to manage business bank accounts, customer invoices, vendor bills, and more.