

CHARGEMEN CERTIFICATION COURSE

SEKATAN : AO

INTRODUCTION

It's unquestionably true that **people are your greatest asset**. How well management determines the business needs that drive job requirement then matches the right people with right jobs, affects profitability. If you don't have skilled operators to run equipment properly or competent maintenance personnel to fix them, there will be no return on the purchase capital equipment. Hiring retaining and developing right maintenance personnel is long and costly process, but not as costly as having wrong people on the job. Electrical system is an important aspect in plant operation. It is mandatory the electrical equipments to be maintained by competent chargemen certified by **Suruhhanjaya Tenaga**.

OBJECTIVES

This course is designed to train the technicians and executives to gain knowledge on Electrical Technology which is crucial in certain decision making process involving electrical system. This course prepares the personnel for the Chargeman Certification and hand-on expertise in tackling day –to –day electrical problems in their plant.

WHO SHOULD ATTEND

This course is exclusively designed for . Supervisors and Senior Technicians / Technicians.

FACILITATOR

Mr Muru has a degree in BSc qualified Electrical and Electronic Engineer and he has over 35 years of experience in Electrical application in the industries. He is also a Certified Energy Manager, 33KV High Voltage Competency Certificate & Competency Electrical Supervision from Energy Commission. he is also lecturing in few institutions in klang valley. He has conducted more than 200 chargeman certification courses

PROGRAMME OUTLINE

Sukatan Pelajaran (Syllabus) Bagi Penjaga Jentera Sekatan AO

MODULE -1 - 2 DAYS

- Elektrik Asas
- Akta Bekalan Elektrik 1990
- Alat-alat perlindungan Dalam Pemasangan Voltan Rendah
 - Jenis pemutus litar
 - FUSE- Rewirable, HRC, Cartridges, Time Delay Lag Fuse
 - CERCUIT BREAKER ACB, OCB, MCCB, MCB,
 - Practical & Assignment

MODULE – 2 - 2 DAYS

Angkadar/ power factor

- Definisi dan pengiraan
- Kesan p.f. rendah
- Kadaran pemuat bagi pembetulan p.f.
 - Voltan
 - Arus (litar arus terus dan ulang alik)
 - Kuasa(kW,kVA,kVAR)
- Pengubah / transformer
 - Binaan, jenis, kegunaan, perbezaan antara pengubah lain jenis
 - Fungsi bahagian-bahagian penting dalam pengubah
 - Overhauling
 - Pengujian dan commissioning

Kabel

- Pemilihan kabel
- Jenis, saiz, keupayaan membawa arus, susutan voltan
- Penyambungan dan tamatan (joints and terminations)
- Kerosakan-kerosakan pada kabel dan penganalisan kerosakan
- Penggunaan alat-alat mengesan kerosakan pada kabel
- Kabel Bawah Tanah
 - Jenis-jenis kabel, saiz, keupayaan membawa arus
 - Panggilan, cara menentang dan menanam kabel (excavation and cable laying) bagi berbagai situasi
 - Penyambungan kabel (cable jointing), penentuan fasa (phasing) dan tamatan (termination)
 - Perkakas kawalan (associated, control gears), peti pembekal (feeder pillar), papan agihan (distribution boards)
 - Pembinaan, pengendalian dan penyelenggaraan
 - Practical & assignment

MODULE -3 - 2 DAYS

- Motor dan alat kawalan
 - Jenis-jenis motor, kegunaan, perbezaan dan cara gerak tugas
 - Penyelenggaraan, mengesan kerosakan dan pembaikan

- Penghidup termasuk ciri-ciri perlindungan
- Bateri
 - Prinsip kerja
 - Jenis, saiz, penyelenggaraan dan system cas
- Alatukur dan alat uji
 - Pengenalan dan penggunaan berbagai jenis alatukur dan alatuji
- Pendingin udara

DURATION

10 Days

- Jenis-jenis pendingin udara
- Komponen-komponen pendingin udara
- Kendalian dan penyelenggaraan
- Practical & Assignment

COURSE FEE

RM 2,500 PER PERSON

MODULE -4 – 2 DAYS

Pemeriksaan bagi peralatan papan suis utama

- Sistem penbumian, OCB, papan suis, switching tripping equipment, pengasing, relay and pilot wiring, dsb.
- Pembumian
- Pengujian pemasangan (ujian-ujian turutan)
- Pemasangan lampu neon
- Practical & Assinment

100 % HRDF CLAIMABLE

MODULE -5 - 2 DAYS

Revision on all modules 1, 2, 3 ,4

Hostel can be arranged for outstation participants