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ABSTRACT

Developed through a modified DACUM (Developing a Curriculum) process involving business, industry, labor, and community agency representatives in Ohio, this document is a comprehensive and verified employer competency profile for business information systems occupations. The list contains units (with and without subunits), competencies, and competency builders that identify the skills needed to enter these occupations. The occupational, academic, and employability skills for this occupation or occupational area are included. Within the outline are three levels of items: core, advancing, and futuring. Core items identify the knowledge, skills, and attitudes essential for entry-level employment. These items are required to be taught and will be the basis for questions on the state vocational competency tests. Advancing items identify the knowledge, skills, and attitudes needed to advance in the occupation; futuring items identify the knowledge, skills, and attitudes needed to enter and remain in a given occupation 3 to 4 years from now. Titles of the 11 units are as follows: data input; microcomputer operations; computer operations; information systems; software applications; general business concepts; office functions; communications; professionalism; supervisory functions; and employability skills. (KC)

OCAP

OHIO'S COMPETENCY ANALYSIS PROFILE

BUSINESS
INFORMATION SYSTEMS

Employer Verification Panel

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Division of Vocational and
Career Education
Ohio Department of Education

Vocational Instructional Materials Laboratory
Center on Education and Training
for Employment

THE OHIO STATE UNIVERSITY

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What is OCAP?

"A comprehensive and verified employer competency list will be developed and kept current for each program." This is the second objective of Imperative 3 of the *Action Plan for Accelerating the Modernization of Vocational Education: Ohio's Future at Work*. Ohio's Competency Analysis Profile (OCAP) lists are the Division of Vocational and Career Education's response to that objective. OCAP lists evolve from a modified DACUM process involving business, industry, labor, and community agency representatives from throughout Ohio. The OCAP process is directed by the Vocational Instructional Materials Laboratory at The Ohio State University's Center on Education and Training for Employment.

How is OCAP used?

Each OCAP contains units (with and without subunits), competencies, and competency builders that identify the occupational, academic*, and employability skills needed to enter a given occupation or occupational area. Within that outline there are three levels of items: core, advancing, and futuring. Core items identify the knowledge, skills, and attitudes essential for entry-level employment. These items are required to be taught and will be the basis for questions on the state vocational competency tests (scheduled to begin in school year 1993-94). Advancing items (marked with one asterisk) identify the knowledge, skills, and attitudes needed to advance in a given occupation. Futuring items (marked with two asterisks) identify the knowledge, skills, and attitudes needed to enter and remain in a given occupation three to four years from now.

School districts may add as many units, subunits, competencies, and/or competency builders as desired to reflect local employment needs, trends, and specialties. Local advisory committees should be actively involved in the identification and verification of additional items. Using OCAP lists, instructors will be able to formulate their vocational courses of study and monitor competency gains via the new criterion-referenced competency testing program that will be directly tied to the competencies identified on the OCAP lists.

*Academic competencies have not been identified for all OCAPs. At a later date math, communication, and science competencies will be released.

The **Employability Skills** portion of this list was verified by the following employer panel:

Gary J. Corrigan, *Dana Corporation*, Ottawa Lake, Michigan
David Crooks, *Bowling Green State University Union Food Service*, Bowling Green, Ohio
Pat Doerman, *Farrow's Harley-Davidson*, Columbus, Ohio
William Gockenbach, *Kaiser Aluminum*, Heath, Ohio
Patsy Hathaway, *CBS Personnel Services, Inc.*, Dayton, Ohio
Marlyn Harman, *Marlyn Harman & Associates* Cleveland, Ohio
Thomas R. Hyldahl, *Toledo Edison*, Toledo, Ohio
Carol C. James, *Ohio Contractors Association*, Columbus, Ohio
James Mack, *Chrysler Jeep Assembly*, Toledo, Ohio
Rocky McCoy, *Ironton-Lawrence Co. Community Action Organization*, Ironton, Ohio
James Needs, *Independent Crop Producer*, Upper Sandusky, Ohio
Ronald Simmons, *Former GM Executive*, Warren Ohio

OHIO COMPETENCY ANALYSIS PROFILE

BUSINESS INFORMATION SYSTEMS

UNIT 1:   Data Input

COMPETENCY 1.0.1:   Enter and verify data

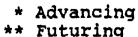**COMPETENCY BUILDERS:**

1.0.1.1   Use company procedural manuals, references,
          documentation, and work flow
1.0.1.2   Use manufacturers' manuals, documentation, terminology,
          and other reference materials
1.0.1.3   Follow job instructions
1.0.1.4   Check equipment for operational status
1.0.1.5   Organize and prepare input
1.0.1.6   Follow company log-on procedures
1.0.1.7   Enter/key data from source
1.0.1.8   Maintain source
1.0.1.9   Verify data for input accuracy
1.0.1.10 Analyze data for reasonableness*

COMPETENCY 1.0.2:   Perform ancillary data input functions

COMPETENCY BUILDERS:

1.0.2.1   Perform input control procedures (e.g., verifying data
          for input accuracy, analyzing data for reasonableness,
          completing production log, file completing transmittal
          logs, and balancing)
1.0.2.2   Follow company log-off procedures
1.0.2.3   File reusable tapes, disks, or diskettes

  * Advancing
 ** Futuring   1

UNIT 2: Microcomputer Operations

COMPETENCY 2.0.1: Maintain microcomputers

COMPETENCY BUILDERS:

2.0.1.1   Use company procedural manuals, references, documentation, and standards
2.0.1.2   Use manufacturers' manuals, documentation, terminology, and other reference materials
2.0.1.3   Install PC
2.0.1.4   Change boards
2.0.1.5   Use operating system
2.0.1.6   Set up system configuration
2.0.1.7   Install software packages
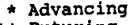2.0.1.8   Respond to system messages
2.0.1.9   Troubleshoot system
2.0.1.10 Identify and report computer malfunction(s)
2.0.1.11 Identify and report software malfunction(s)
2.0.1.12 Run software applications
2.0.1.13 Back up and restore systems
2.0.1.14 Perform preventative maintenance

COMPETENCY 2.0.2: Maintain LAN (Local Area Network)

COMPETENCY BUILDERS:

2.0.2.1   Use company procedural manuals, references, documentation, and standards
2.0.2.2   Use manufacturers' manuals, documentation, terminology, and other reference materials
2.0.2.3   Apply LAN concepts and technology
2.0.2.4   Attach PC to LAN
2.0.2.5   Change boards
2.0.2.6   Use operating system
2.0.2.7   Set up system configuration
2.0.2.8   Install LAN manager software*
2.0.2.9   Install software packages
2.0.2.10 Respond to system messages
2.0.2.11 Troubleshoot system
2.0.2.12 Run software applications
2.0.2.13 Back up and restore systems
2.0.2.14 Perform preventative maintenance

* Advancing
** Futuring

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COMPETENCY 2.0.3: Operate peripheral devices

COMPETENCY BUILDERS:

2.0.3.1   Use manufacturers' manuals, documentation, terminology,
          and other reference materials
2.0.3.2   Load, start, and unload media devices
2.0.3.3   Retrieve and file storage media
2.0.3.4   Set up, operate, and maintain print devices
2.0.3.5   Perform routine maintenance on peripheral devices
2.0.3.6   Monitor peripheral equipment operations

COMPETENCY 2.0.4: Perform storage media housekeeping routines

COMPETENCY BUILDERS:

2.0.4.1   Use manufacturers' manuals, documentation, terminology,
          and other reference materials
2.0.4.2   Retrieve and file stored media (e.g., on-line, off-
          line, permanent, off-site)
2.0.4.3   Initialize media
2.0.4.4   Receive, label, and catalog media
2.0.4.5   Maintain supplies
2.0.4.6   Maintain media library
2.0.4.7   Backup records
2.0.4.8   Perform company and/or government standards for media
          security

UNIT 3: Computer Operations

COMPETENCY 3.0.1: Operate computer systems

COMPETENCY BUILDERS:

3.0.1.1 Use company procedural manuals, references,
         documentation, standards, and work flow
3.0.1.2 Use manufacturers' manuals, documentation, terminology,
         and other reference materials
3.0.1.3 Perform power-up and log-on procedures
3.0.1.4 Use command language
3.0.1.5 Use console device to interact with and respond to
         system messages
3.0.1.6 Secure supplies and resources
3.0.1.7 Follow processing procedures for each application/job
3.0.1.8 Run application/job
3.0.1.9 Monitor system status
3.0.1.10 Run diagnostics
3.0.1.11 Identify and report computer malfunction(s)
3.0.1.12 Identify and report software malfunction(s)
3.0.1.13 Fix recoverable problems
3.0.1.14 Maintain security
3.0.1.15 Maintain computer log
3.0.1.16 Perform backup procedure(s)
3.0.1.17 Perform preventive maintenance
3.0.1.18 Follow log-off and pcwer-down procedure(s)

COMPETENCY 3.0.2: Operate peripheral devices

COMPETENCY BUILDERS:

3.0.2.1 Use manufacturers' manuals, documentation, terminology,
         and other reference materials
3.0.2.2 Retrieve and file storage media
3.0.2.3 Load, start, and unload media devices
3.0.2.4 Set up, operate, and maintain print devices
3.0.2.5 Monitor peripheral equipment operations
3.0.2.6 Perform routine maintenance on peripheral devices

COMPETENCY 3.0.3: Perform storage media housekeeping routines

COMPETENCY BUILDERS:

3.0.3.1   Use manufacturers' manuals, documentation, terminology, and other reference materials
3.0.3.2   Retrieve and file stored media (e.g., on-line, off-line, permanent, off-site)
3.0.3.3   Initialize media
3.0.3.4   Receive, label, and catalog media
3.0.3.5   Maintain supplies
3.0.3.6   Maintain media library
3.0.3.7   Backup records
3.0.3.8   Perform company and/or government standards for media security

UNIT 4:   Information System*

COMPETENCY 4.0.1:   Analyze business information requirements*

COMPETENCY BUILDERS:

4.0.1.1   Use company procedural manuals, references, documentation, and standards*
4.0.1.2   Define and confirm business information requirements*
4.0.1.3   Read and interpret source data, charts, and graphs*
4.0.1.4   Review organizational structure*
4.0.1.5   Apply basic communication skills*
4.0.1.6   Conduct interviews*
4.0.1.7   Take notes*
4.0.1.8   Interpret existing operating documents and procedures for the system*
4.0.1.9   Observe, document, and record existing procedures*
4.0.1.10 Analyze existing procedures*
4.0.1.11 Apply mathematics, algebra, and logic*
4.0.1.12 Document possible alternative solutions*
4.0.1.13 Present findings and recommendations to management*

* Advancing
** Futuring   5

COMPETENCY 4.0.2: Design and document system*

COMPETENCY BUILDERS:

4.0.2.1 Use manufacturers' manuals, documentation, terminology, and other reference materials*
4.0.2.2 Use company procedural manuals, references, documentation, and standards*
4.0.2.3 Apply mathematics, algebra, and logic*
4.0.2.4 Read, interpret, and evaluate documentation, forms, notes, and source data*
4.0.2.5 Apply basic communication skills*
4.0.2.6 Conduct interviews*
4.0.2.7 Identify processing requirements*
4.0.2.8 Design system inputs and outputs and processes*
4.0.2.9 Determine programming language*
4.0.2.10 Apply CASE (Computer Assisted Software Engineering) tools**
4.0.2.11 Create design documentation*
4.0.2.12 Design implementation plan*
4.0.2.13 Present system design to users*
4.0.2.14 Present system design to management*

COMPETENCY 4.0.3: Analyze design specifications*

COMPETENCY BUILDERS:

4.0.3.1 Use company procedural manuals, references, documentation, and standards*
4.0.3.2 Analyze specifications*
4.0.3.3 Divide design specifications into logical process blocks*

COMPETENCY 4.0.4: Design program(s)*

COMPETENCY BUILDERS:

4.0.4.1 Use company procedural manuals, references, documentation, and standards*
4.0.4.2 Use manufacturers' manuals, documentation, terminology, and other reference materials*
4.0.4.3 Apply mathematics, algebra, and logic*
4.0.4.4 Identify processing requirements*
4.0.4.5 Determine programming language*
4.0.4.6 Determine input and output (I/O) requirements*
4.0.4.7 Prepare logic using program-flow diagram*
4.0.4.8 Define variables*

   * Advancing
  ** Futuring   6

COMPETENCY 4.0.5:   Code program(s)*

COMPETENCY BUILDERS:

4.0.5.1   Use company procedural manuals, references,
          documentation, and standards*
4.0.5.2   Use manufacturers' manuals, documentation, terminology,
          and other reference materials*
4.0.5.3   Apply BASIC, COBOL, RPG, and/or other appropriate
          programming tools to generate source code*
4.0.5.4   Apply CASE tools and "Reverse Engineering"**
4.0.5.5   Apply mathematics, algebra, and logic*
4.0.5.6   Write source code per standards*
4.0.5.7   Generate executable code*
4.0.5.8   Debug compilation errors*
4.0.5.9   Prepare program documentation*
4.0.5.10 Prepare user documentation*
4.0.5.11 Update design documentation*

COMPETENCY 4.0.6:   Test and debug program(s)/system*

COMPETENCY BUILDERS:

4.0.6.1   Use company procedural manuals, references,
          documentation, and standards*
4.0.6.2   Use manufacturers' manuals, documentation, terminology,
          and other reference materials*
4.0.6.3   Create test data that checks logic and error routines*
4.0.6.4   Execute program with test data*
4.0.6.5   Identify and correct execution errors*
4.0.6.6   Perform regression and integration test*
4.0.6.7   Analyze test results*
4.0.6.8   Update design documentation*

    * Advancing
    ** Futuring   7

COMPETENCY 4.0.7: Implement and evaluate system*

COMPETENCY BUILDERS:

4.0.7.1 Use company procedural manuals, references, documentation, and standards*
4.0.7.2 Use manufacturers' manuals, documentation, terminology, and other reference materials*
4.0.7.3 Apply mathematics, algebra, and logic*
4.0.7.4 Determine conversion method*
4.0.7.5 Train personnel*
4.0.7.6 Perform parallel testing (if applicable)*
4.0.7.7 Perform implementation or changeover to new system*
4.0.7.8 Perform post-implementation evaluation of new system*

UNIT 5: Software Applications

COMPETENCY 5.0.1: Perform spreadsheet functions

COMPETENCY BUILDERS:

5.0.1.1 Use company procedural manuals, references, documentation, workflow and standards
5.0.1.2 Use manufacturers' manuals, documentation, terminology, and other reference materials
5.0.1.3 Read, interpret, clarify, and follow written and/or oral specifications
5.0.1.4 Apply basic communications skills
5.0.1.5 Apply basic computer skills
5.0.1.6 Use spreadsheet functions to create files, input data, process data, and produce output
5.0.1.7 Use spreadsheet files with other application software
5.0.1.8 Verify accuracy of output

COMPETENCY 5.0.2: Perform database functions

COMPETENCY BUILDERS:

5.0.2.1 Use company procedural manuals, references, documentation, standards, and workflow
5.0.2.2 Use manufacturers' manuals, documentation, terminology, and other reference materials
5.0.2.3 Read, interpret, clarify, and follow written and/or oral specifications
5.0.2.4 Apply basic communication skills
5.0.2.5 Apply basic computer skills
5.0.2.6 Use database functions to create files, input data, process data, and produce output
5.0.2.7 Use database files with other application software
5.0.2.8 Verify accuracy of output
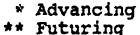
* Advancing
** Futuring

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COMPETENCY 5.0.3:   Perform computer business graphics

COMPETENCY BUILDERS:

5.0.3.1   Use company procedural manuals, references,
          documentation, standards, and workflow
5.0.3.2   Use manufacturers' manuals, documentation, terminology,
          and other reference materials
5.0.3.3   Read, interpret, clarify, and follow written and/or oral
          specifications
5.0.3.4   Apply basic communication skills
5.0.3.5   Apply basic computer skills
5.0.3.6   Use graphic functions to create files, input data,
          process data, and produce output
5.0.3.7   Use graphics files with other application software
5.0.3.8   Verify accuracy of output

COMPETENCY 5.0.4:   Perform word processing functions

COMPETENCY BUILDERS:

5.0.4.1   Use company procedural manuals, references,
          documentation, standards, and workflow
5.0.4.2   Use manufacturers' manuals, documentation, terminology,
          and other reference materials
5.0.4.3   Read, interpret, clarify, and follow written and/or oral
          specifications
5.0.4.4   Apply basic communications skills
5.0.4.5   Apply basic computer skills
5.0.4.6   Use word processing functions to create files, input
          data, process data, and produce output
5.0.4.7   Use word processing files with other application
          software
5.0.4.8   Perform desktop publishing functions*
5.0.4.9   Verify accuracy of output

* Advancing
** Futuring   9

COMPETENCY 5.0.5: Apply basic telecommunications functions

COMPETENCY BUILDERS:

5.0.5.1 Use company procedural manuals, references, documentation, standards, and workflow

5.0.5.2 Use manufacturers' manuals, documentation, terminology, and other reference materials

5.0.5.3 Read, interpret, clarify, and follow written and/or oral specifications

5.0.5.4 Apply basic communications skills

5.0.5.5 Apply basic computer skills

5.0.5.6 Use telecommuncations software and modem functions to attach to outside services and to upload and download files

5.0.5.7 Use telecommunications software files with other application software

UNIT 6: General Business Concepts

COMPETENCY 6.0.1: Apply business principles

COMPETENCY BUILDERS:

6.0.1.1 Analyze business organization and functions

6.0.1.2 Analyze business reporting and information flow

6.0.1.3 Determine interface with data processing functions

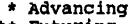COMPETENCY 6.0.2: Apply mathematical, algebraic, and logic
                   skills

COMPETENCY BUILDERS:

6.0.2.1   Solve addition, subtraction, multiplication, and
          division problems manually
6.0.2.2   Solve addition, subtraction, multiplication, and
          division problems using a calculator
6.0.2.3   Apply number relations
6.0.2.4   Convert and reduce fractions
6.0.2.5   Compute percentages
6.0.2.6   Apply measurements
6.0.2.7   Read tables
6.0.2.8   Perform data analysis and probability
6.0.2.9   Compute business and financial data
6.0.2.10 Design and apply algebraic formulas
6.0.2.11 Apply business statistics
6.0.2.12 Convert between numbering systems (e.g., binary,
          hexadecimal, decimal)
6.0.2.13 Construct truth tables (and, or, not conditions)
6.0.2.14 Use computer arithmetic and E notation
6.0.2.15 Apply matrix algebra

COMPETENCY 6.0.3: Apply accounting principles

COMPETENCY BUILDERS:

6.0.3.1   Apply accounting concepts, principles, and procedures to
          business functions
6.0.3.2   Analyze business transactions
6.0.3.3   Generate appropriate accounting reports

* Advancing
** Futuring   11

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UNIT 7: Office Functions

COMPETENCY 7.0.1: Perform telephone operations

COMPETENCY BUILDERS:

7.0.1.1 Use company procedural manuals, references, documentation, standards, and workflow
7.0.1.2 Use manufacturers' manuals, documentation, terminology, and other reference materials
7.0.1.3 Display telephone etiquette
7.0.1.4 Operate equipment
7.0.1.5 Listen and verify information
7.0.1.6 Take accurate messages
7.0.1.7 Prepare for and place calls
7.0.1.8 Examine teleconferencing technology
7.0.1.9 Examine voice mail and/or voice messaging technology
7.0.1.10 Examine facsimile technology

COMPETENCY 7.0.2: Maintain files

COMPETENCY BUILDERS:

7.0.2.1 Use company procedural manuals, references, documentation, standards, and workflow
7.0.2.2 Use manufacturers' manuals, documentation, terminology, and other reference materials
7.0.2.3 Organize, index, and update files
7.0.2.4 Store information
7.0.2.5 Retrieve information
7.0.2.6 Determine, update, and follow retention schedule
7.0.2.7 Consolidate, archive, and/or destroy files
7.0.2.8 Secure files for legality and confidentiality

COMPETENCY 7.0.3: Maintain office support equipment

COMPETENCY BUILDERS:

7.0.3.1 Use company procedural manuals, references, documentation, standards, and workflow
7.0.3.2 Use manufacturers' manuals, documentation, terminology, service contracts, and other reference materials
7.0.3.3 Determine malfunctions
7.0.3.4 Correct and/or report equipment malfunction(s)
7.0.3.5 Prepare and maintain appropriate logs (e.g., maintenance and usage)

* Advancing
** Futuring   12

COMPETENCY 7.0.4:   Maintain work flow

COMPETENCY BUILDERS:

7.0.4.1   Use company procedural manuals, references,
          documentation, standards, and workflow
7.0.4.2   Organize work
7.0.4.3   Prioritize work
7.0.4.4   Apply time-management techniques
7.0.4.5   Monitor and communicate progress
7.0.4.6   Complete assigned tasks in a timely manner
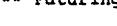7.0.4.7   Coordinate with other team members as needed

COMPETENCY 7.0.5:   Maintain a safe working environment

COMPETENCY BUILDERS:

7.0.5.1   Use company procedural manuals, references,
          documentation, standards, and workflow
7.0.5.2   Use manufacturers' manual, documentation, terminology,
          and other reference materials
7.0.5.3   Observe all government and/or company rules and
          regulations
7.0.5.4   Demonstrate office safety

UNIT 8:   Communications

COMPETENCY 8.0.1:   Apply communication skills

COMPETENCY BUILDERS:

8.0.1.1   Evaluate audience
8.0.1.2   Determine appropriate means of communications (e.g.,
          telephone, meetings, electronic mail, or written
          comunications)
8.0.1.3   Read, interpret, clarify, and follow written and/or oral
          instructions
8.0.1.4   Apply basic grammar rules
8.0.1.5   Apply creativity as appropriate
8.0.1.6   Construct effective sentences
8.0.1.7   Spell and divide words
8.0.1.8   Use correct punctuation, capitalization, abbreviations,
          and numbers
8.0.1.9   Proofread, edit, and correct documents
8.0.1.10 Refine verbal and non-verbal communication skills
8.0.1.11 Write and speak concisely
8.0.1.12 Demonstrate effective listening skills
8.0.1.13 Ask questions
8.0.1.14 Participate in group discussions and meetings
8.0.1.15 Write legibly

 * Advancing
** Futuring   13

COMPETENCY 8.0.2: Compose documents

COMPETENCY BUILDERS:

8.0.2.1 Evaluate audience
8.0.2.2 Collect data
8.0.2.3 Organize data
8.0.2.4 Develop outline
8.0.2.5 Draft document
8.0.2.6 Apply communication skills
8.0.2.7 Prepare final document

COMPETENCY 8.0.3: Prepare and deliver oral presentations

COMPETENCY BUILDERS:

8.0.3.1 Evaluate audience
8.0.3.2 Gather information
8.0.3.3 Compose presentation outline
8.0.3.4 Prepare presentation materials
8.0.3.5 Practice presentation
8.0.3.6 Deliver presentation using verbal and non-verbal communication skills
8.0.3.7 Obtain feedback

* Advancing
** Futuring

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UNIT 9:   Professionalism

COMPETENCY 9.0.1:   Demonstrate work ethics

COMPETENCY BUILDERS:

9.0.1.1   Attend work as scheduled
9.0.1.2   Be punctual
9.0.1.3   Be dependable
9.0.1.4   Communicate effectively
9.0.1.5   Employ characteristics and responsibilities of teamwork
9.0.1.6   Apply time-management techniques
9.0.1.7   Be flexible
9.0.1.8   Show initiative
9.0.1.9   Be organized
9.0.1.10 Be self-confident
9.0.1.11 Adhere to company, governmental, and regulatory policies
          and procedures
9.0.1.12 Recognize constructive criticism in evaluation and
          implement change
9.0.1.13 Take pride in work
9.0.1.14 Be honest
9.0.1.15 Be empathetic toward others
9.0.1.16 Resolve conflict
9.0.1.17 Manage stress
9.0.1.18 Handle office politics
9.0.1.19 Exercise confidentiality
9.0.1.20 Be loyal
9.0.1.21 Be responsible for actions
9.0.1.22 Ask questions
9.0.1.23 Perform decision-making, problem-solving, and
          prioritizing activities
9.0.1.24 Demonstrate positive interaction skills
9.0.1.25 Develop human relations skills
9.0.1.26 Avoid personal activities during work hours

COMPETENCY 9.0.2:   Demonstrate professional image

COMPETENCY BUILDERS:

9.0.2.1   Exhibit professional appearance
9.0.2.2   Exhibit professional manners
9.0.2.3   Project professional attitude
9.0.2.4   Recognize data processor's vital role in organization

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COMPETENCY 9.0.3: Achieve company/industry goals

COMPETENCY BUILDERS:

9.0.3.1 Promote company, profession, and/or industry
9.0.3.2 Determine responsibility in relation to goals
9.0.3.3 Set performance standards for each goal
9.0.3.4 Communicate goals with supervisor(s) and peers
9.0.3.5 Monitor progress with feedback
9.0.3.6 Accomplish tasks

COMPETENCY 9.0.4: Maintain technical proficiency

COMPETENCY BUILDERS:

9.0.4.1 Read profession-related manuals, technical journals, and periodicals
9.0.4.2 Participate in user groups
9.0.4.3 Attend meetings, workshops, seminars, conferences, and demonstrations
9.0.4.4 Participate in professional organizations
9.0.4.5 Participate in formal and informal education and/or training opportunities
9.0.4.6 Create original reference materials

COMPETENCY 9.0.5: Conduct training*

COMPETENCY BUILDERS:

9.0.5.1 Assess training needs*
9.0.5.2 Secure training resources, materials, and equipment*
9.0.5.3 Train employees or peers*
9.0.5.4 Observe and evaluate progress*
9.0.5.5 Provide appropriate feedback*

UNIT 10: Supervisory Functions*

COMPETENCY 10.0.1: Manage production functions*

COMPETENCY BUILDERS:

10.0.1.1 Analyze requests*
10.0.1.2 Prioritize and schedule assignments*
10.0.1.3 Monitor schedules to meet deadlines*
10.0.1.4 Ensure conformity to security requirements*
10.0.1.5 Ensure conformity to quality standards*
10.0.1.6 Assist with selecting data processing equipment*

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COMPETENC': 10.0.2:   Manage personnel*

COMPETENCY BUILDERS:

10.0.2.1 Schedule and prepare employee work assignments*
10.0.2.2 Ensure communications among staff*
10.0.2.3 Coordinate/conduct personnel training*
10.0.2.4 Evaluate and communicate personnel performance*
10.0.2.5 Maintain personnel records*
10.0.2.6 Prepare management reports*

UNIT 11:   Employability Skills

SUBUNIT 11.1:   Career Development

COMPETENCY 11.1.1:   Investigate career options

COMPETENCY BUILDERS:

11.1.1.1 Determine interests and aptitudes
11.1.1.2 Identify career options
11.1.1.3 Research occupations matching interests and aptitudes
11.1.1.4 Select career(s) that best match(es) interests and
         aptitudes
11.1.1.5 Identify advantages and disadvantages of career options,
         including nontraditional careers
11.1.1.6 Assess differences in wages, annual incomes, and job
         opportunities based on geographic location
11.1.1.7 Develop a career plan

COMPETENCY 11.1.2:   Analyze potential barriers to employment

COMPETENCY BUILDERS:

11.1.2.1 Identify common barriers to employment
11.1.2.2 Develop strategies to overcome employment barriers

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UNIT 11: Employability Skills

SUBUNIT 11.2: Decision Making and Problem Solving

COMPETENCY 11.2.1: Apply decision-making techniques in the
workplace

COMPETENCY BUILDERS:

11.2.1.1 Identify the decision to be made
11.2.1.2 Compare alternatives
11.2.1.3 Determine consequences of each alternative
11.2.1.4 Make decisions based on values and goals
11.2.1.5 Evaluate the decision made

COMPETENCY 11.2.2: Apply problem-solving techniques in the
workplace

COMPETENCY BUILDERS:

11.2.2.1 Diagnose the problem and its causes
11.2.2.2 Identify alternatives and their consequences in relation
to the problem
11.2.2.3 Examine multicultural and nonsexist dimensions of
problem solving
11.2.2.4 Utilize resources to explore possible solutions to the
problem
11.2.2.5 Compare and contrast the advantages and disadvantages of
each solution
11.2.2.6 Determine appropriate action
11.2.2.7 Evaluate results

UNIT 11: Employability Skills

SUBUNIT 11.3: Work Ethic

COMPETENCY 11.3.1: Evaluate the relationship of self-esteem to
work ethic

COMPETENCY BUILDERS:

11.3.1.1 Identify special characteristics and abilities in self
and others
11.3.1.2 Identify internal and external factors that affect self-
esteem

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COMPETENCY 11.3.2: Analyze the relationship of personal values and goals to work ethic both in and out of the workplace

COMPETENCY BUILDERS:

11.3.2.1 Distinguish between values and goals
11.3.2.2 Determine the importance of values and goals
11.3.2.3 Evaluate how values affect goals
11.3.2.4 Identify short-term and long-term goals
11.3.2.5 Prioritize personal goals
11.3.2.6 Describe how personal values are reflected in work ethic
11.3.2.7 Describe how interactions in the workplace affect personal work ethic
11.3.2.8 Examine how life changes affect personal work ethic

COMPETENCY 11.3.3: Demonstrate work ethic

COMPETENCY BUILDERS:

11.3.3.1 Examine factors that influence work ethic
11.3.3.2 Exhibit characteristics that reflect an appropriate work ethic

UNIT 11: Employability Skills

SUBUNIT 11.4: Job-Seeking Skills

COMPETENCY 11.4.1: Prepare for employment

COMPETENCY BUILDERS:

11.4.1.1 Identify traditional and nontraditional employment sources
11.4.1.2 Utilize employment sources
11.4.1.3 Research job opportunities, including nontraditional careers
11.4.1.4 Interpret equal employment opportunity laws
11.4.1.5 Explain the critical importance of personal appearance, hygiene, and demeanor throughout the employment process
11.4.1.6 Prepare for generic employment tests and those specific to an occupation/organization

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COMPETENCY 11.4.2: Design a résumé

COMPETENCY BUILDERS:

11.4.2.1 Identify personal strengths and weaknesses
11.4.2.2 List skills and/or abilities, career objective(s), accomplishments/achievements, educational background, and work experience
11.4.2.3 Demonstrate legible written communication skills using correct grammar, spelling, and concise wording
11.4.2.4 Complete résumé using various formats
11.4.2.5 Secure references

COMPETENCY 11.4.3: Complete and process job application forms

COMPETENCY BUILDERS:

11.4.3.1 Explain the importance of an application form
11.4.3.2 Identify ways to obtain job application forms
11.4.3.3 Describe methods for handling illegal questions on job application forms
11.4.3.4 Demonstrate legible written communications skills using correct grammar, spelling, and concise wording
11.4.3.5 Return application to proper person, request interview, and follow up

COMPETENCY 11.4.4: Demonstrate interviewing skills

COMPETENCY BUILDERS

11.4.4.1 Investigate interview environment and procedures
11.4.4.2 Explain the critical importance of personal appearance, hygiene, and demeanor
11.4.4.3 Demonstrate question and answer techniques
11.4.4.4 Demonstrate methods for handling difficult and/or illegal interview questions

COMPETENCY 11.4.5: Secure employment

COMPETENCY BUILDERS:

11.4.5.1 Identify present and future employment opportunities within an occupation/organization
11.4.5.2 Research the organization/company
11.4.5.3 Use follow-up techniques to enhance employment potential
11.4.5.4 Compare and evaluate job offers

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UNIT 11: Employability Skills

SUBUNIT 11.5: Job Retention Skills

COMPETENCY 11.5.1: Analyze the organizational structure of the workplace

COMPETENCY BUILDERS:

11.5.1.1 Identify and evaluate employer expectations regarding job performance, work habits, attitudes, personal appearance, and hygiene
11.5.1.2 Be aware of and obey all company policies and procedures
11.5.1.3 Examine the role/relationship between employee and employer
11.5.1.4 Recognize opportunities for advancement and reasons for termination

COMPETENCY 11.5.2: Maintain positive relations with others

COMPETENCY BUILDERS:

11.5.2.1 Exhibit appropriate work habits and attitude
11.5.2.2 Identify behaviors to establish successful working relationships
11.5.2.3 Cooperate and compromise through teamwork and group participation
11.5.2.4 Identify alternatives for dealing with harassment, bias, and discrimination based on race, color, national origin, sex, religion, handicap, or age

UNIT 11: Employability Skills

SUBUNIT 11.6: Job Advancement

COMPETENCY 11.6.1: Analyze opportunities for personal and career growth

COMPETENCY BUILDERS:

11.6.1.1 Determine opportunities within an occupation/organization
11.6.1.2 Compare and contrast other opportunities
11.6.1.3 List benefits of job advancement
11.6.1.4 Evaluate factors involved when assuming a new position within or outside an occupation/organization

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COMPETENCY 11.6.2: Exhibit characteristics needed for advancement

COMPETENCY BUILDERS:

11.6.2.1 Display a positive attitude
11.6.2.2 Demonstrate knowledge of a position
11.6.2.3 Perform quality work
11.6.2.4 Adapt to changing situations and technology
11.6.2.5 Demonstrate capability for different positions
11.6.2.6 Participate in continuing education/training programs
11.6.2.7 Respect, accept, and work with ALL individuals in the workplace

UNIT 11: Employability Skills

SUBUNIT 11.7: Technology in the Workplace

COMPETENCY 11.7.1: Assess the impact of technology in the workplace

COMPETENCY BUILDERS:

11.7.1.1 Cite how past business/industry practices have influenced present business/industry processes
11.7.1.2 Investigate the use of technology in the workplace
11.7.1.3 Analyze how present skills can be applied to learning new technologies

COMPETENCY 11.7.2: Use a variety of technological applications

COMPETENCY BUILDERS:

11.7.2.1 Explore basic mathematical, scientific, computer, and technological principles
11.7.2.2 Use technology to accomplish assigned tasks
11.7.2.3 Create solutions to problems using technical means

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UNIT 11: Employability Skills

SUBUNIT 11.8: Lifelong Learning

COMPETENCY 11.8.1: Apply lifelong learning to individual
                    situations

COMPETENCY BUILDERS:

11.8.1.1 Define lifelong learning
11.8.1.2 Identify factors that cause the need for lifelong
         learning

COMPETENCY 11.8.2: Adapt to change

COMPETENCY BUILDERS:

11.8.2.1 Analyze the effects of change
11.8.2.2 Identify reasons why goals change
11.8.2.3 Describe the importance of flexibility when reevaluating
         goals
11.8.2.4 Evaluate the need for continuing education/training

UNIT 11: Employability Skills

SUBUNIT 11.9: Economic Education

COMPETENCY 11.9.1: Analyze global enterprise systems

COMPETENCY BUILDERS:

11.9.1.1 Identify characteristics of various enterprise systems
11.9.1.2 Examine the relationship between competition, risk, and
         profit
11.9.1.3 Illustrate how supply and demand influence price

COMPETENCY 11.9.2: Evaluate personal money management

COMPETENCY BUILDERS:

11.9.2.1 Describe the need for personal management records
11.9.2.2 Identify methods of taxation
11.9.2.3 Analyze how credit affects financial security
11.9.2.4 Compare types and methods of investments
11.9.2.5 Prepare a personal budget
11.9.2.6 Be an informed and responsible consumer
11.9.2.7 Analyze the effects of advertising on the consumer

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UNIT 11: Employability Skills

SUBUNIT 11.1C: Balancing Work and Family

COMPETENCY 11.10.1: Analyze the effects of family on work

COMPETENCY BUILDERS:

11.10.1.1 Recognize how family values, goals, and priorities are reflected in the workplace
11.10.1.2 Identify present and future family structures and responsibilities
11.10.1.3 Describe personal and family roles
11.10.1.4 Analyze concerns of working parent(s)
11.10.1.5 Examine how family responsibilities can conflict with work
11.10.1.6 Resolve family-related conflicts
11.10.1.7 Explain how to use support systems/community resources to help resolve family-related conflicts

COMPETENCY 11.10.2: Analyze the effects of work on family

COMPETENCY BUILDERS:

11.10.2.1 Identify responsibilities associated with paid and nonpaid work
11.10.2.2 Compare the advantages and disadvantages of multiple incomes
11.10.2.3 Examine how work can conflict with family responsibilities
11.10.2.4 Describe how work-related stress can affect families
11.10.2.5 Identify family support systems and resources

UNIT 11: Employability Skills

SUBUNIT 11.11: Citizenship in the Workplace

COMPETENCY 11.11.1: Exercise the rights and responsibilities of citizenship in the workplace

COMPETENCY BUILDERS:

11.11.1.1 Identify the basic rights and responsibilities of citizenship
11.11.1.2 Examine the history and contributions of all racial, ethnic, and cultural groups

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COMPETENCY 11.11.2:   Cooperate with others in the workplace

COMPETENCY BUILDERS:

11.11.2.1 Identify situations in which compromise is necessary
11.11.2.2 Examine how individuals from various backgrounds
          contribute to work-related situations
11.11.2.3 Demonstrate initiative to facilitate cooperation
11.11.2.4 Give and receive constructive criticism to enhance
          cooperation

UNIT 11:   Employability Skills

SUBUNIT 11.12:   Leadership

COMPETENCY 11.12.1:   Evaluate leadership styles appropriate for
                      the workplace

COMPETENCY BUILDERS:

11.12.1.1 Identify characteristics of effective leaders
11.12.1.2 Compare leadership styles
11.12.1.3 Demonstrate effective delegation skills
11.12.1.4 Identify opportunities to lead in the workplace

COMPETENCY 11.12.2:   Demonstrate effective teamwork skills

COMPETENCY BUILDERS:

11.12.2.1 Identify the responsibilities of a valuable group
          member
11.12.2.2 Exhibit open-mindedness
11.12.2.3 Identify methods of involving each member of a team
11.12.2.4 Contribute to the efficiency and success of a group
11.12.2.5 Determine ways to motivate others

COMPETENCY 11.12.3:   Utilize effective communication skills

COMPETENCY BUILDERS:

11.12.3.1 Demonstrate the importance of listening
11.12.3.2 Demonstrate assertive communication
11.12.3.3 Recognize the importance of verbal and nonverbal cues
          and messages
11.12.3.4 Analyze written material
11.12.3.5 Prepare written material
11.12.3.6 Give and receive feedback
11.12.3.7 Articulate thoughts
11.12.3.8 Use appropriate language

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UNIT 11: Employability Skills

SUBUNIT 11.13: Entrepreneurship

COMPETENCY 11.13.1: Evaluate the role of small business in the economy

COMPETENCY BUILDERS:

11.13.1.1 Identify the benefits of small business to a community
11.13.1.2 Analyze opportunities for small business in a community

COMPETENCY 11.13.2: Examine considerations of starting a business

COMPETENCY BUILDERS:

11.13.2.1 Research a business idea
11.13.2.2 Compare various ways to become a small business owner
11.13.2.3 Investigate factors to consider in financing a new business
11.13.2.4 Evaluate entrepreneurship as a career option

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|        EMERGING TECHNOLOGIES FOR BUSINESS INFORMATION SYSTEMS**      |
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|   Reverse Engineering                                                |
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