LEVEL 2 – FAST-TRACK – Cost £6,400+vat (invoiced as x4 instalments of £1,600+vat)

City & Guilds 6090-21 - Diploma in Refrigeration, Air-Conditioning and Heat Pump (RACHP) Systems - Experienced Engineers

2026	Week	Dates	No. Days	Topics to be covered
November	1	9 - 13	5	Enrolment / Introduction to Scheme. Overview of Knowledge, Skills and Behaviours. **Unit 201 Principles of welfare, health and safety in RACHP environments.** Introduction and awareness of H&S regulations, including risk assessments and method statement write ups. Ongoing unit.
December	2	7 – 11	5	**Unit 202 - Scientific principles in RACHP systems.** Carry out mathematical calculations and measurements working in RACHP environments. Unit includes gas laws, thermodynamics, pressure-enthalpy diagrams and pyschrometrics, properties of refrigerants, lubricants and materials used in RACHP industry.
2027	**Week**	**Dates**	**No. Days**	**Topics to be covered**
January	3	11 - 15	5	**Unit 203 - Vapour compression systems (single compressor/single evaporator) in RACHP.** Understand the operation and function of a vapour compression systems. Covering components, characteristics of line and pipe systems, the environmental impact and conditions that affect system performance.
February	4	15 - 19		**Unit 206 - Electrical systems (single phase) for RACHP** Practical and Theory. Fundamental electrical practices & Standards BS7671. Use of test instruments and Safe Isolation. Understand how to test circuits and fault find.

2027	Week	Dates	No. Days	Topics to be covered
March	5	15 - 19	5	**Theory recap and assessment** **250 - On-demand E-volve online** – end assessment covering theory from all prior unit topics.
April	6	19 - 23	5	**Unit 206 –** (continued) Complete practical assignment to install, test and commission an electrical control system for RACHP
May	7	17 - 21	5	**Unit 205 - Install and commission RACHP (refrigeration circuit) systems.** Practical and Theory. This unit covers RACHP sector knowledge including jointing methods, system components, fixing pipework and insulation methods. Install and commissioning practical assignment including further risk assessments, method statements, tool selection
June	8	14 - 18	5	**Completion of Level 2 6090-21** **Unit 204 - Service, maintenance and repair of RACHP systems.** Practical and Theory. troubleshoot and repair RACHP systems using modern diagnostics technology. Perform distinct types of maintenances, apply sustainable practices and perform practical servicing and maintenance skills. **Learners will need to retrofit energy efficient equipment, retro-fill new, low GWP replacement refrigerants.** This unit will be an accumulation of skills recognition, including use of PH charts, refrigerant handling, brazing techniques, risk assessments and RACHP regulations. **251 - practical assignment sign off.** Complete any outstanding assignment work. sign off all portfolio evidence.