

MODULE DESCRIPTIONS

Module CON1010: Basic Tools & Materials

Students develop basic hand tool and production skills to transform, safely, common building materials into useful products.

Module CON1070: Building Construction

Students examine common building systems, and develop basic skills related to building a simple model or full size system/structure.

Module CON1120: Project Management

Students develop basic shop drawing and estimating skills, and apply them to build a product.

Module CON1130: Solid Stock Construction

Students develop basic hand and power tool skills to build a product made from solid wood.

Module CON1140: Turning Operations

Students use wood-turning equipment and techniques to create a faceplate and spindle turning made from solid and/or built-up stock.

Module CON1160: Manufactured Materials

Students select and use the appropriate materials and tools to build a product or structure from a wood composite or other manufactured material.

Module CON1180: Mold Making & Casting

Students apply knowledge of casting and molding materials and processes to prepare a mold and produce a casting.

Module CON2010: Site Preparation

Students develop the knowledge and skills to acquire a building permit and to locate and prepare a site for excavation and foundation work.

Module CON2020: Concrete Forming

Students develop knowledge and skills related to the preparation and construction of a concrete foundation.

Module CON2030: Alternative Foundations

Students develop basic knowledge and skills related to the design and construction of an alternative foundation system.

Module CON2040: Framing Systems 1 (Floor & Wall)

Students develop basic framing knowledge and skills associated with the construction of a floor and wall system.

Module CON2050: Roof Structures 1 (Framing & Finishing)

Students develop basic knowledge and skills associated with framing and finishing a simple roof system.

Module CON2060: Exterior Finishing (Door, Window & Siding)

Students apply and develop basic knowledge of door, window and siding systems and installation skills and procedures.

Module CON2070: Electrical Systems

Students apply electrical principles, and develop an understanding of residential electrical code requirements and installation procedures.

Module CON2080: Plumbing Systems

Students develop basic knowledge and skills to fabricate and make repairs to residential drainage, waste, vent (DWV) and water supply systems.

Module CON2090: Climate Control Systems

Students investigate common heating, ventilating and air conditioning (HVAC) systems and principles, and participate in the installation or maintenance of one of these systems.

Module CON2100: Agri-structures

Students apply construction principles and skills, and use pre-engineered designs to build a structure to be used for agricultural purposes.

Module CON2120: Multiple Materials

Students develop a product that incorporates two or more types of material in its construction.

Module CON2130: Furniture Making 1 (Box Construction)

Students develop basic joinery skills and knowledge related to case construction, by producing a box-type piece of furniture.

Module CON2140: Furniture Making 2 (Frame & Panel)

Students use solid and/or composite materials to build a frame and panel product or component.

Module CON2150: Finishing & Refinishing

Students use knowledge of finishing materials and finishing techniques to apply new and replacement finishes.

Module CON2160: Cabinetmaking 1 (Web & Face Frame)

Students apply web and face frame construction techniques, and use solid and/or manufactured materials to produce a built-in or modular cabinet.

Module CON2170: Cabinetmaking 2 (Door & Drawer)

Students use solid and composite materials to develop skills in building cabinet doors and drawers.

Module CON2180: Wood Forming

Students apply skills in mold making and wood conditioning to make a formed part or component.

Module CON2190: Manufacturing Systems

Students investigate the nature of manufacturing systems used to produce durable goods.

Module CON2200: Product Development

Students work, individually or as team members, to research, design and build a product suitable for mass production and marketing.

Module CON3010: Concrete Work (Structures & Finishes)

Students develop essential skills to form, place and finish a concrete project.

Module CON3020: Masonry Work (Structures & Finishes)

Students develop basic knowledge and skills related to masonry materials, structures and finishes.

Module CON3030: Wall & Ceiling Finishing

Students develop basic knowledge and skills to insulate, install and finish an interior wall/ceiling surface.

Module CON3040: Stair Construction

Students develop the knowledge and skills required to build a straight flight of stairs.

Module CON3050: Roof Structures 2 (Framing & Covering)

Students develop basic competencies in laying out, cutting and assembling common and hip and valley rafters in relation to specialized structures and coverings.

Module CON3060: Doors & Trim

Students apply basic finish carpentry knowledge and skills to install doors, railings and moldings.

Module CON3070: Floorcovering

Students develop skills in selecting and installing typical floor coverings used in residential, institutional and commercial buildings.

Module CON3080: Energy-Efficient Housing

Students investigate construction practices and support systems to create an energy-efficient housing design.

Module CON3090: Renovations/Restorations

Students work with a client to plan and complete a building renovation and/or restoration.

Module CON3100: Commercial Structures

Students investigate structural designs, construction techniques and work site practices related to commercial construction.

Module CON3110: Site Management

Students consider the efficient and timely delivery of a quality product. They investigate and report on site management theories and practices to produce a project management plan.

Module CON3120: Tool Maintenance

Students develop skills in preventive maintenance by routinely inspecting and servicing production tools and equipment.

Module CON3130: Furniture Making 3 (Leg & Rail)

Students use solid and/or manufactured materials and leg-and-rail or pedestal construction techniques to build a free-standing piece of furniture.

Module CON3140: Furniture Making 4 (Surface Enhancement)

Students explore and demonstrate the use of veneer, inlay, carving and/or marquetry techniques to enhance the appearance of a product or component.

Module CON3150: Furniture Repair

Students apply basic knowledge of furniture construction and materials to repair or replace existing components or coverings.

Module CON3160: Cabinetmaking 3 (Cabinet/Countertops)

Students develop the knowledge and skills required to build and install a simple cabinet/countertop complete with an appropriate backsplash and edge treatment.

Module CON3170: Cabinetmaking 4 (Layout & Installation)

Students develop a floor/wall cabinet plan and order and install a set of prebuilt cabinets.

Module CON3190: Production Planning

Students plan, individually or as team members, a production system, and create the necessary work cells and floor plan to produce a given product in a safe and efficient manner.

Module CON3200: Production Management

Students identify and enhance management skills in relation to the development and deployment of people and physical resources.

Module CON3210: Framing Systems 2 (Floor, Wall & Ceiling)

Students develop appropriate layout and assembly skills to install conventional and/or engineered framing components associated with residential and/or light commercial construction.