# Work Experience in Manufacturing - Comprehensive Course No. 13998 Credit: 1.0

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| **Student name:**  |  | **Graduation Date:** |  |

Pathways and CIP Codes:Manufacturing (48.0000) - Production & Maintenance Strand

Course Description: An advanced research and **application level** course covering specific topics in manufacturing. Should include opportunities for Work-Based Learning (WBL) such as in-house training, job shadowing, and/or internships. (Prerequisite: Must take at least 1.0 credit of technical level course and Application level course combined.)

Directions:The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

**RATING SCALE:**

4. Exemplary Achievement: Student possesses outstanding knowledge, skills or professional attitude.

3. Proficient Achievement:Student demonstrates good knowledge, skills or professional attitude. Requires limited supervision.

2. Limited Achievement:Student demonstrates fragmented knowledge, skills or professional attitude. Requires close supervision.

1. Inadequate Achievement:Student lacks knowledge, skills or professional attitude.

0. No Instruction/Training:Student has not received instruction or training in this area.

## Benchmark 1: Employability Skills and Career Development Strategies

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Complete a Work-Based Learning (WBL) experience plan. |  |
| 1.2 | Enhance Individual Plan of Study through interest assessment(s). |  |
| 1.3 | Research and report on careers in manufacturing. |  |
| 1.4 | Research licensing certification and credentialing in the manufacturing industry. |  |
| 1.5 | Create a professional portfolio to document activities completed while working with a mentor or through an internship in the manufacturing industry. |  |
| 1.6 | Prepare a resume to include in student Individual Plan of Study (IPS).  |  |
| 1.7 | Prepare a letter of application to include in student Individual Plan of Study (IPS). |  |
| 1.8 | Demonstrate interview skills through mock or actual employment interview, utilizing business partners as applicable.  |  |

## Benchmark 2: Communication and Interpersonal Skills

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 2.1 | Demonstrate sound customer services principles when working with customer or client to complete a client-driven project. |  |
| 2.2 | Develop and maintain professional working relationships. |  |
| 2.3 | Apply verbal skills when obtaining and conveying information. |  |
| 2.4 | Use appropriate grammar and word usage in the creation and delivery of a formal graphic presentation using current standards and technology. |  |
| 2.5 | Develop and deliver oral presentations to provide information for specific purposes. |  |

## Benchmark 3: Best Practices in the Workplace

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 3.1 | Demonstrate an understanding of OSHA regulations for personal safety, including utilization of PPE, safe use of tools and equipment, and safe handling of hazardous materials. |  |
| 3.2 | Demonstrate ability to access and utilize industry resources. |  |
| 3.3 | Demonstrate ability to incorporate industry specific codes in maintenance operations. |  |
| 3.4 | Utilize knowledge and skills to perform job duties to industry standards. |  |
| 3.5 | Understand MSDS (Material Safety Data Sheets) and other safety resources required for the workplace. |  |
| 3.6 | Research and report on “Green” applications in the manufacturing industry. |  |
| 3.7 | Research new technologies to meet future client needs (e.g. Research and discuss modern & future trends in equipment, methods, & techniques). |  |
| 3.8 | Research & utilize information for product development. |  |
| 3.9 | Integrate alternative manufacturing methods and materials in current production process drawings. |  |
| 3.10 | Produce a working model (graphic or physical) using advanced software and/or equipment. |  |
| 3.11 | Conduct product evaluations and offer improvements critique their effectiveness. |  |
| 3.12 | Demonstrate abilities in design/planning, visual communication, and problem solving in the manufacturing industry. |  |

I certify that the student has received training in the areas indicated.

Instructor Signature:

For more information, contact:

CTE Pathways Help Desk

(785) 296-4908

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