ELECTRIFICATION (BATTERY DEVELOPMENT AND DEPLOYMENT)

Electrification is the process of powering by electricity and, in many contexts, the introduction of such power by changing over from an earlier power source.

REVAMPs training material is split into 4 distinct modules under the Title of Electrification (Battery Development and Deployment). REVAMP recommend its clients to undertake all 4 modules in sequence, but courses can be organised to meet individual clients' requirements. These modules are bespoke non-accredited continuous professional development (CPD) courses.

These training modules are provided by REVAMP Training Limited from its dedicated training centre at North Seaton, Ashington, Northumberland. Should a client wish for REVAMP Training Limited to undertake training at its premises, this can be undertaken with prior agreement. All prices available upon request via: info@revamptraining.co.uk or by contacting +44 1642 220778.

Module 1: Battery Technology Fundamentals.

Basics of battery knowledge.

Understand the battery cell, its development, architecture and operation.

Battery cell configurations.

Battery cell matching.

Battery Specifications and their significance.

Battery Management System.

Module 2: Lithium-Ion Battery Manufacture and Energy Storage.

Unit 1, Identify and describe the fundamental stages of Li-ion battery cell Electrode, Assembly, Formation, Ageing and Testing and Finishing.

Unit 2, Provide an understanding of the principles, types and benefits of Li-ion Battery Rechargeable Energy Storage Systems (RESS).

Module 3: Lithium-Ion Battery Health and Safety.

- Unit 1, Electrical Safety, Law and Definitions.
- Unit 2, Electrical Hazards, Safety and Shock.
- Unit 3, Hazard Management.
- Unit 4, Safe Working Practices.
- Unit 5, Battery Lock Out.
- Unit 6, Control of Substances Hazardous to Health (COSHH).
- Unit 7, Electrolyte Safety and Associated Hazards
- Unit 8, Manual Handling and Spill.
- Unit 9. LOLER and PUWER Regulations.
- Unit 10, ATEX and DSEAR.
- Unit 11, Battery LOTO.

Module 4: Battery Recycling and Repurposing.

Battery end of life (EV).

Transport, Discharge and Dismantle.

Battery Shredding.

Electrolyte Treatment.

Material Separation.

Gas Scrubbing.

Hydromet Recovery