Apprenticeship Manitoba

Level Chart: Tool and Die Maker - Technical Training

Level One (9 Weeks) – COMMON CORE UNITS				Level Two (8 Weeks) – COMMON CORE UNITS				
Code	Unit Title	Т	Р	Code	Unit Title	Т	Р	
A1	Trade Safety Awareness	7	0	B1	Advanced Drawings	28	0	
A2	Safety	7	0	B2	Mechanical Components	4	3	
A3	Learning About Work	7	0	B3	Heat Treatment	7	4	
A4	Hand Treading	6	4	B4	Introduction to Welding	7	0	
A5	Hoisting, Lifting and Rigging	3	4	B5	Power Saws	3	4	
A6	Basic Drawings	28	0	B6	Contour Bandsaws	2	5	
A7	Fluids and Coolants	5	2	B7	Cutting Machine Tools	3	4	
A8	Hand and Power Tools	7	14	B8	Precision Measurement II	3	4	
A9	Drills and Drill Presses	7	8	B9	Advanced Conventional Lathe Operation	14	57	
A10	Precision Measurement I	10	5	B10	Taper Turning	7	10	
A11	Basic Layout	8	6	B11	Conventional Milling Machine Operation	14	57	
A12	Introduction to Conventional Lathes	21	0	B12	Introduction to Grinding Machines	3	4	
A13	Basic Conventional Lathe Operation	21	84	B13	Computer Numerical Control I (CNC) Machine – Tools	33	0	
A14	Advanced Lathe Drilling, Boring, Reaming, Tapping and Die Threading	14	10					
A15	Introduction to Milling Machines	27	0					
	Subtotals	178	137		Subtotals	128	152	
	Total	315 hours			Total	280 h	ours	

Level Three (8 Weeks)				Level Four (9 Weeks)			
Code	Unit Title	Т	Р	Code	Unit Title	Т	Р
C1	Basic Tool Design	3	7	D1	Geometric Dimensioning and Tolerancing	21	0
C2	Trade Math I	24	0	D2	Trade Math II	21	0
C3	Trade Science I	24	0	D3	Trade Science II	21	0
C4	Comparison Measurement	3	4	D4	The Coordinate Measuring System	4	3
C5	Grinding Operations I	0	12	D5	Computer Numerical Control (CNC) III – Operation	21	0
C6	Basic Die Making (Theory)	61	0	D6	Grinding Operations II	0	21
C7	Basic Die Making (Practical)	0	102	D7	Advanced Die Making (Theory)	42	0
C8	Computer Numerical Control (CNC) II – Program Code	0	40	D8	Advanced Die Making (Practical)	0	85
				D9	Jigs and Fixtures (Theory)	21	0
				D10	Jigs and Fixtures (Practical)	0	41
				D11	Journeyperson Trainer	7	0
				D12	Pre-Interprovincial Exam Review	7	0
	Subtotals	115	165		Subtotals	165	150
	Total	280 h	nours		Total	315 h	ours

T – Theory hours P – Practical hours

