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ABSTRACT

This Ohio Competency Analysis Profile (OCAP), derived from a modified Developing a Curriculum (DACUM) process, is a current comprehensive and verified employer competency program list for electronics. Each unit (with or without subunits) contains competencies and competency builders that identify the occupational, academic, and employability skills needed to enter this occupational area. Within that outline are three levels of items: core, advancing, and futuring. Core items are essential to entry-level employment. Advancing items are needed to advance in a given occupation. Futuring items are needed to enter and remain in a given occupation 3 to 4 years from now. This profile contains seven units: (1) orientation; (2) basic electronics theory; (3) troubleshooting and repairing; (4) electronic applications for industrial systems; (5) electronic applications for consumer electronic equipment; (6) applied digital concepts; and (7) employability skills. (NLA)

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ED33839

# O C A P

## OHIO'S COMPETENCY ANALYSIS PROFILE

### ELECTRONICS

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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 are essential to 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 FY93). Advancing items (marked with one asterisk) are needed to advance in a given occupation. Futuring items (marked with two asterisks) are needed to enter and remain in a given occupation three to four years from now.

Districts may add as many units, subunits, competencies, and 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 courses of study and monitor competency gains via the new competency testing program.

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

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# OHIO COMPETENCY ANALYSIS PROFILE

## ELECTRONICS

### UNIT 1: Orientation

#### COMPETENCY 1.0.1: Tour laboratory

##### COMPETENCY BUILDERS:

- 1.0.1.1 Locate fire exits
- 1.0.1.2 Locate lockers and wash station
- 1.0.1.3 Locate work station
- 1.0.1.4 Locate all emergency power kill switches

#### COMPETENCY 1.0.2: Locate and use emergency equipment and techniques

##### COMPETENCY BUILDERS:

- 1.0.2.1 Locate and demonstrate proper use of fire extinguishers
- 1.0.2.2 Locate first-aid kit
- 1.0.2.3 Locate and use other shop and personal safety equipment, especially proper eye protection
- 1.0.2.4 Demonstrate appropriate emergency action techniques

#### COMPETENCY 1.0.3: Organize student tool kit

##### COMPETENCY BUILDERS:

- 1.0.3.1 Obtain required tools
- 1.0.3.2 Place tools in kit

#### COMPETENCY 1.0.4: Identify, use, and care for tools

##### COMPETENCY BUILDERS:

- 1.0.4.1 Identify each tool in kit by name and function
- 1.0.4.2 Demonstrate proper and safe use of each tool in kit
- 1.0.4.3 Properly care for and maintain each tool in kit

#### COMPETENCY 1.0.5: Handle hazardous materials

##### COMPETENCY BUILDERS:

- 1.0.5.1 Read material safety data sheets (MSDS) labels
- 1.0.5.2 Handle hazardous materials safely
- 1.0.5.3 Dispose of hazardous materials safely

- \* Advancing
- \*\* Futuring

**UNIT 2: Basic Electronics Theory**

**COMPETENCY 2.0.1: Analyze and measure values in direct current (DC) circuits to existing tolerances**

**COMPETENCY BUILDERS:**

- 2.0.1.1 Adapt electronic theory and electromotive force (EMF)
- 2.0.1.2 Measure DC voltage and dry cells
- 2.0.1.3 Compare conductors and insulators
- 2.0.1.4 Measure current (I) through a resistor
- 2.0.1.5 Classify resistance (R) color code and measure with an ohm ( $\Omega$ ) meter
- 2.0.1.6 Apply Ohm's Law
- 2.0.1.7 Evaluate series circuits
- 2.0.1.8 Evaluate parallel circuits
- 2.0.1.9 Evaluate series-parallel circuits
- 2.0.1.10 Apply Kirchoff's law
- 2.0.1.11 Apply Thevenin's theorem
- 2.0.1.12 Apply Norton's Theorem
- 2.0.1.13 Calculate I
- 2.0.1.14 Examine magnetism

**COMPETENCY 2.0.2: Analyze and measure values in alternating current (AC) circuits to existing tolerances**

**COMPETENCY BUILDERS:**

- 2.0.2.1 Employ oscilloscope scope and generator operations
- 2.0.2.2 Compare peak (PK), root mean square (RMS), and average values
- 2.0.2.3 Examine characteristics of inductors (series and parallel)
- 2.0.2.4 Examine characters of capacities (series and parallel)
- 2.0.2.5 Examine impedance (Z)
- 2.0.2.6 Apply Kirchoff's Law and Thevenin's theorems
- 2.0.2.7 Evaluate resistive-capacitive (RC) and resistive-inductive (RL) time constants (tc)
- 2.0.2.8 Examine frequency (f) and phase relationships
- 2.0.2.9 Examine resonance of inductive-capacitive (LC) circuits
- 2.0.2.10 Examine low-pass and hi-pass filters
- 2.0.2.11 Evaluate AC power
- 2.0.2.12 Evaluate transformers

\* Advancing  
\*\* Futuring

**COMPETENCY 2.0.3: Analyze and measure characteristics of diodes and basic power supplies to manufacturer's specifications**

**COMPETENCY BUILDERS:**

- 2.0.3.1 Examine "PN" junctions
- 2.0.3.2 Examine diode characteristics
- 2.0.3.3 Evaluate limiters and clampers
- 2.0.3.4 Analyze half wave, full wave, and bridge rectifiers
- 2.0.3.5 Examine nonregulated power supplies
- 2.0.3.6 Examine Zener diodes
- 2.0.3.7 Adapt thermistors and varistors
- 2.0.3.8 Examine characteristics of the light-emitting diode (LED)

**COMPETENCY 2.0.4: Construct and analyze transistor circuits to manufacturer's specifications**

**COMPETENCY BUILDERS:**

- 2.0.4.1 Examine NPN and PNP transistors
- 2.0.4.2 Examine I gain (beta) and characteristic curves
- 2.0.4.3 Examine common emitter (CE) amplifiers
- 2.0.4.4 Examine common base (CB) amplifiers
- 2.0.4.5 Examine common collector (CC) or emitter follower amplifiers
- 2.0.4.6 Apply biasing techniques
- 2.0.4.7 Categorize classes of amplification (i.e. A, B, C, AB)
- 2.0.4.8 Investigate audio amplifiers and frequency response
- 2.0.4.9 Analyze switching transistors
- 2.0.4.10 Examine phototransistors and optoelectronics

**COMPETENCY 2.0.5: Construct and analyze field effect transistor (FET) circuits to manufacturer's specifications**

**COMPETENCY BUILDERS:**

- 2.0.5.1 Examine N and P channel junction field effect transistors (JFETs)
- 2.0.5.2 Examine metal-oxide-semiconductor field effect transistors (MOSFETs)
- 2.0.5.3 Apply biasing techniques to JFETs and MOSFETs
- 2.0.5.4 Compare FETs and vacuum tubes

\* Advancing  
\*\* Futuring

**Electronics--8/91**

**COMPETENCY 2.0.6: Analyze control and power circuits to manufacturer's specifications**

**COMPETENCY BUILDERS:**

- 2.0.6.1 Analyze silicon-controlled rectifiers (SCRs)
- 2.0.6.2 Investigate characteristics of SCRs (i.e. zero, phase angle)
- 2.0.6.3 Analyze triacs
- 2.0.6.4 Investigate diacs
- 2.0.6.5 Analyze the Darlington
- 2.0.6.6 Analyze the unijunction transistor (UJT)

**COMPETENCY 2.0.7: Construct and analyze linear integrated circuits to manufacturer's specifications**

**COMPETENCY BUILDERS:**

- 2.0.7.1 Investigate operational amplifiers (op amps)
- 2.0.7.2 Analyze integrators and differentiators
- 2.0.7.3 Analyze differential amplifiers
- 2.0.7.4 Analyze feedback techniques
- 2.0.7.5 Analyze summing amplifiers
- 2.0.7.6 Analyze comparator amplifiers
- 2.0.7.7 Analyze the 555 timing circuit
- 2.0.7.8 Analyze active filters

**COMPETENCY 2.0.8: Build and use oscillators according to circuit requirements**

**COMPETENCY BUILDERS:**

- 2.0.8.1 Examine oscillator types (i.e. Hartley, Colpitts, Armstrong, Crystal)
- 2.0.8.2 Construct and analyze use of frequency oscillators (i.e. phase-locked loop [PLL], variable frequency oscillator [VFO])
- 2.0.8.3 Compare uses of oscillator systems

\* Advancing  
\*\* Futuring

**COMPETENCY 2.0.9: Construct and analyze digital circuits to meet manufacturer's specifications**

**COMPETENCY BUILDERS:**

- 2.0.9.1 Analyze gates and their functions (i.e. and, or, nand, nor, exclusive or [xor], not [inverters], buffers)
- 2.0.9.2 Construct truth tables
- 2.0.9.3 Apply binary arithmetic
- 2.0.9.4 Examine functional circuits (i.e. flip flops, 1/2 adders, full adders)
- 2.0.9.5 Analyze counters
- 2.0.9.6 Analyze multiplexers
- 2.0.9.7 Analyze registers
- 2.0.9.8 Analyze displays
- 2.0.9.9 Analyze convertors (i.e. analog [A] to digital [D], D to A)

**COMPETENCY 2.0.10: Analyze microprocessors to manufacturer's specifications**

**COMPETENCY BUILDERS:**

- 2.0.10.1 Define fundamentals of the central process unit (CPU)
- 2.0.10.2 Analyze bus structure (i.e. power, control, data, address)
- 2.0.10.3 Analyze memory devices (i.e. random access memory [RAM], read-only memory [ROM], erasable-programmable-read-only memory [EPROM])
- 2.0.10.4 Analyze input/output devices (i.e. serial, parallel, A to D/D to A)

**UNIT 3: Troubleshooting and Repairing**

**COMPETENCY 3.0.1: Analyze schematics to determine circuit function**

**COMPETENCY BUILDERS:**

- 3.0.1.1 Recognize electronic symbols
- 3.0.1.2 Demonstrate comprehension of schematic reading

**COMPETENCY 3.0.2: Trace circuits to locate problem**

**COMPETENCY BUILDERS:**

- 3.0.2.1 Identify circuit type or subsystem
- 3.0.2.2 Locate specific circuits as per schematic
- 3.0.2.3 Utilize appropriate troubleshooting techniques

\* Advancing  
\*\* Futuring



**Electronics--8/91**

**COMPETENCY 3.0.3: Use testing equipment to isolate cause**

**COMPETENCY BUILDERS:**

- 3.0.3.1 Use digital volt ohm milliammeter (DVOM)
- 3.0.3.2 Use analog volt ohm milliammeter (AVOM)
- 3.0.3.3 Use O-SCOPE
- 3.0.3.4 Use frequency generator
- 3.0.3.5 Use frequency counter
- 3.0.3.6 Use inductance analyzer
- 3.0.3.7 Use capacitance analyzer
- 3.0.3.8 Use logic probe
- 3.0.3.9 Use variable output transformer
- 3.0.3.10 Verify proper operation

**COMPETENCY 3.0.4: Use tools safely**

**COMPETENCY BUILDERS:**

- 3.0.4.1 Perform appropriate soldering and de-soldering techniques
- 3.0.4.2 Select appropriate tool for the job
- 3.0.4.3 Clean, maintain, and store tools properly

**COMPETENCY 3.0.5: Repair circuit**

**COMPETENCY BUILDERS:**

- 3.0.5.1 Select proper replacement part(s)
- 3.0.5.2 Apply substitution techniques
- 3.0.5.3 Remove and replace faulty components
- 3.0.5.4 Verify proper operation through testing
- 3.0.5.5 Clean exterior of unit being repaired

\* Advancing  
\*\* Futuring

**UNIT 4: Electronic Applications for Industrial Systems \***

**COMPETENCY 4.0.1: Select and apply appropriate transducers/transmitters (sensors)\***

**COMPETENCY BUILDERS:**

- 4.0.1.1 Analyze specifications of temperature sensors (i.e. thermocouples, thermisters, resistance temperature detector [RTD]) \*
- 4.0.1.2 Analyze specifications of pressure sensors (i.e. strain gage, pizzo electric/pizzo resistive)\*
- 4.0.1.3 Analyze specifications of flow sensors (i.e. orifice flow meter [ $\Delta P$ ], turbine meter, mass flow meters)\*
- 4.0.1.4 Analyze specifications of speed or position sensor (i.e. tachometer, encoder, linear voltage detection transformer [LVDT]) \*
- 4.0.1.5 Analyze specifications of controllers/indicators and recorders (i.e. process controllers [PID], programmable logic controller [PLC] with computer interface, R-chart recorders and data loggers/indicators [readouts]) \*
- 4.0.1.6 Analyze specifications of final control elements (i.e. SCR power controllers, motor drives, actuators/robots)\*

**COMPETENCY 4.0.2: Apply modern quality control techniques for continuous improvement \***

**COMPETENCY BUILDERS:**

- 4.0.2.1 Perform calibrations \*
- 4.0.2.2 Observe statistical process control (SPC) techniques and methodology \*
- 4.0.2.3 Perform preventive maintenance \*

**UNIT 5: Electronic Applications for Consumer Electronic Equipment \***

**COMPETENCY 5.0.1: Analyze video equipment to manufacturer's specifications \***

**COMPETENCY BUILDERS:**

- 5.0.1.1 Analyze block diagrams \*
- 5.0.1.2 Investigate video recorders \*
- 5.0.1.3 Investigate video monitors \*
- 5.0.1.4 Investigate camcorders \*

\* Advancing

\*\* Futuring

**Electronics--8/91**

**COMPETENCY 5.0.2: Analyze audio equipment to manufacturer's specifications \***

**COMPETENCY BUILDERS:**

- 5.0.2.1 Analyze block diagrams \*
- 5.0.2.2 Investigate compact disc (CD) players \*
- 5.0.2.3 Investigate tuners and/or amplifiers \*
- 5.0.2.4 Investigate audio recorders \*

**UNIT 6: Applied Digital Concepts \***

**COMPETENCY 6.0.1: Analyze personal computer (PC) equipment to manufacturer's specifications\***

**COMPETENCY BUILDERS:**

- 6.0.1.1 Analyze PC block diagrams\*
- 6.0.1.2 Investigate interfacing\*
- 6.0.1.3 Investigate input/output (I/O) devices\*
- 6.0.1.4 Investigate storage systems\*
- 6.0.1.5 Investigate memory systems\*

**COMPETENCY 6.0.2: Managing operating systems in accordance with manufacturer's specifications\***

**COMPETENCY BUILDERS:**

- 6.0.2.1 Boot up system \*
- 6.0.2.2 Execute a program \*

**UNIT 7: Employability Skills**

**SUBUNIT 7.1: Career Development**

**COMPETENCY 7.1.1: Investigate career options**

**COMPETENCY BUILDERS:**

- 7.1.1.1 Determine interests and aptitudes
- 7.1.1.2 Identify career options
- 7.1.1.3 Research occupations matching interests and aptitudes
- 7.1.1.4 Select career(s) that best match(es) interests and aptitudes
- 7.1.1.5 Identify advantages and disadvantages of career options, including nontraditional careers
- 7.1.1.6 Assess differences in wages, annual incomes, and job opportunities based on geographic location
- 7.1.1.7 Develop a career plan

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**COMPETENCY 7.1.2: Analyze potential barriers to employment**

**COMPETENCY BUILDERS:**

- 7.1.2.1 Identify common barriers to employment
- 7.1.2.2 Develop strategies to overcome employment barriers

**UNIT 7: Employability Skills**

**SUBUNIT 7.2: Decision Making and Problem Solving**

**COMPETENCY 7.2.1: Apply decision-making techniques in the workplace**

**COMPETENCY BUILDERS:**

- 7.2.1.1 Identify the decision to be made
- 7.2.1.2 Compare alternatives
- 7.2.1.3 Determine consequences of each alternative
- 7.2.1.4 Make decisions based on values and goals
- 7.2.1.5 Evaluate the decision made

**COMPETENCY 7.2.2: Apply problem-solving techniques in the workplace**

**COMPETENCY BUILDERS:**

- 7.2.2.1 Diagnose the problem and its causes
- 7.2.2.2 Identify alternatives and their consequences in relation to the problem
- 7.2.2.3 Examine multicultural and nonsexist dimensions of problem solving
- 7.2.2.4 Utilize resources to explore possible solutions to the problem
- 7.2.2.5 Compare and contrast the advantages and disadvantages of each solution
- 7.2.2.6 Determine appropriate action
- 7.2.2.7 Evaluate results

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UNIT 7: Employability Skills

SUBUNIT 7.3: Work Ethic

**COMPETENCY 7.3.1: Evaluate the relationship of self-esteem to work ethic**

**COMPETENCY BUILDERS:**

- 7.3.1.1 Identify special characteristics and abilities in self and others
- 7.3.1.2 Identify internal and external factors that affect self-esteem

**COMPETENCY 7.3.2: Analyze the relationship of personal values and goals to work ethic both in and out of the workplace**

**COMPETENCY BUILDERS:**

- 7.3.2.1 Distinguish between values and goals
- 7.3.2.2 Determine the importance of values and goals
- 7.3.2.3 Evaluate how values affect goals
- 7.3.2.4 Identify short-term and long-term goals
- 7.3.2.5 Prioritize personal goals
- 7.3.2.6 Describe how personal values are reflected in work ethic
- 7.3.2.7 Describe how interactions in the workplace affect personal work ethic
- 7.3.2.8 Examine how life changes affect personal work ethic

**COMPETENCY 7.3.3: Demonstrate work ethic**

**COMPETENCY BUILDERS:**

- 7.3.3.1 Examine factors that influence work ethic
- 7.3.3.2 Exhibit characteristics that reflect an appropriate work ethic

**UNIT 7: Employability Skills**

**SUBUNIT 7.4: Job-Seeking Skills**

**COMPETENCY 7.4.1: Prepare for employment**

**COMPETENCY BUILDERS:**

- 7.4.1.1 Identify traditional and nontraditional employment sources
- 7.4.1.2 Utilize employment sources
- 7.4.1.3 Research job opportunities, including nontraditional careers
- 7.4.1.4 Interpret equal employment opportunity laws
- 7.4.1.5 Explain the critical importance of personal appearance, hygiene, and demeanor throughout the employment process
- 7.4.1.6 Prepare for generic employment tests and those specific to an occupation/organization

**COMPETENCY 7.4.2: Design a résumé**

**COMPETENCY BUILDERS:**

- 7.4.2.1 Identify personal strengths and weaknesses
- 7.4.2.2 List skills and/or abilities, career objective(s), accomplishments/achievements, educational background, and work experience
- 7.4.2.3 Demonstrate legible written communication skills using correct grammar, spelling, and concise wording
- 7.4.2.4 Complete résumé using various formats
- 7.4.2.5 Secure references

**COMPETENCY 7.4.3: Complete and process job application forms**

**COMPETENCY BUILDERS:**

- 7.4.3.1 Explain the importance of an application form
- 7.4.3.2 Identify ways to obtain job application forms
- 7.4.3.3 Describe methods for handling illegal questions on job application forms
- 7.4.3.4 Demonstrate legible written communications skills using correct grammar, spelling, and concise wording
- 7.4.3.5 Return application to proper person, request interview, and follow up

\* Advancing  
\*\* Futuring

**COMPETENCY 7.4.4: Demonstrate interviewing skills**

**COMPETENCY BUILDERS**

- 7.4.4.1 Investigate interview environment and procedures
- 7.4.4.2 Explain the critical importance of personal appearance, hygiene, and demeanor
- 7.4.4.3 Demonstrate question and answer techniques
- 7.4.4.4 Demonstrate methods for handling difficult and/or illegal interview questions

**COMPETENCY 7.4.5: Secure employment**

**COMPETENCY BUILDERS:**

- 7.4.5.1 Identify present and future employment opportunities within an occupation/organization
- 7.4.5.2 Research the organization/company
- 7.4.5.3 Use follow-up techniques to enhance employment potential
- 7.4.5.4 Compare and evaluate job offers

**UNIT 7: Employability Skills**

**SUBUNIT 7.5: Job Retention Skills**

**COMPETENCY 7.5.1: Analyze the organizational structure of the workplace**

**COMPETENCY BUILDERS:**

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

\* Advancing  
\*\* Futuring

**COMPETENCY 7.5.2: Maintain positive relations with others**

**COMPETENCY BUILDERS:**

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

**UNIT 7: Employability Skills**

**SUBUNIT 7.6: Job Advancement**

**COMPETENCY 7.6.1: Analyze opportunities for personal and career growth**

**COMPETENCY BUILDERS:**

- 7.6.1.1 Determine opportunities within an occupation/organization
- 7.6.1.2 Compare and contrast other opportunities
- 7.6.1.3 List benefits of job advancement
- 7.6.1.4 Evaluate factors involved when assuming a new position within or outside an occupation/organization

**COMPETENCY 7.6.2: Exhibit characteristics needed for advancement**

**COMPETENCY BUILDERS:**

- 7.6.2.1 Display a positive attitude
- 7.6.2.2 Demonstrate knowledge of a position
- 7.6.2.3 Perform quality work
- 7.6.2.4 Adapt to changing situations and technology
- 7.6.2.5 Demonstrate capability for different positions
- 7.6.2.6 Participate in continuing education/training programs
- 7.6.2.7 Respect, accept, and work with ALL individuals in the workplace

- \* Advancing
- \*\* Futuring



UNIT 7: Employability Skills

SUBUNIT 7.7: Technology in the Workplace

**COMPETENCY 7.7.1: Assess the impact of technology in the workplace**

**COMPETENCY BUILDERS:**

- 7.7.1.1 Cite how past business/industry practices have influenced present business/industry processes
- 7.7.1.2 Investigate the use of technology in the workplace
- 7.7.1.3 Analyze how present skills can be applied to learning new technologies

**COMPETENCY 7.7.2: Use a variety of technological applications**

**COMPETENCY BUILDERS:**

- 7.7.2.1 Explore basic mathematical, scientific, computer, and technological principles
- 7.7.2.2 Use technology to accomplish assigned tasks
- 7.7.2.3 Create solutions to problems using technical means

UNIT 7: Employability Skills

SUBUNIT 7.8: Lifelong Learning

**COMPETENCY 7.8.1: Apply lifelong learning to individual situations**

**COMPETENCY BUILDERS:**

- 7.8.1.1 Define lifelong learning
- 7.8.1.2 Identify factors that cause the need for lifelong learning

**COMPETENCY 7.8.2: Adapt to change**

**COMPETENCY BUILDERS:**

- 7.8.2.1 Analyze the effects of change
- 7.8.2.2 Identify reasons why goals change
- 7.8.2.3 Describe the importance of flexibility when reevaluating goals
- 7.8.2.4 Evaluate the need for continuing education/training

\* Advancing  
\*\* Futuring

**UNIT 7: Employability Skills**

**SUBUNIT 7.9: Economic Education**

**COMPETENCY 7.9.1: Analyze global enterprise systems**

**COMPETENCY BUILDERS:**

- 7.9.1.1 Identify characteristics of various enterprise systems
- 7.9.1.2 Examine the relationship between competition, risk, and profit
- 7.9.1.3 Illustrate how supply and demand influence price

**COMPETENCY 7.9.2: Evaluate personal money management**

**COMPETENCY BUILDERS:**

- 7.9.2.1 Describe the need for personal management records
- 7.9.2.2 Identify methods of taxation
- 7.9.2.3 Analyze how credit affects financial security
- 7.9.2.4 Compare types and methods of investments
- 7.9.2.5 Prepare a personal budget
- 7.9.2.6 Be an informed and responsible consumer
- 7.9.2.7 Analyze the effects of advertising on the consumer

**UNIT 7: Employability Skills**

**SUBUNIT 7.10: Balancing Work and Family**

**COMPETENCY 7.10.1: Analyze the effects of family on work**

**COMPETENCY BUILDERS:**

- 7.10.1.1 Recognize how family values, goals, and priorities are reflected in the workplace
- 7.10.1.2 Identify present and future family structures and responsibilities
- 7.10.1.3 Describe personal and family roles
- 7.10.1.4 Analyze concerns of working parent(s)
- 7.10.1.5 Examine how family responsibilities can conflict with work
- 7.10.1.6 Resolve family-related conflicts
- 7.10.1.7 Explain how to use support systems/community resources to help resolve family-related conflicts

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**COMPETENCY 7.10.2: Analyze the effects of work on family**

**COMPETENCY BUILDERS:**

- 7.10.2.1 Identify responsibilities associated with paid and nonpaid work
- 7.10.2.2 Compare the advantages and disadvantages of multiple incomes
- 7.10.2.3 Examine how work can conflict with family responsibilities
- 7.10.2.4 Describe how work-related stress can affect families
- 7.10.2.5 Identify family support systems and resources

**UNIT 7: Employability Skills**

**SUBUNIT 7.11: Citizenship in the Workplace**

**COMPETENCY 7.11.1: Exercise the rights and responsibilities of citizenship in the workplace**

**COMPETENCY BUILDERS:**

- 7.11.1.1 Identify the basic rights and responsibilities of citizenship
- 7.11.1.2 Examine the history and contributions of all racial, ethnic, and cultural groups

**COMPETENCY 7.11.2: Cooperate with others in the workplace**

**COMPETENCY BUILDERS:**

- 7.11.2.1 Identify situations in which compromise is necessary
- 7.11.2.2 Examine how individuals from various backgrounds contribute to work-related situations
- 7.11.2.3 Demonstrate initiative to facilitate cooperation
- 7.11.2.4 Give and receive constructive criticism to enhance cooperation

\* Advancing  
\*\* Futuring

**UNIT 7: Employability Skills**

**SUBUNIT 7.12: Leadership**

**COMPETENCY 7.12.1: Evaluate leadership styles appropriate for the workplace**

**COMPETENCY BUILDERS:**

- 7.12.1.1 Identify characteristics of effective leaders
- 7.12.1.2 Compare leadership styles
- 7.12.1.3 Demonstrate effective delegation skills
- 7.12.1.4 Identify opportunities to lead in the workplace

**COMPETENCY 7.12.2: Demonstrate effective teamwork skills**

**COMPETENCY BUILDERS:**

- 7.12.2.1 Identify the responsibilities of a valuable group member
- 7.12.2.2 Exhibit open-mindedness
- 7.12.2.3 Identify methods of involving each member of a team
- 7.12.2.4 Contribute to the efficiency and success of a group
- 7.12.2.5 Determine ways to motivate others

**COMPETENCY 7.12.3: Utilize effective communication skills**

**COMPETENCY BUILDERS:**

- 7.12.3.1 Demonstrate the importance of listening
- 7.12.3.2 Demonstrate assertive communication
- 7.12.3.3 Recognize the importance of verbal and nonverbal cues and messages
- 7.12.3.4 Analyze written material
- 7.12.3.5 Prepare written material
- 7.12.3.6 Give and receive feedback
- 7.12.3.7 Articulate thoughts
- 7.12.3.8 Use appropriate language

\* Advancing  
\*\* Futuring

**UNIT 7: Employability Skills**

**SUBUNIT 7.13: Entrepreneurship**

**COMPETENCY 7.13.1: Evaluate the role of small business in the economy**

**COMPETENCY BUILDERS:**

- 7.13.1.1 Identify the benefits of small business to a community
- 7.13.1.2 Analyze opportunities for small business in a community

**COMPETENCY 7.13.2: Examine considerations of starting a business**

**COMPETENCY BUILDERS:**

- 7.13.2.1 Research a business idea
- 7.13.2.2 Compare various ways to become a small business owner
- 7.13.2.3 Investigate factors to consider in financing a new business
- 7.13.2.4 Evaluate entrepreneurship as a career option

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