

## Level Chart (Levels 1 – 4): Refrigeration and Air Conditioning Mechanic (Commercial) (Level 1 Gasfitter B included)

Level One (9 Weeks)				Level Two (9 Weeks)			
Code	Unit Title	T	P	Code	Unit Title	T	P
A1	Orien. I: Struc. and Scope of RACM	7	0	A10	Pipe Threading and Assembly	4	16
A3	Trade Safety Awareness	7	0	A15	Pressure Enthalpy Diagrams	15	0
A4	Tools and Equipment	10	10	B3	Science II	16	0
A5	Communication	7	0	C1	Refrigeration and Air Cond. Installation	15	14
A6	Hoisting, Lifting, Rigging, and Access/Egress Equipment	5	2	D1	Air Conditioning Fundamentals	30	5
A7	Refrigeration Fundamentals	47	22	E3	Compressors II	15	10
A8	Refrigerants and Oils	10	0	E5	Motors I	20	10
A9	Piping, Tubing, Soldering and Brazing I	16	4	E7	Metering Devices	10	10
A11	Leak Testing, Evacuation and Charging	8	7	E8	Fans, Mech. Drives, Air Filters, Air Cleaners	15	5
A12	Electrical Fundamentals	37	12	E9	Condensers	5	10
A13	Blueprint Reading and Drafting	10	10	E10	Evaporators	5	10
A14	Trade Documents	6	0	F1	Control Fundamentals	15	5
B1	Trade Mathematics	15	0	F2	Control Circuits and Wiring Diagrams	20	10
B2	Science I	15	0	G2	Gas Code II (includes propane)	20	5
E1	Valves and Accessory Devices	4	4				
E2	Compressors I	10	5				
G1	Gas Code I (includes propane) I	20	5				
	<b>Subtotals</b>	<b>228</b>	<b>87</b>		<b>Subtotals</b>	<b>205</b>	<b>110</b>
	<b>Total</b>	<b>315 hrs</b>			<b>Total</b>	<b>315 hrs</b>	

Level Three (9 Weeks)				Level Four (9 Weeks)			
Code	Unit Title	T	P	Code	Unit Title	T	P
C2	Refrigeration Load Calculations	25	5	A16	Job Coordination	7	0
C3	Refrigeration System Design	20	5	C5	Industrial Refrigeration Systems	15	5
C4	Commercial Refrigeration Systems	25	10	D5	Air Conditioning Load Calculations	32	0
D2	Air Conditioning Systems	15	10	D6	Air Conditioning System Design	32	0
D3	Packaged Air Conditioning Units	20	10	D7	Duct Systems and Design	20	10
D4	Heat Pump Systems	20	10	D8	Heating Systems	15	5
E4	Compressors III	5	5	D9	Air Measuring Instruments and System Air Balancing	7	5
E6	Motors II	10	5	D10	Chillers and Chiller Systems	32	5
E11	Fluid Dynamics and Circulating Pumps	15	0	F5	Troubleshooting with Schematics and Wiring Diagrams	20	0
E12	Refrigerant Flow Controls	10	5	G4	Gas Code Review	35	0
E13	Evaporative Condensers and Cooling Towers	8	2	A17	Inter-Provincial Review	70	0
F3	Troubleshooting Refrigeration and Air Conditioning Electronics	15	5				
F4	Control Systems	20	10				
G3	Gas Code III (includes propane)	20	5				
	<b>Subtotals:</b>	<b>228</b>	<b>87</b>		<b>Subtotals:</b>	<b>285</b>	<b>30</b>
	<b>TOTAL:</b>	<b>315 hours</b>			<b>TOTAL:</b>	<b>315 hours</b>	