



Building Linkages in IT Occupations Framework; For Entry Level, Technical, and Professional Careers Related to Design, Development, Support and Management for Hardware, Software, Multimedia, and Systems Integration Services.

Pathway: Electronic Publishing

Keyboard/Document Layout and Design

Credit: ½

SDE Course Code: 3727

MNPS Course Code: BUS7155

The Keyboarding/Document Layout and Design course builds on the Keyboarding/Document Formatting course. Student proficiency can lead to software certification. The student will use a hands-on approach to develop proficiency in document creation and design. Emphasis is on production of business applications including design and layout, speed and accuracy. Concepts, capabilities, procedures and legal responsibilities of word and information processing are applied. Simulated real projects from rough draft copy and/or transcription magnetic media are used for problem solving and business document preparation..

eBusiness Communication

Credit: 1

SDE Course Code: 3704

MNPS Course Code: BUS7291

eBusiness Communication is the study of oral, written, and electronic communications in a global society. Components of communication include the sender, the message, the receiver, the feedback, and the channel. The purposes of communication are to build goodwill, persuade, obtain or share information, and build self-esteem. The course

will address the use of Internet developing concepts, particularly those related to Web browsers, navigators, search engines, on-line communication methods, home and Web site design concepts, transfer of data, downloading files, security procedures and Internet navigational tools. The student will choose and use appropriate tools when completing Internet applications using the Internet for research and validation of research data for written and oral business communications. Emphasis will be placed on electronic research, security issues, ethics, business report writing, business correspondence, enhancement of oral presentations with electronic media and communications applying current technology.

Desktop Publishing

Credit: 1

SDE Course Code: 3741

MNPS Course Code: BUS7184

The student will apply keying, formatting, typography, and layout and design skill in developing electronic publishing documents. The student will develop skills in electronic publishing design, layout, composition, and photo journalism. Content provides the opportunity to acquire marketable skills and to prepare for gainful employment and or entry into

postsecondary education in the graphic communications industry. Laboratory facilities and experiences simulate those found in the graphic communications industry.

Integrated Input Technology

Credit: 1 - 2

SDE Course Code: 3730

MNPS Course Code: BUS7185

This is a capstone course in which students will learn necessary skills in problem solving using current and emerging integrated technology to include a variety of input technologies such as advanced keyboarding, scanning, speech recognition, handwriting recognition, and the use of a mouse in the production of mailable business documents. The course focuses on student choice, accountability and competency. Students work toward the attainment of high-level employable competencies in areas which may include (but are not limited to) integrated software applications, computer systems, communication systems, networking, ethical issues, human relations, leadership, self-management, and workplace management. Students may choose areas of specialization and achieve industry certification in areas such as word processing, spreadsheet applications, database design and management, multimedia presentations, schedule and contact management, etc. This course may articulate to post-secondary education.

Pathway: Interactive Multimedia

Computer Applications

Credit: 1

SDE Course Code: 3718

MNPS Course Code: BUS3718

This course is designed to develop computer technology skills. Students will use a variety of computer software and hardware tools and features of an electronic information

network. Students will explore the, historical, social and ethical issues of using computer technology. The students will develop skills that will assist them with efficient production; accurate production analysis;

management of information and design and presentation of a multimedia project.

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Interactive Multimedia Presentation

Credit: 1

SDE Course Code: 3746

MNPS Course Code: BUS7617

The student will apply keying, typography, layout and design skills in this course. The student will be proficient in using interactive multimedia tools

to develop electronic presentations. Creative design, persuasive communications, and language arts skills are applied through research, evaluation, validation, written, and oral communication. Typography, layout and design guidelines are applied. Copyright laws and ethical practices are reinforced in creating and formatting various presentations that require imported data/graphics, digital, audio, and video clips. Team development will also be stressed as students work on multimedia project(s). Laboratory facilities and experiences simulate those found in business and industry.

Pathway: Information Support Services

Computer Applications

Credit: 1

SDE Course Code: 3718

MNPS Course Code: BUS3718

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those related to Web browsers, navigators, search engines, on-line communication methods, home and Web site design concepts, transfer of data, downloading files, security procedures and Internet navigational tools. The student will choose and use appropriate tools when completing Internet applications using the Internet for research and validation of research data for written and oral business communications. Emphasis will be placed on electronic research, security issues, ethics, business report writing, business correspondence, enhancement of oral presentations with electronic media and communications applying current technology.

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BASIC Programming

Credit: 1

SDE Course Code: 3722

This course is designed to develop object-oriented programming language skills using Beginners All-Purpose Symbolic Instruction Code (BASIC). The student will utilize the commands, statements, and procedures of this language to write, run, debug, and edit computer programs.

Integrated Input Technology

Credit: 1 - 2

SDE Course Code: 3730

MNPS Course Code: BUS7185

Pathway: Networking Systems

Information Technology Foundations

Credit: 1

SDE Course Code: 3764

MNPS Course Code: BUS3764

Information Technology Foundations is designed to prepare students with work-related skills for advancement in the telecommunication and computer architecture career paths. Content provides students the opportunity to acquire basic foundational knowledge and skills in both theory and practical applications in direct current, alternating current, digital and power supply circuits. Course content includes fundamentals for personal computers (PC), networking, determining system requirements, setting up equipment, and performing installation tests for the end user. Content provides the opportunity to evaluate and install peripheral devices. Course content will be delivered through virtual training and hands-on methods. Competencies mastered during this course help prepare students toward acquiring basic electronics and/or A+ certifications.

Computer Operating Systems and Hardware

Credit: 1 - 2

SDE Course Code: 3763 or 5756

MNPS Course Code: BUS3763 or VO8185

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Networking Essentials/Networking

Credit: 1

SDE Course Code: 3738 or 5757

MNPS Course Code: BUS7616 or VO8172

This course is designed to teach the fundamentals of networking through the use of lecture, multimedia, and hands on training. Students will be introduced to the terminology, concepts and industry standards that govern how computers and other devices communicate with each other. This course will provide students with a good working knowledge of the hardware and software being used today in multi vendor networks throughout the business world. This course will particularly help prepare students who are planning to pursue international technology certifications such as the Microsoft Certified Systems Engineer/Administrator (MCSE) (MCSA), CompTIA Network +, or Certified

Novell Engineer (CNE) just to name a few. This course may articulate to a postsecondary program.

Cabling Technology

Credit: 1

SDE Course Code: 5758

MNPS Course Code: VO8173

Cabling Technology is a part of the information technology infrastructure sub cluster, and it is designed to equip technicians with the fundamental knowledge, skills, and abilities necessary to install, troubleshoot, and maintain today's networks. Course content presents the principles, which govern the architecture and design of systems and networks for connectivity of video, voice, and data communications. Course content and skill development is delivered by the use of training centers and training aids in the class laboratory on which students complete training exercises

Pathway: Programming and Software Development

BASIC Programming

Credit: 1

SDE Course Code: 3722

MNPS Course Code: BUS3722

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(BASIC). The student will utilize the commands, statements, and procedures of this language to write, run, debug, and edit computer programs.

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report writing, business correspondence, enhancement of oral presentations with electronic media and communications applying current technology.

C++ Programming
Credit: 1
SDE Course Code: 3723
MNPS Course Code: BUS3723

This course is designed to develop object-oriented programming language skills using C++. The student will utilize the commands, statements, and procedures of this lan-

guage to write, run, debug, and edit computer programs.

JAVA
Credit: 1
SDE Course Code: 3761
MNPS Course Code: BUS3761

This course is designed to develop object-oriented programming language skills using JAVA. The student will utilize the commands, statements, and procedures of this language to write, run, debug, and edit computer programs

Pathway: Web Design

Website Foundations
Credit: 1
SDE Course Code: 3758
MNPS Course Code: BUS3758

This course prepares students with work-related skills for advancement into postsecondary education or industry. Course content includes exposure to basic Web Design and the dynamics of networking/Internetworking, Web hosting and Web design in e-commerce. The course content provides students the opportunity to acquire fundamental skills in both theory and practical application of Web Design and of leadership and interpersonal skill development. Laboratory facilities and experiences simulate those found in the Web Page Design and construction industry.

Website I Foundations
Credit: 1
SDE Course Code: 5766 or 3815
MNPS Course Code: VO8181 or TEE3815

See above description.

Webpage Design Site Designer
Credit: 1
SDE Course Code: 3759
MNPS Course Code: BUS3759

This course prepares students with work-related skills for advancement into postsecondary education or industry. Course content includes exposure to basic and advanced Web design, pixelated and vector-based Web graphics, Web animations, dynamics of Web hosting, and

Web design in E-commerce. The course content provides students the opportunity to acquire fundamental skills in both theory and practical application of Web design and of leadership and interpersonal skill development. Laboratory facilities and experiences simulate those found in the Web page design and Web page construction industry. Further, this course maps to the Certified Internet Webmaster "Site Designer" national certification examination.

Webpage II Design Site Designer
Credit: 1
SDE Course Code: 5767 or 3816
MNPS Course Code: VO8281 or TEE3816

See above description

Web Design - eCommerce
Credit: 1
SDE Course Code: 3760
MNPS Course Code: BUS3760

This course prepares students with work-related skills for advancement into postsecondary education or industry. Course content includes exposure to Web design in e-commerce with marketing, customer relations, and commercial Web site publication. The course content provides students the opportunity to acquire fundamental skills in practical application of Web development, leadership, and interpersonal skill development. Laboratory facilities and experiences simulate those found in the Web page design and Web page construction industry. This

course correlates to the CIW certification "Web eCommerce"

Web Design III - eCommerce
Credit: 1
SDE Course Code: 5769 or 3817
MNPS Course Code: VO8381 or TEE3817

See above description.