Iowa CTE

# Cabinetmaking and Wood Products

**Students understand measurement systems in the planning and layout process used in the cabinetmaking and wood products industry.** CWP1

1. **Know design solutions to common problems in cabinetmaking and wood products.** CWP1.1
2. **Understand calculation procedures for materials and production requirements for wood product designs.** CWP1.2
3. **Convert scaled drawing measurements to full dimensional layout and template applications.** CWP1.3
4. **Know conventional measurement processes for cabinetmaking and wood products, linear measurements and conversions of fractions and decimals.** CWP1.4

**Students understand the safe and appropriate use of hand tools common to the cabinetmaking and wood products industry.** CWP2

1. **Use common hand tools and accessories, such as planers, shapers, clamping and gripping tools, pliers, wrenches, wood chisels, hammers, hand saws and squares safely and properly.** CWP2.1
2. **Maintain and care for common hand tools.** CWP2.2

**Students understand the safe and appropriate use of portable power tools common to the cabinetmaking and wood products industry.** CWP3

1. **Use portable power tools, such as single and compound miter saws, drills, sanders, saber saws and routers, safely and appropriately.** CWP3.1
2. **Use tools, such as pneumatic clamps, grips, framing nail guns, and finishing and brad nail guns, safely and properly.** CWP3.2
3. **Maintain and care for portable power and pneumatic tools.** CWP3.3

**Students understand the safe and appropriate use of stationary power machines and equipment common to the cabinetmaking and wood products industry.** CWP4

1. **Understand the proper and safe use of stationary power tools used in the milling process, such as shapers, sanders, joiners, table saws and band saws.** CWP4.1
2. **Understand the proper and safe use of stationary power tools used in the assembly process, such as pneumatic table clamps, case clamps, case frame fasteners and hardware fasteners.** CWP4.2
3. **Understand the proper and safe use of stationary power tools used in the finishing process, such as glue applicators, laminate applicators and lacquer and paint applicators.** CWP4.3

| | |
|---|---|
| | 4 Know the basic care, maintenance and lock-out procedures for stationary power tools. CWP4.4 |
| **Students understand the value and necessity of practicing occupational safety in the cabinetmaking/wood products industry or shop.** CWP5 | 1 Know the safety rules in the cabinetmaking/wood products work environment. CWP5.1 |
| | 2 Use hand tools (wood chisels, drills, coping saws) and power tools (routers, sanders, planers) safely in the cabinetmaking/ wood products work environment. CWP5.2 |
| | 3 Understand how to handle and dispose of toxic materials safely and use protective clothing as needed when using lacquers, acetone, thinners, staining materials, and so forth in an environmentally responsible manner. CWP5.3 |
| **Students understand the variety of production processes used in the cabinetmaking and wood products industry.** CWP6 | 1 Design and create cabinet and wood products. CWP6.1 |
| | 2 Develop a production plan, including the layout, bill of materials and cost analysis, for the production of cabinets or wood products. CWP6.2 |
| | 3 Use stationary and portable power tools in milling the components for cabinets and wood products. CWP6.3 |
| | 4 Use stationary and portable power tools in the assembly of cabinet and wood product components. CWP6.4 |
| | 5 Use finish tools (e.g., airless sprayers, palm sanders) and techniques for finishing cabinets and wood products. CWP6.5 |
| | 6 Use installation tools and understand the processes for the installation of cabinets, millwork and wood products CWP6.6 |
| **Students understand the impact of financial, technical and environmental trends on the past and future of the cabinetmaking and wood products industry.** CWP7 | 1 Understand significant historical trends in cabinetmaking and wood products technology. CWP7.1 |
| | 2 Understand environmental regulations that influence the cabinetmaking and wood products industry. CWP7.2 |
| | 3 Understand issues of the sustainable use of wood product resources. CWP7.3 |