

## Level Chart: Ref. and Air Cond. Mechanic (Residential) - Technical Training

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 (Residential)	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	E4	Motors I	20	10
A9	Piping, Tubing, Soldering and Brazing I	16	4	E5	Metering Devices	10	10
A11	Leak Testing, Evacuation and Charging	8	7	E6	Fans, Mech. Drives, Air Filters, Air Cleaners	15	5
A12	Electrical Fundamentals	37	12	E7	Condensers	5	10
A13	Blueprint Reading and Drafting	10	10	E8	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)	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)			
Code	Unit Title	T	P
A16	Job Coord. and Job Site Management	5	0
A17	Sheet Metal: Simple Layout	7	7
C2	Bldg. Heat Loss, Heat Gain, Load Calc.	25	5
C3	Refrigeration System Design	15	10
D2	Air Conditioning Systems	15	10
D3	Packaged Air Conditioning Units	7	3
D4	Heat Pump Systems	7	2
D5	Air Conditioning System Design	20	10
D6	Duct Systems and Design	20	5
D7	Heating Systems	15	3
D8	Air Meas. Instruments & System Air Bal.	5	3
E9	Fluid Dynamics and Circulating Pumps	7	0
F3	Troubleshooting Refrig. & Air Cond. Sys.	20	10
F4	Troubleshooting Schematic Wiring Diag.	15	4
G3	Gas Code III (includes propane)	20	5
A18	Pre-Certification Review	35	0
	<b>Subtotals</b>	<b>238</b>	<b>77</b>
	<b>Total</b>	<b>315 hrs</b>	