

Jones County Junior College
Career and Technical Education Division
Catalog Addendum
2008-2010

Addendum # 9
February 25, 2009

The following changes have been made to the curricula of the Computer Information Systems Technology (CIST) Program.

(1)The program name is now Information Systems Technology (IST). The course prefix is now standard across all options. All courses will have the prefix of IST.

(2)These new courses have been added to the course offerings. IST 1143 Security Principles and Policies, IST 1163 Concepts of Database Design, IST 1113 Fundamentals of Information Technology and IST 1124 IT Foundations.

(3) IST 2414 Flash Game Programming has been added to the programming language electives.

This addendum indicates the changes to the 2008-2010 catalog in red below. The changes will be implemented Fall 2009

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INFORMATION SYSTEMS TECHNOLOGY

Purpose

The **Information Systems Technology (IST)** department offers technical programs, leading to associate degrees or certifications, designed to develop marketable skills and promote economic development.

Program Description

Students entering **Information Systems Technology** may choose a Computer Networking Technology option or a Web and Programming Technology option. The **IST** department at JCJC has numerous partnerships and affiliations with national vendors such as Cisco, Microsoft, Comptia, and Oracle.

The Web and Programming Technology option is a two-year program which offers training in the design, coding, and testing of websites, e-commerce development, server administration, graphics manipulation, Internet programming, and database interaction. The curriculum teaches students skills such as Visual Basic, Oracle, PHP, ASP.Net, Javascript, HTML, DHTML, and CSS. Also, students are prepared to earn their CIW and IC3 certifications.

The Computer Networking option is a two-year program which offers training in telecommunications, network administration and client/server systems. The curriculum offers

students the education needed to earn Cisco's CCNA certification, Microsoft's MCP certification, and CompTIA's A+, Network+, Security+, and Linux+ certifications.

Program Length

- Four semesters

Degree

- Associate in Applied Science

Admissions Requirements

- Must meet all general admission requirements.
- An applicant having previously earned college credit with less than a 2.5 grade point average must schedule an interview with the **Information Systems Technology** staff and be referred to the Dean of Career and Technical Education or Dean of the College for approval.
- A minimum composite ACT score of 18 is required. Applicants with composite ACT scores of 16 or 17 may be referred to the Dean of Career and Technical Education or Dean of the College for probationary admission. ACT scores must be recorded in the Jones County Junior College Admissions and Records Office prior to admission to the program.

Career Opportunities:

Computer Programmer/Analyst, Computer Operator, Computer Center Manager, Network Manager/Administrator, Network Technician, Network Assistant, Application Clerk, Network Support Technician, Network Customer Engineer, Web Master, and Web Designer/Developer. Potential employers would include state and federal government, telecommunications industries, internet-based companies and computer consulting firms.

Contact

The Counseling Center-Jones County Junior College at 601-477-4257 or **Information Systems** Department at 601- 477-4081 or 477-4096 or email at cist@jcc.edu

Curriculum - It should be noted that all sophomore year and many freshmen classes in are only taught once per year and in the semester noted.

Web and Programming Technology

Freshman Year

First Semester

Credit Hours

ENG 1113 English Comp. I.....	3
IST 1154 Web & Prog. Concepts	4
Programming Language Elective**	4
IST 1124 IT Foundations	4
IST 1134 Fund. of Data Comm	4
LLS 1312 Orientation	2
Total Hours.....	21

Second Semester **Credit Hours**

ENG 1123 English Comp. II	3
IST 1143 Security Principles & Policies.....	3
IST 1424 Web Design Applications	4
Programming Language Elective**	4
Programming Language Elective**	4
Total Hours.....	18

Sophomore Year

First Semester **Credit Hours**

MAT 1313 College Algebra	3
IST 2483 Web Server.....	3
IST 1163 Concepts of Database Design.....	3
Programming Language Elective**	4
Programming Language Elective**	4
Total Hours.....	17

Second Semester **Credit Hours**

Social/Behavioral Science Elective***.....	3
SPT 1113 Public Speaking I.....	3
Programming Language Elective**	4
IST 2473 E-Commerce Strategies	3
IST 2314 Website and Systems Dev.....	4
Total Hours.....	17

Computer Networking

Freshman Year

First Semester **Credit Hours**

IST1134 Fund. of Data Comm	4
IST 1154 Web and Program Concepts.....	4
IST 1124 IT Foundations	4
ENG 1113 English Comp. I.....	3
Programming Language Elective **	4
LLS 1312 Orientation	2
Total Hours	21

Second Semester	Credit Hours
IST 1224 Network Components	4
ENG 1123 English Comp. II	3
IST 1143 Security Principles & Policies.....	3
Network Operating System Elective**** ...	4
IST 1424 Web Design App.	4
Total Hours	18

Sophomore Year

First Semester	Credit Hours
IST 2224 Network Plan. & Design	4
IST 1163 Concepts of Database Design.....	3
MAT 1313 College Algebra	3
Network Operating System Elective**** ...	4
IST 2214 Network Security	4
	18

Second Semester	Credit Hours
IST 2234 Network Implementation	4
Social/Behavioral Science Elective***	3
SPT 1113 Public Speaking I	3
Network Operating System Elective**** ...	4
Network Operating System Elective**** ...	4
Total Hours	18

****Programming Language Electives**

- Visual BASIC Programming Language (IST 1314)
- RPG Programming Language (IST 1324)
- COBOL Programming Language (IST 1334)
- Client-Side Programming (IST 1414)
- Script Programming Language (IST 2324)
- Advanced Visual BASIC Programming Language (IST 2334)
- Database Programming and Design (IST 2344)
- Advanced RPG Programming Language (IST 2354)
- Advanced COBOL Programming Language (IST 2364)
- C Programming Language (IST 2374)
- Advanced C Programming Language (IST 2384)
- Flash Game Programming (IST 2414)
- XML Programming (IST 2424)
- Server-Side Programming I (IST 2434)
- Server-Side Programming II (IST 2444)

*****Social/Behavioral Science Electives**

- HIS 1113 – Western Civilization I

HIS 1123 – Western Civilization II
HIS 2213 – American History I
HIS 2223 – American History II
PSY 1513 – General Psychology
PSC 1113 – American National Government

**** Network Operating Systems Elective

Client Installation and Configuration (IST 1213)

Network Administration Using Novell (IST 1234)

Network Administration Using Microsoft Windows Server (IST 1244)

Network Administration Using Linux (IST 1254)

Advanced Network Administration Using Novell (IST 2244)

Advanced Network Administration Using Microsoft Windows Server (IST 2254)

Advanced Network Administration Using Linux (IST 2264)

INFORMATION SYSTEMS TECHNOLOGY/COMPUTER NETWORKING TECHNOLOGY- WEB AND PROGRAMMING TECHNOLOGY

CNT 1414 – Fundamentals of Data Communications – This course introduces students to fundamentals of networking. It provides coverage of architectures, topologies, and protocols. Two hours lecture and four hours lab. Four semester hours credit.

CNT 1524 – Network Components – Prerequisite: Fundamentals of Data Communications (CNT 1414). This course presents local area network and wide area network connectivity. It focuses on architectures, topologies, protocols, and transport methods of a network. Two hours lecture and four hours lab. Four semester hours credit.

CNT 1614 – Network Administration Using Novell – Pre/requisites: Fundamentals of Data Communications (CNT 1414). This course focuses on the management of a computer network using the Novell network operating system. Emphasis will be placed on daily administrative tasks performed by a network administrator. Two hours lecture and four hours lab. Four semester hours credit.

CNT 1624 – Network Administration Using Microsoft Windows Server – Prerequisites: Fundamentals of Data Communications (CNT 1414) This course focuses on the management of a computer network using the Microsoft Windows Server network operating system. Emphasis will be placed on daily administrative tasks performed by a network administrator. Two hours lecture and four hours lab. Four semester hours credit.

CNT 1634 - Installing and Configuring Windows XP Professional - Prerequisites: Fundamentals of Data Communications (CNT 1414)1333).Error! Bookmark not defined. This course is designed to help the student install, support and troubleshoot the XP operating system. Emphasis will be placed on common user's operations as well as the network administrator's support of the operating system. (4 sch: 2 hr. Lecture, 4 hr. Lab)

CNT 1654 – Network Administration Using Linux – Prerequisites: Fundamentals of Data Communications (CNT 1414). This course focuses on the management of a computer network using the Linux operating system. Emphasis is placed on installation, configuration, implementation, and administrative tasks of a functional server. Two hours lecture and four hours lab. Four semester hours credit.

CNT 2424 – System Maintenance – This course covers the diagnosis, troubleshooting, and maintenance of computer components. Topics include hardware compatibility, system architecture, memory, input devices, video displays, disk drives, modems, and printers. Two hours lecture and four hours lab. Four semester hours credit.

CNT 2534 – Network Planning and Design – Prerequisites: One Network Operating System Elective and Network Components (CNT 1524). This course involves applying network concepts in planning and designing a functioning network. Emphasis is placed on recognizing the need for a network, conducting analysis, and designing solutions. Two hours lecture and four hours lab. Four semester hours credit.

CNT 2544 – Network Implementation – Prerequisite: Network Planning and Design (CNT 2534). This course is the culmination of all concepts learned in the network curriculum. Topics include planning, installation, evaluation, and maintenance of a network solution. Two hours lecture and four hours lab. Four semester hours credit.

CNT 2554 - Network Security - Prerequisites: Web and Programming Concepts (CPT 1144) and Network Components (CNT 1524) This course provides an introduction to network and computer security. Topics such as ethics, security policies, legal issues, vulnerability testing tools, firewalls and operating system hardening will be discussed. Students will receive a deeper understanding of network operations and protocols through traffic capture and protocol analysis. (4 sch: 2 hr. Lecture, 4 hr. Lab)

CNT 2634 –Advanced Network Administration Using Novell – Prerequisite: Network Administration Using Novell (CNT 1614). This course is a continuation of Network Administration Using Novell. Emphasis is placed on installation, configuration, and implementation of a Novell Network. Two hours lecture and four hours lab. Four semester hours credit.

CNT 2644 – Advanced Network Administration using Microsoft Windows Server – Prerequisites: Fundamentals of Data Communication (CNT 1414) and Network Administration using Microsoft Windows Server (CNT 1624). This course is a continuation of Network Administration Using Microsoft Windows Server. Emphasis is placed on installation, configuration, and implementation of a functional Server. Two hours lecture and four hours lab. Four semester hours credit.

CNT 2654 - Advanced Network Administration Using Linux - Prerequisites: Web Development Concepts (WDT 1123), Network Components (CNT 1524), Network administration Using Linux (CNT 1654). This course is a continuation of CNT 1654. This is an advanced administration course in network services for Linux users who wish to increase their skills. Students will learn how to apply security to network users and resources, manage and compile the Linux kernel, manage network clients, and troubleshoot network processes and services. Two hours lecture and four hours lab. Four semester hours credit.

CPT 1144 – Web and Programming Concepts – This course is an introduction to programming logic, computer systems and the Internet. Students will gain hands-on experience in the development of computer programs and web pages. Two hours lecture and four hours lab. Four semester hours credit.

CPT 1214 – Visual BASIC Programming – Introduction to the Visual BASIC programming language. Introduces the student to object-oriented programming and a graphical integrated development environment. Two hours lecture and four hours lab. Four semester hours credit.

CPT 1224 – RPG Programming Language – Prerequisite: Web and Programming Concepts (CPT 1144). This course is designed to introduce the student to the RPG language for the

creation of business applications. Two hours lecture and four hours lab. Four semester hours credit.

CPT 1323 – Survey of Microcomputer Applications – This course will introduce students to the business uses of the Internet including the World Wide Web, browsers, list serves, and email. It will also introduce business productivity software such as word processing, spreadsheet, and database management software with integration of these applications. Two hours lecture and two hours lab. Three semester hours credit.

CPT 1333 – Operating Platforms – This course will provide experience in a variety of operating platforms. Emphasis will be placed on support personnel interaction with the platform to assist users in business environments. Two hours lecture and two hours lab. Three semester hours credit

CPT 1353 – Database Design Fundamentals – Prerequisite: Any Programming Language. This course is a study of the design of databases. Additional emphasis is placed on creation, manipulation, extraction, and display of data from existing databases. Two hours lecture and two hours lab. Three semester hours credit.

CPT 1414 – Java Programming Language – Introduction to the Java programming language to include sorts, loops, arrays, and applets. Two hours lecture and four hours lab. Four semester hours credit.

CPT 2132 – Career Development – Prerequisite: Written Communication Elective. This course provides practical exercises in both the technical and social skills necessary for employment. Interpersonal skills, the job search process, and the importance of high standards of personal and professional relationships are stressed. One hour lecture and two hours lab. Two semester hours credit.

CPT 2244 – Database Programming – This course will introduce programming using a database management software application. Emphasis will be placed on menus and file maintenance. Two hours lecture and four hours lab. Four semester hours credit.

CPT 2264 – Advanced RPG Programming Language – Prerequisite: RPG Programming Language (CPT 1224). This course is a continuation of the RPG programming language. Emphasis is placed on advanced table processing, file maintenance, and interactive programming. Two hours lecture and four hours lab. Four semester hours credit.

CPT 2284– C Programming Language – Prerequisites: Any Programming Language course or by permission of instructor. This course is designed to introduce the student to the C programming language and its basic functions. Two hours lecture and four hours lab. Four semester hours credit.

CPT 2354 – Web Site and Systems Design – Prerequisite: Database Design Fundamentals (CPT 1353) and Web Server (WDT 2823) or by permission of Instructor. This course introduces techniques used in systems analysis design, maintenance, security, and evaluation. Emphasis will be placed on the design and development of web-based systems. Two hours lecture and four hours lab. Four semester hours credit.

CPT 2424 – Advanced C Programming Language – Prerequisite: C Programming Language (CPT 2284). This course is a continuation of the C programming language. Two hours lecture and four hours lab. Four semester hours credit.

CPT 2434 – Advanced Visual BASIC Programming Language – Prerequisite: Visual BASIC (CPT 1214). This course is a continuation of Visual BASIC. Emphasis is placed on database access, file access, controls, and structures. Two hours lecture and four hours lab. Four semester hours credit.

CPT 2444 – Script Programming – Prerequisites: Web And Programming Concepts (WDT 1123) or by permission of instructor. This course is an introduction to the use of integrating scripts to add functionality to web pages. Two hours lecture and four hours lab. Four semester hours credit.

IST 1113 - Fundamentals of Information Technology - Introduces microcomputer operation, word processing, spreadsheets, database management, and online applications. This course is designed for students with limited computer proficiency and is to be taken by those students in addition to the courses listed in the course sequence. Two hours lecture and two hours lab. Three semester credit hours.

IST 1124 - IT Foundations - This course covers the diagnosis, troubleshooting, and maintenance of computer components and interpersonal communications for IT professionals. Topics include hardware compatibility, system architecture, memory, input devices, video displays, disk drives, modems, printers, safety and environmental issues, communication, and professional behavior. Two hours lecture and four hours lab. Four semester hours credit.

IST 1134 – Fundamentals of Data Communications – This course introduces students to fundamentals of networking. It provides coverage of architectures, topologies, and protocols. Four semester credit hours: Two hours lecture and four hours lab.

IST 1143 - Security Principles and Policies - This course is an introduction to the various technical and administrative aspects of Information Security and Assurance. This course provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing a consistent, reasonable information security system with appropriate intrusion detection and reporting features. Two hours lecture and two hours lab. Three semester hours credit.

IST 1154 – Web and Programming Concepts – This course is an introduction to programming logic computer systems and the Internet. Students will gain hands-on experience in the development of computer programs and web pages. Four semester credit hours: Two hours lecture and four hours lab.

IST 1163 - Concepts of Database Design - This course is an introduction to the design and manipulation of relational databases. Emphasis is placed on creation, manipulation, extraction, and display of data from existing databases. QBE and SQL are explored. Two hours lecture and two hours lab. Three semester hours credit.

IST 1213 – Client Installation and Configuration –Prerequisites: Fundamentals of Data Communications (IST 1134). This course is designed to help the student install, support and troubleshoot the Client operating system. Emphasis will be placed on common user's operations as well as the network administrator's support of the operating system. Four semester credit hours: Two hours lecture and four hours lab.

IST 1224 – Network Components – Prerequisite: Fundamentals of Data Communications (IST 1134). This course presents local area network and wide area network connectivity. It focuses on architectures, topologies, protocols, and transport methods of a network. Four semester credit hours: Two hours lecture and four hours lab.

IST 1234 – Network Administration Using Novell – Prerequisites: Fundamentals of Data Communications (IST 1134). This course focuses on the management of a computer network using the Novell network operating system. Emphasis will be placed on daily administrative tasks performed by a network administrator. Four semester credit hours: Two hours lecture and four hours lab.

IST 1244 – Network Administration Using Microsoft Windows Server –Prerequisites: Fundamentals of Data Communications (**IST 1134**). This course focuses on the management of a computer network using the Novell network operating system. Emphasis will be placed on daily administrative tasks performed by a network administrator. Four semester credit hours: Two hours lecture and four hours lab.

IST 1254 – Network Administration Using Linux – Prerequisites: Fundamentals of Data Communications (**IST 1134**). This course focuses on the management of a computer network using the Linux operating system. Emphasis is placed on installation, configuration, implementation, and administrative tasks of a functional server. Four semester credit hours: Two hours lecture and four hours lab.

IST 1314 – Visual BASIC Programming – Introduction to the Visual BASIC programming language. Introduces the student to object-oriented programming and a graphical integrated development environment. Four semester credit hours: Two hours lecture and four hours lab.

IST 1324 – RPG Programming Language – Prerequisite: Web and Programming Concepts (**IST 1154**). This course is designed to introduce the student to the RPG language for the creation of business applications. Four semester credit hours: Two hours lecture and four hours lab.

IST 1414 – Client Side Programming – Prerequisites: Web and Programming Concepts (**IST 1154**) and a Programming Language. This course focuses on JavaScript, CSS, and DHTML programming. Four semester credit hours: Two hours lecture and four hours lab.

IST 1424 – Web Design Applications – Prerequisites: Web and Programming Concepts (**IST 1154**) and **IT Foundations (IST 1124)**. Introduce students to various professional and personal web design applications using current industry standards. Students will work with the latest WYSIWYG editors, HTML editors, animation/multi-media products, and photo editors. Four semester credit hours: Two hours lecture and four hours lab.

IST 2214 – Network Security – Prerequisites: Network Components (**IST 1224**). This course provides an introduction to network and computer security. Topics such as ethics, security policies, legal issues, vulnerability testing tools, firewalls and operating system hardening will be discussed. Students will receive a deeper understanding of network operations and protocols through traffic capture and protocol analysis.

Four semester credit hours: Two hours lecture and four hours lab.

IST 2224 – Network Planning and Design – Prerequisite: One Network Operating System Elective and Network Components (**IST 1224**). This course involves applying network concepts in planning and designing a functioning network. Emphasis is placed on recognizing the need for a network, conducting analysis, and designing solutions. Four semester credit hours: Two hours lecture and four hours lab.

IST 2234 – Network Implementation – Prerequisite: Network Planning and Design (**IST 2224**). This course is the culmination of all concepts learned in the network curriculum. Topics include planning, installation, evaluation, and maintenance of a network solution. Four semester credit hours: Two hours lecture and four hours lab.

IST 2244 – Advanced Network Administration Using Novell – Prerequisite: Network Administration Using Novell (**IST 1234**). This course is a continuation of Network Administration Using Novell. Emphasis is placed on installation, configuration, and implementation of a Novell Network. Four semester credit hours: Two hours lecture and four hours lab.

IST 2254 – Advanced Network Administration Using Microsoft Windows Server – Prerequisites: Fundamentals of Data Communication (**IST 1414**) and Network Administration

using Microsoft Windows Server (IST 1244). This course is a continuation of Network Administration Using Microsoft Windows Server. Emphasis is placed on installation, configuration, and implementation of a functional server. Four semester credit hours: Two hours lecture and four hours lab.

IST 2264 – Advanced Network Administration Using Linux – Prerequisites: Web and Programming Concepts (IST 1154), Network Components (IST 1224), and Network Administration Using Linux (IST 1254). This course is a continuation of IST 1654. This is an advanced administration course in network services for Linux users who wish to increase their skills. Students will learn how to apply security to network users and resources, manage and compile the Linux kernel, manage network clients, and troubleshoot network processes and services. Four semester credit hours: Two hours lecture and four hours lab.

IST 2314 – Web Site and Systems Development – Prerequisites: Concepts of Database Design (IST 1163) and Web Server (IST 2483) or by permission of instructor. This course introduces techniques used in systems analysis, design, maintenance, security, and evaluation. Emphasis will be placed on the design and development of web-based systems. Four semester credit hours: Two hours lecture and four hours lab.

IST 2324 – Script Programming – Prerequisites: Web and Programming Concepts (IST 1154) or by permission of instructor. This course is an introduction to the use of integrating scripts to add functionality to web pages. Four semester credit hours: Two hours lecture and four hours lab.

IST 2334 – Advanced Visual BASIC Programming Language – Prerequisite: Visual BASIC (IST 1314). This course is a continuation of Visual BASIC. Emphasis is placed on database access, file access, controls, and structures. Four semester credit hours: Two hours lecture and four hours lab.

IST 2344 – Database Programming – This course will introduce programming using a database management software application. Emphasis will be placed on menus and file maintenance. Four semester credit hours: Two hours lecture and four hours lab.

IST 2354 – Advanced RPG Programming Language – Prerequisite: RPG Programming Language (IST 1324). This course is a continuation of the RPG programming language. Emphasis is placed on advanced table processing, file maintenance, and interactive programming. Four semester credit hours: Two hours lecture and four hours lab.

IST 2374 – C Programming Language – Prerequisites: Any Programming Language course or by permission of instructor. This course is designed to introduce the student to the C programming language and its basic functions. Four semester credit hours: Two hours lecture and four hours lab.

IST 2384 – Advanced C Programming Language – Prerequisite: C Programming Language (IST 2374). This course is a continuation of the C programming language. Four semester credit: Two hours lecture and four hours lab.

IST 2414 - Flash Game Programming – Prerequisites: Client-Side Programming (IST 1414) and Web Design Applications (IST 1424). This course is an introduction to developing interactive Web-based games using Flash and ActionScript programming. Upon completion of this course, students will be able to create a fully functional Flash game and post it on the Web. Four semester credit hours. Two hours lecture and four hours lab.

IST 2424 – XML Programming – Prerequisite: Web and Programming Concepts (IST 1154). Provides a comprehensive understanding of the Extensible Markup Language (XML). Four semester credit hours: Two hours lecture and four hours lab.

IST 2434 – Server Side Programming I – Prerequisite: Client Side Programming (IST 1414). An introduction to creating dynamic web applications using server-side technologies. . Four semester credit hours: Two hours lecture and four hours lab

IST 2444 – Server Side Programming II – Prerequisite: Server-Side Programming I (IST 2434). Continuation of Server-Side Programming I with increased emphasis on data-driven content. Four semester credit hours: Two hours lecture and four hours lab.

IST 2453 – Web Graphic Production – Prerequisites: Web Design Applications (IST 1424) and Web and Programming Concepts (IST 1154) or by instructor's consent. An in-depth study of producing and utilizing graphic elements designed for Internet or web application. Emphasis is placed equally on concentrated study related to color management, typography, graphic development and manipulation of individual elements and is recommended as a supplement to a web design application course or previous experience. Three semester credit hours: One hour lecture and four hours lab.

IST 2473 – E-Commerce Strategies – Prerequisite: Server Side Programming I (IST 2434). Provides opportunities for students to examine strategies and products available for building electronic commerce sites, examine how such sites are managed, and explore how they can complement an existing business infrastructure. Students get hand-on experience implementing the technology to engage cardholders, merchants, issues, payment getaways, and other parties in electronic transactions. Three semester credit hours: Two hours lecture and two hours lab.

IST 2483 – Web Server – Prerequisites: IT Foundations (IST 1124) and Fundamentals of Data Communications (IST 1134). Co requisite: Server Side Programming I (IST 2434). Introduces students to web, e-mail, and proxy servers and the platforms on which they reside. Students will be able to install and configure web, e-mail, and proxy servers. Three semester credit hours: Two hours lecture and two hours lab.

WDT 1314 – Client Side Programming – Prerequisites: Web and Programming Concepts (CPT 1144) and a Programming Language. This course focuses on JavaScript, CSS, and DHTML programming. Two hours lecture and four hours lab. Four semester hours credit.

WDT 1414 – Web Design Applications – Prerequisites: Web and Programming Concepts (CPT 1144). Introduce students to various professional and personal web design applications using current industry standards. Students will work with the latest WYSIWYG editors, HTML editors, animation/multi-media products, and photo editors. Two hours lecture and four hours lab. Four semester hours credit.

WDT 2214 –Server Side Programming I – Prerequisite: Client Side Programming (WDT 1314). An introduction to creating dynamic web applications using server-side technologies. Two hours lecture and four hours lab. Four semester hours credit.

WDT 2224 –Server Side Programming II – Prerequisite: Server-Side Programming I (WDT 2214). Continuation of Server-Side Programming I with increased emphasis on data-driven content. Two hours lecture and four hours lab. Four semester hours credit.

WDT 2263 – Web Graphic Production – Prerequisites: Web Design Applications (WDT 1414) and Web Development Concepts (WDT 1123); or by instructor's consent. An in-depth study of producing and utilizing graphic elements designed for Internet or web application. Emphasis is placed equally on concentrated study related to color management, typography, graphic development and manipulation, digital imaging, and creating dynamic web experiences. The

focus is on the production and manipulation of individual elements and is recommended as a supplement to a web design application course or previous experience. One hour lecture and four hours lab. Three semester hours credit.

WDT 2324- XML Programming - Prerequisite: Web and Programming Concepts (CPT 1144). Provides a comprehensive understanding of the Extensible Markup Language (XML). Two hours lecture and four hours lab. Four semester hours credit.

WDT 2723 – E-Commerce Strategies – Prerequisite: Server-Side Programming I (WDT 2214). Provides opportunities for students to examine strategies and products available for building electronic commerce sites, examine how such sites are managed, and explore how they can complement an existing business infrastructure. Students get hands-on experience implementing the technology to engage cardholders, merchants, issues, payment gateways, and other parties in electronic transactions. Two hours lecture and two hours lab. Three semester hours credit.

WDT 2823 – Web Server – Prerequisites: Operating Platforms (CPT 1333) and Fundamentals of Data Communications (CNT 1414). Corequisite: Server-Side I (WDT 2214). Introduces students to web, e-mail, and proxy servers and the platforms on which they reside. Students will be able to install and configure web, e-mail, and proxy servers. Two hours lecture and two hours lab. Three semester hours credit.