

Introduction



Working on live electrical equipment is dangerous. Every year many individuals are injured or killed working on these systems. Our course aims to deliver knowledge on the source of the most common Arc Flash hazards and how to protect yourself, your team and your assets from being damaged by this danger. The course will comprise of sharing of both theoretical knowledge and also experience gained from operations in the field. The knowledge gained will also be applied through in class practical exercises.

Program Designed For

- Electrical Personnel
- Senior Authorized Electrical Personnel
- Personnel involved with daily activities and provide assistance during operations on live HV/LV equipment

Duration

3 days

Learning Outcome

- You will be able to understand the concept of arc flash and arc blast
- You will be able to identify the various categories of arc flash incident energy for non-arc flash protected equipment
- You will be able to identify the different types of arc flash and non-arc flash equipment
- You will be able to decide on how to apply the most appropriate method for operation of non-arc flash protected equipment
- You will be able to take action to mitigate the risks of an arc flash

Your Instructor

Manggau Galawing

Minimum Pax

6 Pax

Course Contents



Day 1	Day 2	Day 3
<p>Introduction to OSH (Occupational Safety & Health) and relevant international, national and local standards (IEEE, NFPA)</p> <p>Introduction of electrical risks due to shock hazards, step & touch potentials and burns</p> <p>Basic principle of electric arc flash and arc blast, including arc flash energy, arc flash boundary, tools, equipment and selection of PPE</p>	<p>Design and assessment of arc flash protected and non-arc flash protected switchgear</p> <ul style="list-style-type: none">• switchgear and distribution boards• metal-clad and metal-enclosed switchgear• Compartment categorization for Form 1, 2, 3 & 4• HV & LV motor contactors• Air- and gas-insulated switchgear• Earthing switch, racking and operation <p>Understanding NFPA 70E and IEEE 1584 in relation to arc flash</p>	<p>Mitigation and control of non-arc flash equipment</p> <ul style="list-style-type: none">• Operating and maintenance.• Switching procedure and sequence to reduce the risk of electric arc• Use of current limiting fuses and LV CBs• monitoring and tripping devices• Remote racking operation• Arc flash PPE <p>Desk-Top Practical exercise on non-arc flash protected Form 2 LV switchgear</p> <ul style="list-style-type: none">• Assess the LV switchgear• Identify the arc flash incident energy and boundary level• Prepare mitigation and control procedure• Prepare switching procedure• Correct use of PPE.

