

Statewide Manufacturing Curriculum:

Technology Awareness and
Skills Module

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***Supplemental material can be located in flash drive file labeled: Man
Tech Resource File**

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FOUNDATIONS FOR DESIGN

- ✓ Instruction emphasizes learning by doing through projects and simulations; therefore, the instructor is a facilitator or learning coach.
- ✓ Each module emphasizes communication, teamwork, and critical thinking.
- ✓ Content is contextualized for manufacturing professions and their programs of study.
- ✓ Learning outcomes often require learners to meet and interact with academic and manufacturing professionals, engage in collaborative and individual projects involving authentic materials and resources, visit manufacturing and academic facilities, and complete documents and writing tasks for career paths with the guidance of learning facilitators.
- ✓ Specific units within modules may serve as precursors for additional units within the module. Many lessons and units may be repeated and expanded from one module to another.
- ✓ Self-advocacy and continual self-assessment and self-monitoring are inherent to each module while students must be introduced to, required to meet with, and encouraged to consult with program coordinator as well as academic and employment professionals.
- ✓ Site visits to manufacturing and learning facilities, guest speakers, and conferences with employment and academic professionals are integral to the relevance and value of the program for students.

ASSUMPTIONS:

- ✓ Each agency or instructor who may use these modules or this program will adapt instructional strategies, content level of difficulty, learning activities and projects to meet the needs of the program's own target population and adult learners of lower and higher academic levels.

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- ✓ Referenced resources, relevant internet links, learning activities (created, suggested, attached, or referenced) will be used, modified, or omitted based on student need and restraints of class time and resources.
- ✓ This curriculum will work in established internal partnerships within the academic community as well as external partnerships/relationships in the employment community.
- ✓ Units and lessons will be adapted to fit within varying contact hours of a program.

Module Description: The technology awareness and skills module offers the adult learner the opportunity to gain knowledge and proficiency in the use of technology for the purposes of a) communication, b) academic studies, c) research, d) employability, and e) self-advocacy. This module is designed to introduce the student to basic computer skills using individualized and group instruction.

i-Pathways Alignment with the Statewide Manufacturing Curriculum: The lessons identified in this document have connections with both i-Pathways and the intended learning objectives identified in the Statewide Manufacturing Curriculum. The i-Pathways lessons can be used to build background knowledge, reinforce content, or provide learners with additional practice in a specific skill development.

Module Objectives:

Students will:

- Demonstrate proficiency in basic computer skills.
- Utilize technological applications to process ideas, communicate results, and enhance learning and performance.
- Utilize technology to access research and information for problem-solving and self-advocacy.
- Select appropriate technology and adopt use of software and technology to new situations.

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- Demonstrate knowledge and proficiency in use of internet and appropriate programs in the job search process.
- Demonstrate and practice knowledge of privacy issues and ethics in internet communication.
- Communicate appropriately and effectively with employers and colleagues in the workplace via e-mail.
- Access resources in academia (via familiarity with college website) to advocate for self and communicate with instructors and support staff.

Learning Outcomes

Students will:

- Acquire or improve keyboarding skills
- Execute basic desktop operations
- Execute file management operations
- Execute e-mail operations
- Utilize word processing skills using Word
- Utilize Internet search skills and strategies
- Utilize spreadsheet skills using Excel
- Utilize presentation skills using PowerPoint
- Utilize all learned skills in employment applications

Methods of Instruction

- Lecture
- Teacher demonstration/modeling
- Guided and independent practice
- Hands-on activities
- Online activities

Methods for Evaluating Student Performance

- Student demonstration
- Teacher designed checklists
- Written self-assessments

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Module Overview

- A. Learning Basic Skills: Mouse, Keyboard, Windows
- B. Passwords and Privacy
- C. Navigating the Internet
- D. Using E-mail
- E. Using MS[®] Office: Word, Excel, and PowerPoint
- F. Completing Electronic Forms
- G. Accessing Moodle and Blackboard
- H. Exploring Healthcare Occupations
- I. Determining Special Learning Needs

Module Outline

- 1. Use a mouse
 - a. Right click/Left click
 - b. Scroll button
 - c. Click and drag
 - d. Learn to use a mouse
www.instruction.greenriver.edu/avery/activities/mouse/MouseSkills.htm
 - e. Click and learn
www.clicknlearn.net
- 2. Locate and use keyboard keys
 - a. Control key
 - b. Alt key
 - c. Backspace key
 - d. Delete key
 - e. Page Up
 - f. Page Dn
 - g. Caps Lock
 - h. Tab
 - i. Insert key
 - j. Number pad

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3. Use a keyboard
 - a. Finger placement on keyboard
 - b. Online instruction
 - i. <http://sense-lang.org/typing/>
 - c. Typing games
 - i. <http://freetypinggame.net/play.asp>
 - d. Typing instruction software
 - e. Ergonomically correct space

4. Use Windows
 - a. Open a program
 - i. Start button
 - ii. Use Windows key
 - iii. Shortcut icon

 - b. Multi-task in Windows
 - c. Move between Windows
 - i. Mouse
 - ii. Tab key
 - d. Create folders

5. Create passwords, understand privacy and virus protection
 - a. Create a password
 - b. Basic computer privacy
 - i. Phishing
 - ii. Pop ups
 - iii. Virus protector, Malware

6. Navigate the Internet
 - a. URL address bar
 - b. Use search engines: Google, Yahoo, etc
 - c. Search limiters: quotes, and/or, etc

7. Use e-mail
 - a. Compose e-mail
 - b. Send and receive e-mail
 - i. TO:

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- ii. Subject line
 - iii. Send button
 - iv. Reply, Reply All
 - v. Forward
 - c. Add an attachment to e-mail
 - d. Use browse to find attachment
 - e. Download attachment from e-mail
 - f. Save attachment in appropriate folder
8. Use MS[®] Word
- a. Create a file
 - b. Open, edit
 - c. Cut and paste
 - d. Save a document
 - e. Print document
9. Use MS[®] Excel
- a. Enter information into a spreadsheet
 - b. Format a spreadsheet
 - c. Write a simple formula
 - d. Print a spreadsheet
10. Use MS[®] PowerPoint
- a. Show a PowerPoint presentation
 - b. Create a PowerPoint
11. Enter data on electronic forms
- a. Use Tab key
 - b. Scroll bar
 - c. Cut and paste from another program to form
 - d. Practice online applications
12. Explore Moodle
- a. Define Moodle
 - b. Discuss usage

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13. Explore Blackboard
 - a. Define Blackboard
 - b. Discuss usage

14. Discover manufacturing occupations
 - a. Use the internet to locate information on manufacturing occupations
 - b. View manufacturing occupations videos on You Tube

15. Determine special learning needs of student (Optional)
 - a. Use Ease of Access in Windows
 - b. Set up computer for learner's needs