University of Nottingham
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JOB DESCRIPTION

Job Title:	Air-conditioning (AC) Technician
School/Department:	Estate Department
Job Family and Level:	Level 1 (Non Executive)
Contract Status:	Permanent
Location	UNM
Reporting To:	AC Team Leader
Job Overview:	The Air-conditioning Technician is responsible for the installation, maintenance, diagnosis, and repair of heating, ventilation, air conditioning, and chiller (HVAC) systems. This role is essential in ensuring the safe, efficient, and reliable operation of climate control systems in environments. The technician must be proficient in troubleshooting both mechanical and electrical issues, conducting routine preventative maintenance, and adhering to all relevant safety regulations and industry standards. This position requires the ability to work independently with minimal supervision and to effectively document and report findings, repair actions, and recommendations to management in a timely and professional manner.

Generic Roles:

No.	Description
1.	**Routine Maintenance:** a) Conduct scheduled preventive maintenance to ensure optimal system performance and minimise unexpected breakdowns. b) Enhance system reliability and reduce failures through proactive Planned Preventive Maintenance (PPM). c) Carry out daily checklists for the chiller room to verify proper operation and safety compliance. d) Closely monitor the chiller system to detect anomalies early and maintain consistent performance.
2.	**System Diagnostics:** a) Air filter Check for dirt and debris; replace or clean them regularly to maintain proper airflow and indoor air quality. b) Thermostat ensures it's set correctly, responds accurately to temperature adjustments, and is functioning properly. c) Blower motor inspects for proper functioning and lubrication. d) Refrigerant levels check refrigerant levels to ensure the system is operating efficiently. e) Indoor and outdoor unit : Clear debris, inspect the fins, and ensure the unit in good working conditions.
3.	**Repairs and Replacements:** a) Identify Faulty Components: Accurately determine which components (e.g., compressors, motors, capacitors, fans, coils, valves) are malfunctioning or damaged through proper diagnostic procedures. b) Conduct mechanical and electrical repairs in compliance with safety standards, ensuring minimal disruption to system operation. c) Remove and replace damaged or outdated components using manufacturer-approved parts and industry-standard procedures. d) Verify that all repaired or replaced parts function correctly by testing the system under normal operating conditions.

	e) Follow local regulations and manufacturer guidelines during repairs, especially when handling refrigerants or electrical systems Record f) details of repairs and replacements performed, including parts used, time taken, and observations, in service logs or reports
4.	**Testing and Commissioning:** a) Power up and activate HVAC systems after installation or repair to ensure all components are functioning. b) Verify key performance indicators such as temperature, pressure, airflow, voltage, and current to ensure the system operates within specified limits. c) Measure and adjust refrigerant charge to the correct level for optimal cooling and system efficiency. d) Confirm that thermostats, sensors, timers, and control panels are responding correctly and regulating the system as intended. e) Identify and resolve any operational problems before final handover. f) Run the system under full load for a set duration to confirm reliability and efficiency. g) Run the system under full load for a set duration to confirm reliability and efficiency. h) Run the system under full load for a set duration to confirm reliability and efficiency and prepare and submit detailed commissioning reports, including system settings, test results, and any adjustments made.
5.	**User Interaction:** a) Respond quickly to user-reported issues or complaints related to air conditioning performance (e.g., no cooling, unusual noise, leakage). b) Clearly explain the root cause of the issue and describe the repair or maintenance actions taken in simple. c) Educate users on basic operation of thermostats or control panels and how to prevent common misuse. d) Collect feedback from users on system performance and comfort level after servicing and report this to the maintenance supervisor for continuous improvement.
6.	**MaintainX Work Orders Monitoring:** a) Regularly check assigned tasks in MaintainX and acknowledge receipt to confirm awareness and readiness to start the job and understand and follow the priority level of each work order based on urgency, system criticality, and agreed response times. b) Complete tasks within the timeframe defined in the Service Level Agreement to maintain compliance and user satisfaction. c) Attach photos, checklist results, readings (e.g., pressure, temperature), and any relevant notes or findings in the work order for record-keeping and audits. d) Notify supervisors immediately through MaintainX or other communication channels if a job cannot be completed within the SLA due to technical or material issues. e) Before closing the work order, confirm that the issue is fully resolved, tested, and that the user is satisfied with the outcome.

Specific Roles:

No.	Main Responsibilities
1.	a) Ensure correct placement and alignment of indoor and outdoor units and ductwork b) Perform scheduled maintenance on all HVAC equipment (e.g., chillers, AHUs, c) FCUs, split units). d) Clean filters, coils, and fans; check refrigerant levels; lubricate moving parts. e) Complete daily/weekly/monthly checklists, especially for critical systems like the chiller room. f) Inspect and diagnose faults in HVAC systems, including electrical and mechanical issues. g) Ensure repaired systems are tested and returned to full operational condition. h) Test newly installed or repaired systems to confirm they meet operational and safety standards. i) Perform final performance checks and ensure systems are ready for j) handover. Follow all safety procedures and use appropriate PPE. k) Ensure compliance with local regulations and refrigerant handling guidelines. Report safety incidents, hazards, or near misses immediately.

Job Requirements:

Specification	Essential	Desirable
Qualifications/ Education	Diploma in Mechanical Engineering 1) Building Services Engineering 2) HVAC Engineering (if available)	1) Certification as AO or A4 2) Degree in Electrical Engineering 3) Diploma in a technical field or currently pursuing one
Working Experience	Minimum 3 years of experience in managing mechanical, electrical and chiller systems Experience with low voltage Chargeman electrical systems is essential.	Experience in managing systems chiller and understanding the process. Available to troubleshoot and repair system AHU, FCU, indoor outdoor unit and VRV.
Knowledge and Skills	Installation: a) Installation of air conditioning units and associated ductwork or piping b) Mounting and electrical connections Maintenance & Servicing: a) Routine servicing of HVAC units (filter cleaning, refrigerant checks, lubrication) b) Preventive maintenance planning Fault Finding & Repairs: a) Diagnosing and fixing electrical and mechanical faults b) Gas leak detection and repairs Brazing/Welding & Pipe Fitting: a) Skills in connecting refrigerant lines using proper joining techniques System Testing & Commissioning: a) Performance testing b) Ensuring compliance with specifications	Advanced HVAC Controls & Automation - Knowledge of Building Management Systems (BMS) or smart thermostats HVAC Design and Layout - Ability to read and interpret blueprints, duct layouts, and system schematics - Basic understanding of HVAC load calculations Familiarity with Specialized HVAC Systems -VRV/VRF systems -Chiller and cooling tower systems - System AHU, Fcu and Indoor and outdoor
Character Attributes	Energetic team player and positive working attitudes with highly developed sense of responsibility. Proactive, problem solver, capable of identifying issues and providing practical solutions. Ability to communicate effectively at all levels in a clear and concise manner.	Multi-Skilled Technician -Basic knowledge of electrical, plumbing, or fire alarm systems can be a major advantage Project Coordination -Assisting in site supervision, material planning, or coordinating with other trades Health & Safety Knowledge - Familiar with PPE, risk assessments, and emergency procedures

Working Conditions	Full-time position. Availability for emergency response outside of regular working hours (evenings, weekends, or holidays). Ability to work in various environmental conditions (indoors/outdoors, confined spaces, heights, etc.).	