

Profile Chart: RACM (Commercial) - Technical Training

Course A: Occupational Skills	A1 Orientation I: Structure and Scope of Refrigeration and Air Conditioning Mechanic	A2 Orientation II: The Job Journeywork	A3 Trade Safety Awareness	A4 Tools and Equipment	A5 Communication
	Level 1 Hours: 7	Levels 5 Hours: 14	Level 1 Hours: 7	Level 1 Hours: 20	Level 1 Hours: 7
	A6 Hoisting, Lifting, Rigging and Access/Egress Equipment	A7 Refrigeration Fundamentals	A8 Refrigerants and Oils	A9 Piping, Tubing, Soldering and Brazing I	A10 Pipe Threading and Assembly
	Level 1 Hours: 7	Level 1 Hours: 69	Level 1 Hours: 10	Level 1 Hours: 20	Level 2 Hours: 20
A11 Leak Testing, Evacuation and Charging	A12 Electrical Fundamentals	A13 Blueprint Reading and Drafting	A14 Trade Documents	A15 Pressure Enthalpy Diagrams	
Level 1 Hours: 15	Level 1 Hours: 49	Level 1 Hours: 20	Level 1 Hours: 6	Level 2 Hours: 15	
A16 Job Coordination	A17 Inter-Provincial Review				
Level 4 Hours: 7	Level 4 Hours: 70				
Course B: Trade Math and Science	B1 Trade Math	B2 Science I	B3 Science II		
	Level 1 Hours: 15	Level 1 Hours: 15	Level 2 Hours: 16		
Course C: Refrigeration and Air Cooling Systems	C1 Refrigeration and Air Conditioning Installation	C2 Refrigeration Load Calculations	C3 Refrigeration System Design	C4 Commercial Refrigeration systems	C5 Industrial Refrigeration Systems
	Level 2 Hours: 29	Level 3 Hours: 30	Level 3 Hours: 35	Level 3 Hours: 35	Level 4 Hours: 20
Course D: Heating, Ventilation and Air Conditioning Systems	D1 Air Conditioning Fundamentals	D2 Air Conditioning Systems	D3 Packaged Air Conditioning Units	D4 Heat Pump Systems	D5 Air Conditioning Load Calculations
	Level 2 Hours: 35	Level 3 Hours: 25	Level 3 Hours: 30	Level 3 Hours: 30	Level 4 Hours: 32
	D6 Air Conditioning System Design	D7 Duct Systems and Design	D8 Heating Systems	D9 Air Measuring Instruments and System Air Balancing	D10 Chillers and Chiller Systems
	Level 4 Hours: 32	Level 4 Hours: 30	Level 4 Hours: 20	Level 4 Hours: 12	Level 4 Hours: 37
Course E: Refrigeration, Heating, Ventilation and Air Conditioning System Components	E1 Valves and Accessory Devices	E2 Compressors I	E3 Compressors II	E4 Compressors III	E5 Motors I
	Level 1 Hours: 8	Level 1 Hours: 15	Level 2 Hours: 25	Level 3 Hours: 10	Level 2 Hours: 30
	E6 Motors II	E7 Metering Devices	E8 Fans, Mechanical Drives, Air Filters, Air Cleaners	E9 Condensers	E10 Evaporators
	Level 3 Hours: 15	Level 2 Hours: 20	Level 2 Hours: 20	Level 2 Hours: 15	Level 2 Hours: 15

	E11 Fluid Dynamics and Circulating Pumps Level 3 Hours: 15	E12 Refrigerant Flow Controls Level 3 Hours: 15	E13 Evaporative Condensers and Cooling Towers Level 3 Hours: 10		
Course F: Control Systems	F1 Control Fundamentals Level 2 Hours: 20	F2 Control Circuits and Wiring Diagrams Level 2 Hours: 30	F3 Troubleshooting Refrigeration and Air Conditioning Electronics Level 3 Hours: 20	F4 Control Systems Level 3 Hours: 30	F5 Troubleshooting with Schematics and Wiring Diagrams Level 4 Hours: 20
Course G: Gas Fitter	G1 Gas Code I (includes propane) Level 1 Hours: 25	G2 Gas Code II (includes propane) Level 2 Hours: 25	G3 Gas Code III (includes propane) Level 3 Hours: 25	G4 Gas Code Review Level 4 Hours: 35	G5 Gas/Safety Control Requirements Level 5 Hours: 35
	G6 Supply Air/Venting Permit Requirements Level 5 Hours: 34	G7 Gas Burning Equipment & Materials Determination/Burner Orifice Sizing/Conversion Work Level 5 Hours: 38	G8 Longest Run/Gas Burning Equipment BTU Input Demand, Systems/Pipe Size Determination/Pressure & Meas. Requirements Level 5 Hours: 42	G9 Tests/Inspects Piping & Gas Appliance Efficiency Level 5 Hours: 33	G10 Electrical Requirements Level 5 Hours: 105
	G11 Alternate Fuel Systems Level 5 Hours: 14	G12 Applied Trades Projects Level 5 Hours: 35			