

Level 3: Cabinet Making & Wood Machining

Wood forms an indispensable component of the building and furniture industry. The extensive introduction of specialised machinery and equipment into the furniture industry has changed the traditional roles of the tradesmen in this field. Most of the work is done mechanically under the supervision of an experienced worker, but knowledge of the skills needed to manufacture, design and create, remains an asset.

The following two trades are but a few that are recognised in the furniture industry:

Woodmachinist

Woodmachinists are responsible for the processing of timber and board products into furniture components, using a wide range of machinery. Their main function is to set up, adjust, operate and maintain a whole range of over 16 machines from the simplest band-saw to the most complex computer controlled spindle moulder. Woodmachinists must be able to affix details on the wood according to design specifications.

Cabinet-maker

Cabinet-makers receive the components from the woodmachinist and assemble the piece of furniture. They add the finishing touches such as doors, drawers and locks. This trade involves more handwork and traditional approaches, but modern technology such as basic wood machines and electric and pneumatic tools are also used. Cabinets are not only made from wood, but also from modern materials, such as melamine.

We are proud to have 12 Learners Graduate in 2011.

The Cabinet Maker course was took place as follows:

Wood: Cabinet Making Level 3

Course Outline

**Qualification title: National Certificate Furniture Making
Wood: Cabinet Making Level 3**

DOL: 10Q100047171243 / SAQA 49105



	UNIT STANDARD TITLE	Programme content	Unit Std Credits	Hours of training at Furntech	Summative assessment	Hours of practice at workplace
Week 1	Apply safety, health and environmental protection procedures (12215)	Learner induction	6	1 day	Week 6	42
		Regulations, legislation, agreements, policy, standards		18		
		Hazard identification and solutions		2 days		
		Safety and environmental inspections				
		Reporting				
Week 2	Read, interpret and produce basic engineering drawings (13223)	Read and interpret drawings to select components and produce freehand sketches	6	32	Week 6	28
		Isometric, oblique, orthographic projection		4 days		
Weeks 3+4	Produce modern carcasses, doors and drawers (117396)	Materials technology including types, suitability, defects, seasoning of wood	22	66	Week 6	154
		Quality, standards, tolerances and introduction to design		8 days		
		Cutting, shaping moulding components				
		Carcase construction techniques				
		Door construction techniques				
		Drawer construction techniques				
		Adhesives including types, lifespan, curing, application, clamping time				
		Clamping / cramping theory and techniques: mechanical, hand, pneumatic				
Weeks 5+6	Complete crafted furniture (117351)	Specifications	22	66	Week 6	154
		Fitting components: surface and flush fitting doors; drawers with mechanical runners, false fronts; carcase; frames		8 days		
		Hardware: hinges, runners, locks, knobs, handles, stays, edging, lipping, wood carvings, wooden and plastic mouldings, supports				
		Cabinet making hand and power tools				
		Adhesives.				
		Carvings and mouldings applied to flat and curved surfaces				
		Quality: accuracy of fit, fitting faults, mechanical movements, runners, kickers				
Week 7	Summative assessment				3 days at Furntech	
Week 8	Prepare veneers (117376)	Tools and equipment: inlays, veneers, veneering saw, knives, hammers, rollers, etc	6	18		42
		Veneer cutting: to length, width, shape: flame, crown, quarter cut		2 days		
		Matching veneers: straight, slip laid, leaf laid, book match, edge veneering				
		Joints: quarter panels, stringed sheets, edged sheets				
		Problems and faults				

	UNIT STANDARD TITLE	Programme content	Unit Std Credits	Duration of training at Furntech	Summative assessment	Duration of practice at workplace (hours)
Weeks 8 + 9	Lay veneers and hand fit inlays (117354)		16	48	Week 7	112
		Materials: veneers, wood, inlays, natural and synthetic				
		Specifications: type, quality, grain matching, colour matching, moisture content				
		Veneer cutting: to length, width, shape: flame, crown, quarter cut				
		Equipment and tools: straight edge, veneer hammer, veneer saw, veneer knife, toothing plane, veneer tape, veneer pins, plane, clamps, flat iron, unheated press, heated press, brushes, router, roller, adhesive sticks, veneer roller				
		Adhesives: PVA, UF, resorcinol, phenol, epoxy				
		Inlays: wood, natural, synthetic, stringing,				
Week 10	Produce curved laminated timber and board products (117385)	Equipment and tools: panel saw, rip saw, radial arm saw, surfacer, thicknesser, hand cramps, pneumatic cramps, laminating wheel	8 (80)	24 3 - 4 days or 3 days + 1 day revision	Weeks 8+9	56
		Materials: softwood, hardwood, plywood, board products				
		Specifications				
		Adhesives: cold glue, hot glue				
		Formers: single, 2-part (male & female), dowel, solid or ribbed				
		Laminating: curves, free-form				
Week 11	Produce edge banded components and products (optional) (117387)		8 (80)	24	Week 10	56
		Production information and requirements				
		Materials: wood, veneer, melamine				
		Jigs and templates				
		Adhesives: polyvinyl acetate; urea formaldehyde; phenol formaldehyde				
		Operating and maintaining manual and automatic edge banding machines				
Week 12					Week 11 + revision	
Week 13 / 14	Integrated summative assessment					