

Standards and Competencies for Computer Integrated Manufacturing (PLTW) (Course # 5794)

	Begin-End Yr
Standard 1 - Students will demonstrate personal management skills.	2009 -
1.1 - Manage time and resources.	2009 -
1.2 - Cultivate positive personal attitudes.	2009 -
Standard 2 - Students will demonstrate teamwork, problem solving, and decision-making skills required for success in manufacturing-related careers.	2009 -
2.1 - Cultivate teamwork abilities within a diverse group.	2009 -
2.2 - Demonstrate problem solving and decision making abilities.	2009 -
Standard 3 - Students will demonstrate safe practices and injury prevention and treatment in a manufacturing environment.	2009 -
3.1 - Use reference materials to locate safety guidelines and regulations.	2009 -
3.2 - Analyze safety hazards and prevention procedures for the manufacturing industry	2009 -
3.3 - Perform first aid in manufacturing situations.	2009 -
Standard 4 - Students will make and interpret measurements commonly required in manufacturing processes.	2009 -
4.1 - Use common measurement tools to perform measurements to appropriate standards of accuracy and precision.	2009 -
4.2 - Interpret measurements encountered in the manufacturing workplace	2009 -
Standard 5 - Students will implement quality and statistical process control procedures to ensure and improve quality in manufacturing processes.	2009 -
5.1 - Analyze the contributing factors to an industrial process.	2009 -
5.2 - Use statistical process control concepts to evaluate and modify manufacturing processes	2009 -
Standard 6 - Students will demonstrate the appropriate use of technologies used in machining and manufacturing processes.	2009 -
6.1 - Investigate the chemical and physical properties of materials used in manufacturing.	2009 -
6.2 - Demonstrate the steps involved in bench layout processes for milling, cutting, welding, and machining operations.	2009 -
6.3 - Demonstrate basic proficiency in common manufacturing machining operations.	2009 -
Standard 7 - Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.	2009 -
7.1 - Demonstrate dignity in work.	2009 -
7.2 - Participate in SkillsUSA as an integral part of classroom instruction.	2009 -
7.3 - Evaluate school, community, and workplace situations by applying problem-solving and decision-making skills.	2009 -
7.4 - Demonstrate the ability to work professionally with others.	2009 -
Standard 8 - Students will perform safety examinations and maintain safety records.	2009 -
8.1 - Pass with 100% accuracy a written examination relating specifically to safety issues.	2009 -
8.2 - Pass with 100% accuracy a performance examination relating specifically to tools and equipment	2009 -
8.3 - Maintain a portfolio record of written safety examinations and equipment examinations for which the student has passed an operational checkout by the instructor	2009 -