Apprenticeship Manitoba

Level Chart: Tool and Die Maker - Technical Training

Level 0	One (9 Weeks)	Level Two (8 Weeks)					
Code	Unit Title	T	Р	Code	Unit Title	T	Р
A1	Trade Safety Awareness(ACB Standard)	7	0	E2	Conventional Milling Machine Operation	15	60
A2	Safety	7	0	A7	Advanced Drawings	32	0
А3	A3 Orientation I: The Structure & Scope of Machinist Trade Learning (A & C Board Standard)	7	0	C2	Precision Measurement II	3	4
A4	Hand Threading	6	4	B5	Cutting Machine Tools	4	4
A5	Hoisting, Lifting and Rigging	3	4	D4	Advanced Conventional Lathe Operation	15	65
A6	Basic Drawings	32	0	D5	Taper Turning	7	10
C1	Precision Measurement I	10	5	B2	Power Saws	3	4
B1	Hand and Power Tools	10	12	В3	Contour Bandsaws	2	5
C3	Basic Layout	8	6	A9	Mechanical Components	4	3
A8	Fluids and Coolants	5	2	A10	Heat Treatment	8	4
B4	Drills and Drill Presses	7	8	A11	Introduction to Welding	7	0
F1	Introduction to Grinding Machines	3	4	A12	Orientation II: The Job of Journeywork	14	7
D1	Introduction to Conventional Lathes	20	0				
D2	Basic Conventional Lathe Operation	20	80				
D3	Advanced Lathe Drilling, Boring, Reaming, Tapping and Die Threading	15	10				
E1	Introduction to Milling Machines	20	0				
	Subtotals	180	135		Subtotals	114	166
	Total	315 F	lours		Total	280 F	lours

Level Three (8 Weeks)				Level Four (9 Weeks)			
Code	Unit Title	Т	Р	Code	Unit Title	Т	Р
B6	Basic Tool Design	3	7	B7	Geometric Dimensioning and Tolerancing (GD and T)	20	0
C3	Trade Math III	24	0	C4	Trade Math IV	24	0
D6	Trade Science III	24	0	D7	Trade Science IV	24	0
E3	Comparison Measurement	3	4	E4	The Coordinate Measuring System	4	3
F2	Grinding Operations I	0	12	F3	Grinding Operations II	0	20
G1	Basic Die Making (Theory)	61	0	F4	Computer Numerical Control	20	0
G2	Basic Die Making (Practical)	0	142	C3	Advanced Die Making (Theory)	40	0
				C4	Advanced Die Making (Practical)	0	88
				C5	Jigs and Fixtures (Theory)	24	0
				C6	Jigs and Fixtures (Practical)	0	48
	Subtotals	115	165		Subtotals	156	159
	Total	280 Hours			Total	315 H	lours

