

RELATED INSTRUCTION
INDUSTRIAL MANUFACTURING TECHNICIAN
O*NET-SOC CODE: 17-3029.09 RAPIDS CODE: 2030HY

Overview

Related instruction teaches apprentices the science and theory behind their daily duties. It comprises **264 hours** of the apprenticeship program, the equivalent of four hours per week when school is in session. The apprentice is paid by the employer to attend.

Course Descriptions

Industrial Manufacturing 1 (First Semester)

The first semester includes an orientation to the occupation and manufacturing, then followed by the Manufacturing Skills Standards Council (MSSC) safety module, MSSC quality module, OSHA 10 certification, blueprint reading, visual inspection, measurement, and first aid & CPR training. Manufacturing concepts will be introduced and applied in a variety of industrial settings.

Industrial Math for the Occupation (First Semester)

This course provides applied mathematics instruction from a review of: basic arithmetic; basic algebra; applications, based on geometry; right triangle trigonometry, oblique angle trigonometry and compound angles. U.S. and metric measurement systems will be introduced.

Industrial Manufacturing 2 (Second Semester)

The second semester includes the MSSC manufacturing processes and production and maintenance awareness modules, along with communication, lean manufacturing, problem solving, and frontline leadership. Manufacturing related concepts will be applied to a variety of industrial settings. The course concludes with an examination of emerging trends and technologies, and future directions for manufacturing.

Communication for Apprentices (Second Semester)

Introduces the apprentice to basic communication concepts relating to the workplace. It is designed specifically for the apprentice to acquire the necessary skills of giving instructions, writing a technical memo, and explaining a technical process. Throughout the course the apprentice will brainstorm, write, edit, revise, and use one-on-one communication delivery in a small group. The course combines lecture and hands-on activities utilizing information which the apprentice brings from the workplace.

BAS Transition to Trainer (Final Semester)

Developed by the Office of Apprenticeship Standards, this 8 hour course teaches soon-to-be journeyworkers how to serve as a mentor and job coach, how to provide hands-on skill training, and how to give positive and effective performance feedback. Course is offered at multiple times each year. Course meets for 8 hours.