

# Technical Learning Directory 2025

### Empowering Growth, Shaping a Sustainable Future



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### The People Strategy

Our people are the most important and valuable asset. They are our greatest strength and the key to our mission's success. They determine the success and failure of our business.

### **HR Game Plan**





### **Agile**

Able to respond to challenges efficiently



### Creative

Always thinking outside the box



### **Innovative**

Continuously generating unique ideas



### **Our People Priorities**

### **Acquire**

- Robust Workforce Plan
- Fit-for-Purpose
   Resourcing Plan
- Positive Onboarding & Integration



### **Deploy**

- Right person, Right Place,
   Right time
- Open Access to Opportunities
- Robust Organisation
   Effectiveness &
   Succession



### Develop

- Accelerates Capability Building
- Deepens our Competitive
   & Differentiating
   Competencies
- Aids in Rewarding,
   Coaching and Mentoring our People







### **Welcome to the Technical Learning Directory 2025!**

Individuals with a growth mindset embrace learning throughout their careers. There is an inseparable connection between one's personal development and his/her learning efficiency. In Sarawak Energy, effective learning begins with knowing what learning and development opportunities are available to you and what kind of support your leadership and colleagues can provide. The key to a successful learning and development programme is support and cooperation from all sides as well as a structured investment of time and resources dedicated just for learning.

Sarawak Energy offers a robust range of technical trainings and learning platform for your personal and career development through continuous learning. The courses are led by Subject Matter Experts (SMEs), specialists, and lecturers with extensive hands-on experience in the field.



This directory serves to guide you towards finding the appropriate formal technical learning programme. You are encouraged to familiarise with the course content, objectives, and methodology to find a course befitting your goals and learning outcomes. The directory is also available to contractors of Sarawak Energy.

Upon completion of your course, you are encouraged to incorporate what you have learned into your daily tasks at the workplace. Share your learning, knowledge, and experiences as experts within and beyond the Company, coach your team members and have continuous discussions with your supervisors to optimise the benefits and make the necessary opportunities more available.

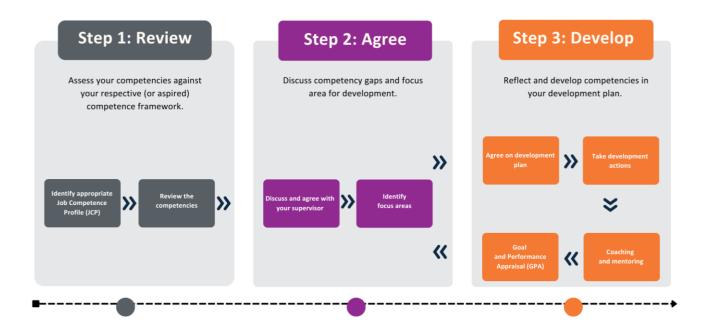
As we begin to see the increased value and impact of learning in our daily work, we will build individual and group competencies to make Sarawak Energy a learning organisation and to cultivate a high performance culture through a continuous improvement mindset.

Let's make time to prepare, learn, plan, practice and follow up on your new competencies.

Together, let's make Sarawak Energy a greater place to work.

### **Competence Assurance Approach**

To ensure personal and career growth, it is essential to assess and develop your competencies through a structured approach. The Competence Assurance Framework (CAF) helps you understand the competencies required for current and future roles, addressing any gaps while building on your strengths. By following this approach, you can align your developmental efforts with your personal goals and the organisational needs.



### **Workplace Learning (70%)**

Learning and developing through day-to-day tasks, challenges and practice

- Constant on-the-job encouragement and stimulation, such as delegation and job rotation
- On-the-job training, projects, short-term assignments, and taskforce
- Learning through projects, problem solving, client interaction and rotation assignments
- Learning by doing the actual work



### Social Learning (20%)

Learning and developing through informal coaching, personal networks, and other collaborative and co-operative actions

- Learning through observing
- Social networking
- Self-study material
- Self-reflection

### Formal Learning (10%)

Learning and developing through structured courses and programmes

- Formal and prescribed methods such as e-learning, instructor-led training, virtual learning and external courses
- Learning curricula, online resources, books and articles, and external resources
- Traditional training which has a formal structure and an explicit, expected outcome





# What to Attend: Training Matrix 2025



### **EIU Electrical Competency Certification**

Competency Category	S100	E309	E604	E223	E405	E703	E211, E212, E213	E602	E221	E603	E511	E521, E522, E523, E524
L1 - Low Voltage (LV) Main Switchboard & Auxiliaries	Р	Р					Р					
L2 (O/H) - Low Voltage (LV) Overhead Lines & Auxiliaries	Р	P		P								
L2 (U/G) - Low Voltage (LV) Underground Cable Laying & Auxiliaries	Р	P	P									
L3 – Low Voltage (LV) Generating Stations	Р	Р				Р						
H3- High Voltage (HV) Generating Stations	Р	P										
H1 – Voltage Higher Than Low Voltage (HV) Electrical Substation & Auxiliaries	Р	P										P
H2 (O/H) – Voltage Higher Than Low Voltage (HV) Overhead Lines & Auxiliaries	Р	P			P							
H2 (U/G) – Voltage Higher Than Low Voltage (HV) Underground Cable Laying & Auxiliaries	P	P										
11kV Underground Cable- Jointing Practices	Р	P						P				
33kV Underground Cable- Jointing Practices	P	P								P		
Authorised to Test (Internal Wiring)	Р								P			

### Legend:

### P: Pass

For more information on the CAC/EIU certification process, kindly refer to the "CAC PPG Rev 2020" document by clicking this link.

### **CAC Electrical Competency Certification**

Competency Category	S100	E200	E808	E809	E405	E703	E211, E212, E213	E602	E603	E500	E514	E222
Low Voltage O/H Lines	Р											
High Voltage O/H Lines	Р											
Low Voltage U/G Cables	Р											
High Voltage U/G Cables	Р											
Low Voltage Substation Equipment	Р	P										
High Voltage Substation Equipment	Р											
HV Equipment Testing	Р											
Low Voltage Power Station Electrical System	Р											
High Voltage Power Station Electrical System	Р											
Energy Meter—Single Phase, Three Phase, CT Meter, HV/Demand Meter	Р											
11kV Cable Jointing	Р											
33kV Cable Jointing	Р											
Cable Spiking	Р											
Protection, Control, Instrumentation Work (33kV)	Р		Р									
Protection, Control, Instrumentation Work (275kV)	P			Р								
LV Live Line Works	Р											P
Communication & SCADA Work	P									Α		
Fused Cutout Work	Р	P										
Communication Infrastructure Installation Work (Utility Shared Pole)	P											
Streetlighting Work	Р	Р									Р	
Grid System Operator (State Dispatch Centre, SDC)	P											

### Legend:

P: Pass

A: Attend

For more information on the CAC/EIU certification process, kindly refer to the "CAC PPG Rev 2020" document by clicking this link.

### **CAC Electrical Authorisation Certification**

Authorisation						EEOE/						
Category	S100	E200	E500	E503	E511	E505/ E506/	E203	E502	E202	E223	E808	E809
						E512						
*Prerequisite: At least one CAC technical competency. **For LV Fuse Switching Standby Contractor only.	P	P (employee)							P (non- employee)			
11kV Switching (for Control Room)	P		P									
33kV Switching (for Control Room)	P			P								
132/275kV Switching (for Control Room)	P				P							
Switching in Rural Power Station *Prerequisite: Either L3 or ICE Driver Competency	P	Р					P					
Switching in Major Power Station —11kV	Р		Р					P <sup>1</sup>				
Switching in Major Power Station —33kV	Р			P				P <sup>1</sup>				
Switching in Major Power Station —275kV	Р				Р			P <sup>1</sup>				
Switching (for Live and Dead)—11kV	Р		Р									
Switching (for Live and Dead)—33kV	Р			P								
Switching (for Live and Dead)—132/275kV	P				P							
11kV Switching Authorisation Renewal	v					Α						
33kV Switching Authorisation Renewal	V					Α						
132/275kV Switching Authorisation Renewal	V					Α						
Isolation for PCI Works – 33kV	Р										Р	
Isolation for PCI Works – 275kV	P											P

Legend:

V: Valid P: Pass

A: Attend

P<sup>1</sup>: Compulsory for applicants from Major Power Station only.

### **CAC Competency for Non-Electrical Works**

Competency Category	\$100	S200	S300	S401	\$500	\$501	Remarks
EHV Substation Operation	V	Α				Α	
Line Vegetation Clearing	V			Α			
Routine Compound Maintenance Works Within Substation/Power Station	v	A*	A*		A*	A*	*Attend either one
Civil (or M&E) Works within Substation/Power Station	v	A*	A*		A*	A*	
Patrolling & Guarding Works Within Substation/Power Station	v	A*	A*		A*	A*	
Meter Reading Within Substation/Power Station	V	A*	A*		A*	<b>A*</b>	

Legend:

V: Valid

P: Pass

A: Attend

P<sup>1</sup>: Compulsory for applicants from Major Power Station only.

For more information on the CAC/EIU certification process, kindly refer to the "CAC PPG Rev 2020" document by clicking this link.

### **HSE Critical Roles & Training Matrix**

To achieve the HSSE Excellence target, the HSE Critical Roles Training Matrix was developed to ensure that both employees and contractors uphold robust HSSE competencies while carrying out operational and maintenance tasks, such as those in plant operations, transmission, distribution, construction, and other high-risk activities. This training matrix reinforces functional competence, adherence to safety standards, and compliance with regulatory requirements, including Life-Saving Rules, Mechanical & Electrical Safety Rules, and statutory guidelines.

Personnel assigned to a HSE Critical Role must attend the relevant training specified in the HSE Critical Roles & Training Matrix. Currently, 81 HSE Critical Roles have been identified, with 67 corresponding HSE Critical Roles Trainings available. Below are some examples of common HSE Critical Roles and the required training.

Critical Roles	Courses Compulsory to Attend	Courses Pre-Requisite (at least one competency)
Cable Spiking Personnel	Chargeman L2 & H2 UG Cable Laying	
Communication and SCADA Work Personnel	Chargeman L1 Course 11kV Switching Requirement Course	
Communication Officer	Emergency Response and Preparedness Plan	
Communications Infrastructure Installation Works Personnel	Chargeman L2 Overhead Lines	
Company Vehicles Driver	Defensive Driving	
Confined Space Entrant Supervisor/Gas Tester	Authorised Entrant and Standby Person for Confined Space Authorised Gas Tester and Entry Supervisor for Confined Space	
Confined Space Worker	Authorised Entrant and Standby Person for Confined Space	
EHV Substation Operation Personnel	Safety Awareness for Working Near to Substation	
First Aider	First Aid	
Forklift Operator	Forklift Driver	
Emergency Response Team Members	Emergency Response and Preparedness Plan	
Energy Metering – CT Meter Personnel	Wireman Grade One & Two	
Energy Metering – HV/Demand Meter Personnel	Chargeman L1	
Energy Metering – Three Phase Personnel	Wireman Grade One & Two	
Fire Fighter/Warden	Basic Fire Fighting Emergency Response and Preparedness Plan	
Fused Cutout Work Personnel	LV Distribution Systems Practices and Switching requirements	Chargeman L1 Wireman Grade Two

Grid System Operation Personnel	EPRI Power System Dynamics Grid System Operation Simulator Power Simulator™ Switching 132/275kV Switching Requirements Course	
HV Equipment Tester	Chargeman L1	
HV OH Lines Personnel	Chargeman H2 Overhead Lines	Distribution Working at Height (Pole)
HV Power Station Electrical System Personnel	Chargeman L1 Chargeman L3 - Generators and Synchronising	
HV Substation Equipment Personnel	Chargeman L1	
Internal Wiring Tester	Internal Wiring Testing	Chargeman L1 Wireman Grade One & Two
Lifting Supervisor	Lifting Supervisor Training Overhead Crane Operation	
LV Live Lines Personnel	Chargemen L2 Overhead Lines Overhead Live-Line Work	
LV OH Lines Personnel	Chargemen L2 Overhead Lines	
LV Power Station Electrical System Personnel	Chargeman L1 Chargeman L3 - Generators and Synchronising	
LV Substation Equipment Personnel	Chargeman L1 LV Distribution Systems Practices and Switching Requirements	
LV Switching Personnel	Internal Combustion Engine (Diesel) LV Distribution Systems Practices and Switching Requirements	Chargemen L2 Overhead Lines Chargeman L1 Chargeman L3 - Generators and Synchronising Chargeman L2 & H2 UG Cable Laying
Off-Road Company Vehicles Driver	4x4 Offroad Training	
Overhead Crane Operator	Overhead Crane Operation	
Protection, Control and Instrumentation Personnel	11 KV Switching Requirements Chargeman L1	
Rigger/Signaller	Overhead Crane Operation	
Rural Power Station Switching Personnel	LV Distribution Systems Practices and Switching Requirements Switching Requirements for Rural Power Stations	Chargeman L1 Chargeman L3 - Generators and Synchronising
Street Lighting Work Personnel	Street Lighting Maintenance Chargemen L2 Overhead Lines LV Distribution Systems Practices and Switching Requirements	
Substation/Power Station Civil (or M&E) Works Personnel		
		Safety Awareness for Power Station (Electrical)



Substation/Power Station Meter Reader		Safety Awareness for Working Near 33/11kV Overhead Lines Safety Awareness for Working Near to Electrical
Substation/Power Station Patrolling and Guarding Works Personnel		Installations Safety Awareness for Working Near to Substations
Substation/Power Station Routine Compound Maintenance Works Personnel		
Line Vegetation Clearing Personnel		
UG Cables Personnel	Chargemen L2 & H2 UG Cable Laying	
Work on Poles Personnel	Distribution Working at Height (Pole)	
Working at Height Supervisor	Working at Height	
11kV Cable Jointer	Grading of 11kV Cable Jointers 11kV Underground Cable Jointing Practices	
11kV Major Power Station Switching Personnel	Switching Requirements for Major Power Stations 11kV Switching Requirements	
11kV Switching Personnel	11kV Switching Requirements	
132/275kV Major Power Station Switching Personnel	Switching Requirements for Major Power Stations 132/275kV Switching Requirements	
132/275kV Switching Personnel	11kV Switching Requirements 132/275kV Switching Requirements 33kV Switching Requirements	
33kV Cable Jointer	Grading of 33kV Cable Jointers 33kV Underground Cable Jointing Practices	
33kV Major Power Station Switching Personnel	Switching Requirements for Major Power Stations 33kV Switching Requirements	
33kV Switching Personnel	11kV Switching Requirements 33kV Switching Requirements	

For more information on the HSE Critical Role Training Matrix, kindly refer to the "HSE Critical Roles and Training Matrix" document by clicking this link.

Remarks: Currently this HSE Critical Role Training Matrix is applicable to internal staff only.



# List of Technical<br/>Learning Course 2025





### **HSE Training**

<i>S100</i>	First Aid Course
S701	Distribution Working at Height
S401	Safety Awareness Course - Working Near 33/11kV Overhead Lines
S300	Safety Awareness Course for Power Station (Electrical)
S200	Safety Awareness Course for Working Near Electrical Installations
S500	Safety Awareness Course for Working Near Substations
S501	Safety Awareness Course for Working at EHV Substations
S402	Safety Awareness Course for Working Near EHV Transmission Lines
AESP	Authorised Entrant and Standby Person for Confined Space
AESPR	Authorised Entrant and Standby Person for Confined Space Refresher
DD	Defensive Driving
ERPP	Emergency Response Plan & Preparedness
FD	Forklift Driver
ОНС	Overhead Crane Operator
PTW	Permit to Work
WAH	Work at Height
4x4OD	4x4 Offroad Driving
SBOT	Steam Boiler Operator Training

Steam Boiler Operator Revision Workshop

**SBORW** 

Clickable Content for Quick Access to the Programme



### **Electrical Discipline**

E500	11kV Switching Requirements Course
E602	11kV Underground Cable-Jointing Practices Course
E511	132/275kV Switching Requirements Course
E503	33kV Switching Requirements Course
E603	33kV Underground Cable-Jointing Practices Course
E405	Chargeman H2 Overhead Lines Course
E211	Chargeman L1 Course Module 1
E212	Chargeman L1 Course Module 2
E213	Chargeman L1 Course Module 3
E223	Chargeman L2 Overhead Lines Course
E703	Chargeman L3 Course - Generators and Synchronising
E808	Distribution Protection Control & Instrumentation
E209	Electrical Power System Fundamentals for Non-Technical Personnel
E309	Electricity Ordinance and Electricity Rules 1999 (EOER) Course
E406	High Voltage Overhead Lines Testing & Commissioning
E221	Internal Wiring Testing Course
E903	Introductory Course on Sarawak Energy Power System Module 1 - Statutory
	Requirements
E904	Introductory Course on Sarawak Energy Power System Module 2 - Cables and Lines
E905	Introductory Course on Sarawak Energy Power System Module 3 - Generators and
	Protection



E906	Introductory Course on Sarawak Energy Power System Module 4 - High Voltage Systems
E200	Low Voltage Distribution System and Switching Requirements Course
E206	Low Voltage Main Switchboard Requirement & Testing Course
E225	Meter Inspection, Installation and Disconnection
E222	Overhead Live Line Work Course
E505	Refresher Course for HV Switching Personnel
E506	Refresher Course for 132/275kV Switching Personnel
E512	Refresher Course for Power Station Switching Personnel
E514	Street Lighting Maintenance Course
E509	Substation Routine Maintenance Course
E502	Switching Requirements for Major Power Stations Course
E203	Switching Requirements for Rural Power Stations Course
E809	Transmission Protection Control & Instrumentation
E202	LV Fuse Switching
E521	Chargeman H1 Module 1
E522	Chargeman H1 Module 2
E523	Chargeman H1 Module 3
E524	Chargeman H1 Module 4
E604	Chargeman L2 & H2 Underground Cable Laying

Clickable Content for Quick Access to the Programme Details



# Programme Details: Sarawak Energy HSE Critical Roles 2025







### First Aid



3 days



30 participants

### **Learning Outcomes**

This course aims to provide participants with knowledge and techniques of emergency first aid treatment and to prepare participants for First Aid examination conducted by St John Ambulance

### Contents

- Principles, Priorities and Action in Providing First Aid for Various Types of Emergencies
- Casualty Assessment, Diagnosis of Injury & Illnesses
- Principles of Resuscitation and Adult Cardiopulmonary Resuscitation
- Respiratory Problem & Choking
- Heart & Circulatory Problem, Treatment for Shock
- Treatment of Various Types of Wounds & Bleeding
- Causes & Treatment of Impaired Consciousness
- Identification & Treatment of Bone, Joint & Muscle Injuries
- Treatment for Various Types of Industrial Poisoning
- Types & Treatment of Severe Burns & Scald
- Bites & Stings
- Effects of Extreme Temperatures
- Transportation & Handling of Casualties

### Methodology

Blended learning: Online lecturing, practical demonstration, and hands-on practical sessions

### **Learning Type**

In-House Training

### **S701**

### Distribution Working at Height



2 days



20 participants

### **Learning Outcomes**

Upon completion, learner will be able to understand and apply relevant OSHA legislation and regulations, demonstrate safe and practical method for performing tasks at height, and correctly used tool and equipment, including proper storage and securing methods. Learners will also gain knowledge of systems designed to protect employees and others from injury, follow emergency procedures for Pole Top Rescue (PTR), and ensure the proper fitting, use, and storage of Personal Protection Equipment (PPE) and fall protection gear

### Contents

- Legislation and Guideline
- Risk Assessment and Management
- Equipment and Tools Usage, Inspection, Maintenance and Storage
- Safe Climbing Procedure
- Emergency Management

### Methodology

Conveyed through lectures, practical demonstrations, and hands-on practical sessions

### **Learning Type**

Internal Training



### **Target Groups**

Technical or non-technical personnel who wish to enhance their knowledge in First Aid, including those applying for or renewing competency and authorisation certificate, as well as individuals renewing their First Aid certificates

### **Course Custodian**

Didit Anak Nuing

### **Target Groups**

Technical personnel working at height on distribution Overhead System

### **Course Custodian**

Willie Anak William Silan



**S401** 

### Safety Awareness Course for Working Near 33/11kV Overhead Lines



1 day



20 participants

### **Learning Outcomes**

This programme aims to provide the participants with knowledge on the safety requirements and work procedures in order to avoid danger while working on 33/11kV poles in accordance with OSHA 2022, the Electricity Rules 1999 and Sarawak Energy Electrical Safety Rules, Occupational Safety and Health (Amendment) Act 2022

### **Contents**

- Sarawak Energy Electrical Safety Rules
- Identification of 33/11kV/415V Structures
- Safe Working Clearances
- Requirements for the Use of Ladders
- Pole Top Rescue

### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

### **Learning Type**

Internal Training

### **Target Groups**

Personnel working in the vicinity of 33/11kV overhead lines

### **Course Custodian**

Hollis Micky Langgi

### **S300**

### Safety Awareness Course for Power Station (Electrical)



1 day



20 participants

### **Learning Outcomes**

This programme aims to educate participants on Occupational, Safety and Health subjects and Safety Awareness aspects working within or near Sarawak Energy's electrical systems/Substation/HV Overhead line/Power Station

### Contents

- Requirements of the Occupational Safety & Health (Amendment) Act 2022
- Requirements of the Electricity Rules 1999
- Sarawak Energy Electrical & Mechanical Safety Rules
- Workplace Hazards

### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

### **Learning Type**

Internal Training

### **Target Groups**

All personnel who are working in or near a power station

### **Course Custodian**

Phang Hiang Tzee



### **AESP**

### Authorised Entrant and Standby Person for Confined Space



1 day



20 participants

### **Learning Outcomes**

Upon programme completion, participants should be able to:

- State legal requirement pertaining to confined space
- Describe the presence of hazards at the confined space
- Apply confined space entry procedures
- Use the personal protective equipment and other related equipment associated with con-fined space occupation
- State the duties/responsibilities of Authorised Entrants and Stand-by Person
- Qualification of a competent worker (Authorised Entrant & Stand-by Person) for confined space occupation

### **Contents**

- Legal Requirements
- Hazards in Confined Spaces
- Entry Procedure & Equipment

### Methodology

Conveyed through face-to-face lectures and practical session

### **Learning Type**

In-House Training

### **Target Groups**

Confined space workers

### **Course Custodian**

Didit Anak Nuing

### **AESPR**

### Authorised Entrant and Standby Person for Confined Space Refresher



1 day



20 participants

### **Learning Outcomes**

Upon programme completion, participants should be able to:

- State legal requirement pertaining to confined space
- Describe the presence of hazards at the confined space
- Apply confined space entry procedures.
- Use the personal protective equipment and other related equipment associated with confined space occupation
- State the duties/responsibilities of Authorised Entrants and Stand-by Person
- Renew qualification of a competent worker (Authorised Entrant & Stand-by Person) for confined space occupation

### Contents

- Legal Requirements
- Hazards in Confined Spaces
- Entry Procedure & Equipment

### Methodology

Conveyed through face-to-face lectures and practical session

### **Learning Type**

In-House Training

### **Target Groups**

Confined space workers who need to renew their certificate

### **Course Custodian**



### **S200**

### Safety Awareness Course for Working Near Electrical Installations



1 day



20 participants

### **Learning Outcomes**

The programme aims to educate participants on Occupational, Safety and Health subjects and Safety Awareness aspects working within or near Sarawak Energy's electrical systems/substation/HV overhead line/power station

### **Contents**

- Related Terminology
- Occupational Safety and Health (Amendment) Act 2022
- Electrical Injuries & Shock Occurrences
- General Precautions (High & Low Voltage Systems)
- Road & Fire Safety Awareness
- Identification of Various Distribution Systems & Requirements
- Adherence to Various Electrical Statutory Requirements
- Requirements of Relevant Sarawak Energy Contract Specifications

### Methodology

Blended learning: Self-study, online lecturing, focused group discussions, assignment

### **Learning Type**

Internal Training

### **Target Groups**

Personnel with little electrical knowledge who are required to work near electrical systems such as substations and overhead lines

### **Course Custodian**

Chiu Yii Lung

### **S500**

### Safety Awareness Course for Working Near Substations



1 day



20 participants

### **Learning Outcomes**

The programme aims to educate participants on Occupational, Safety and Health subjects and Safety Awareness aspects working within or near Sarawak Energy's substation

### Contents

- Substation Layout and Equipment
- Sarawak Energy Electrical Safety Rules for work on High Voltage Equipment
- Electricity Rules, 1999
- Electrical Injuries & Shock Occurrences
- Occupational Safety and Health Act (Amendment) Act 2022
- Relevant Sarawak Energy Contract Specifications on 33kV and 11kV Substations
- Field Study to Substations –
   Familiarisation of Equipment and Safety Precautions

### Methodology

Blended learning: Self-study, online lecturing, focused group discussions, assignment

### **Learning Type**

Internal Training

### **Target Groups**

Personnel with little electrical knowledge who are required to work near electrical systems such as substations

### **Course Custodian**

Then Jung Seng





### Emergency Response Plan & Preparedness



2 days



20 participants

### **Learning Outcomes**

Upon completion, learners will be able to develop emergency response plans, understand the legislative requirements and standards on Emergency Preparedness and training for ERT members to handle various emergencies

### **Contents**

- Legal Provisions and Standards
- Overview of Hazards and Risks
- Plan and prepare effective emergency plans
- Develop the hierarchy of commands
- Understand Evacuation & Emergency response procedures
- Lead and contribute directly to the event of emergency

### Methodology

Conveyed through lectures and practical session

### **Learning Type**

In-House/Public Training

### **Target Groups**

Emergency response team members

### **Course Custodian**

Didit Anak Nuing

### FD

### **Forklift Driver**



2 days



20 participants

### **Learning Outcomes**

Upon completion, learners will be able to operate forklift safely based on the principles for safer forklift operation, types and its operation and maintenance procedures

### Contents

- Deliver a better understanding to operators on the principles for safer forklift operation, types, and its operation procedures.
- Legal safety requirements under OSHA Act 1994 (Act 514) standard
- Machines and technical knowledge, handling skills and correct operational attitudes
- Assist operators in enabling them to identify and avoid risks to surrounding people and safely guarded properties the risk of damage to loads, equipment and in most cases, of human injuries

### Methodology

Conveyed through lectures and practical session

### **Learning Type**

In-House/Public Training

### **Target Groups**

Forklift drivers

### **Course Custodian**





### **Overhead Crane Operator**



2 days



20 participants

### **Learning Outcomes**

Upon completion, learners will be able to operate overhead crane operator and understand crane handling and management, safety requirements, communication, and hand signal, lifting equipment, principles of rigging and slinging and other relevant requirements

### **Contents**

- Introduction to Crane Handling and Management
- Basic Crane Safety
- Communication and Hand Signals
- Lifting Equipment
- Rigging and Slinging Principles

### Methodology

Conveyed through lectures and practical session

### **Learning Type**

In-House/Public Training

### **Target Groups**

Overhead crane operator

### **Course Custodian**

Didit Anak Nuing

### WAH

### Working at Height



2 davs



20 participants

### **Learning Outcomes**

Upon completion, learners will be able to perform working at height activities safely. Learners will learn about the responsibilities of both employers and employees towards OSH at the workplace, working at height hazards, climbing techniques and procedures and type of personal protective equipment for climbing

### Contents

- Legislation
- WAH Principle
- Introduction to Working at Height PPE and Inspection
- Structure Climbing

### Methodology

Conveyed through lectures and practical session

### **Learning Type**

In-House/Public Training

### **Target Groups**

Workers who perform working at height activities

### **Course Custodian**



### 4x40D

### 4 x 4 Offroad Driving



2 days



20 participants

### **Learning Outcomes**

Upon completion, learners will be able to handle a 4x4 vehicle off-road safely and equip the learners with critical 4x4 off-road-and-wheel knowledge and develop their self-discipline habits, practices and practical skills on-the-wheel

### **Contents**

- Basic vehicle inspection
- The 16 crucial defensive driving habits
- 4-wheel drive system, component, and operation
- Types of off-terrain tyre and tyre pressure for offroad
- Off-road terrain and gear usage
- Defensive driving
- Journey and risk management
- Mental & physical
- Hearts and mind
- Basic convoy rules and communications
- Winching technique and recovery

### Methodology

Conveyed through lectures and practical session

### **Learning Type**

In-House/Public Training

### **Target Groups**

Company car drivers

### **Course Custodian**

Didit Anak Nuing

### DD

### **Defensive Driving**



2 davs



20 participants

### **Learning Outcomes**

Upon completion, learners will be able to drive safely using specific techniques (on-road, off-road)

### Contents

- Basic vehicle inspection
- The 12-defence driving habits
- Five (5) step parking & slalom
- Avoidance braking/ABS braking
- Zig-Zag figure of combo push & pull steering technique
- Safe driving
- Journey and risk management
- Mental & physical
- Hearts & mind
- Driver attitude & motivation
- Vehicle safety systems & learning outcome

### Methodology

Conveyed through lectures and practical session

### **Learning Type**

In-House/Public Training

### **Target Groups**

Company car drivers

### **Course Custodian**







2 days



20 participants

### **Learning Outcomes**

Upon completion, learners will be able to:

- Understand the legal and company requirements Relating to Permit to Work (PTW) systems
- Learn the basic knowledge of PTW, a proven process for a safe working environment
- Describe and understand the requirements of the PTW systems
- Familiarise with the various types of PTW permits and their implementation on site
- Learn the step-by-step overview of the process and be able to identify PTW roles for better comprehension

### **Contents**

- Introduction of PTW
- Overview of PTW
- Duties and Responsibilities of PTW System
- Types of PTW and Supporting Forms (Relevance to the Nature of Work Being Executed)
- Period of Validity

### Methodology

Conveyed through lectures and practical session

### **Learning Type**

Internal

### **Target Groups**

Sarawak Energy PTW Users

### **Course Custodian**

Governance & Strategy Division, HSSE Department

### **S501**

### Safety Awareness Course for Working Near to EHV Substation



1 davs



20 participants

### **Learning Outcomes**

The programme aims to educate participants on Occupational Safety and Health subjects as well as Safety Awareness aspects when working around or near Sarawak Energy's EHV Substation, including its installations or equipment

### Contents

- EHV Substations
- Sarawak Energy Electrical Safety Rules for work on High Voltage Equipment
- Electricity Rules, 1999
- Occupational Safety and Health Act, Rev 2022
- Potential Hazards & Accidents
- SESCO'S Contract Requirements

### Methodology

Blended learning: Self-study, online lecturing, focused group discussions, assignment

### **Learning Type**

Internal

### **Target Groups**

Intended for personnel with limited electrical knowledge who are required to work in proximity to electrical systems such as around and near EHV Substations.

### Course Custodian

Catherine Fong Oii Kah





### Steam Boiler Operator Training



5 days



25 participants

### **Learning Outcomes**

This course aims to provide participants with knowledge of steam boiler operation and relevant regulations.

### **Contents**

- Introduction of Steam Boiler
- Laws Related to Steam Boiler
- Steam Boiler Operation and Troubleshooting
- Boiler Water Treatment
- Combustion Fundamental
- Steam Turbine Fundamental
- Steam Boiler Maintenance
- Steam Boiler Failure

### Methodology

Blended learning: Instructor-led, online learning, field practical

### **Learning Type**

Internal

### **Target Groups**

Technical personnel who are eligible to apply for DOSH steam boiler operator examination.

### **Course Custodian**

Didit Anak Nuing

### SBORW

### Steam Boiler Operator Revision Workshop



2 days



25 participants

### **Learning Outcomes**

The workshop aims to prepare participants with specific knowledge of steam boiler operation, maintenance, troubleshooting and relevant regulations for the steam boiler operator examination.

### **Contents**

- Introduction of Steam Boiler
- Laws Related to Steam Boiler
- Steam Boiler Operation and Troubleshooting
- Boiler Water Treatment
- Combustion Fundamental
- Steam Turbine Fundamental
- Mock Interview

### Methodology

Focus group discussion, instructor lead

### **Learning Type**

Internal

### **Target Groups**

Technical personnel who are going to apply for DOSH steam boiler operator examination.

### **Course Custodian**

### **S402**

### Safety Awareness Course for Working Near to EHV Transmission Lines



1 day



20 participants

### **Learning Outcomes**

The programme aims to educate participants on Occupational Safety and Health subjects as well as Safety Awareness aspects when working around or near Sarawak Energy's EHV Transmission Lines

### **Contents**

- Statutory Requirement
- Sarawak Energy Electrical Safety Rules for work on High Voltage Equipment
- Potential Hazards & Accidents
- Electrical Injuries
- EHV Equipment for Transmission Lines
- SESCO's Contract Requirements

### Methodology

Blended learning: Self-study, online lecturing, focused group discussions, assignment

### **Learning Type**

Internal

### **Target Groups**

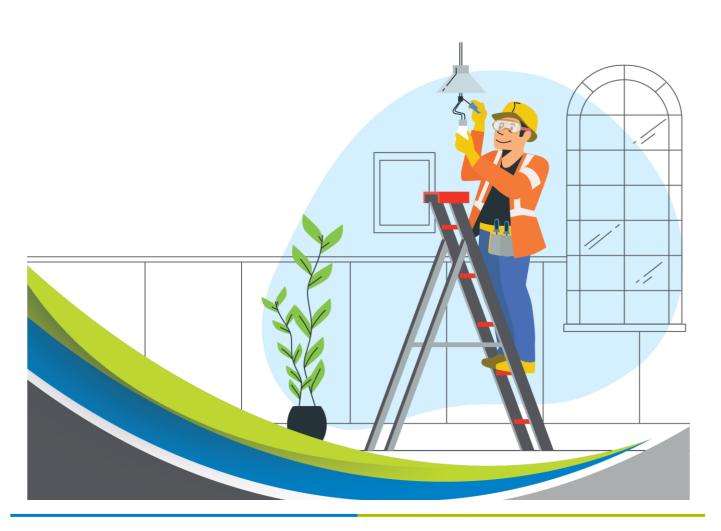
Intended for personnel with little electrical knowledge who are required to work in proximity to electrical systems such near EHV Transmission Lines

### **Course Custodian**

Willie Anak William Silan



## Programme Details: Electrical 2025





E500

### 11kV Switching Requirements



4 days



20 participants

### **Learning Outcomes**

The course aims to upgrade the knowledge and skills of participants with regards to the operation, control and protection of distribution substations, switchgears and transformers. This course also serves as a qualifying assessment for the application of the 11kV switching authorisation

### Contents

- The Electricity Rules, 1999 and Sarawak Energy Electrical Safety Rules & OSHA (Amendment) Act 2022
- Various Configurations of Substations and Network Systems
- Functions & Operations of HV Apparatus
- Fuse Protection for Distribution Transformer
- Current Carrying Capacity of HV Cable and Overhead Lines
- Labelling and Nomenclature of Switchgear
- Protection and Relaying in a Distribution System
- Testing of HV Equipment
- HV Faults and Preventive Measures
- Roles and Responsibilities of Switching Personnel
- Switching on HV Apparatus and Preparation of a Switching Programme
- Standard Operating Procedures (SOP)

### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

### **Learning Type**

Internal Training

### **Target Groups**

Switching personnel intending to apply for the 11kV switching authorisation

### **Course Custodian**

Then Jung Seng

### E602

### 11kV Underground Cable-Jointing Practices



3 Days



16 participants

### **Learning Outcomes**

The course aims to upgrade the cable jointer's knowledge on underground cables, the correct jointing techniques, identification of unsafe and incorrect work practices and to prepare the cable jointers for the 11kV cable jointing grading

### Contents

- Cable-jointing Standards and Technical Requirements
- Sarawak Energy Electrical Safety Rules and Procedures
- Cable Components
- Cable Preparation for 11kV XLPE 95sq mm/3C Cable
- Cable Jointing Procedures for 11kV
   Straight- Through Joint on XLPE Cable
   - Heat Shrink and Tapping/Resin
   Injected Technique
- Crimping Ferrules and Lugs
- Stress Control in Polymeric Cable Joints and Terminations
- Cable Testing Requirements

### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

### **Learning Type**

Internal Training

### **Target Groups**

Technicians with at least 5 years' experience in underground cable works

### **Course Custodian**

Chiu Yii Lung





### 33kV Switching Requirements



3 days



20 participants

### **Learning Outcomes**

The course aims to provide the participants with knowledge and skills on the operation and switching procedures of 33kV switchgear and isolators. This course also serves as the qualifying assessment for the application of 33kV switching authorisation

### **Contents**

- 33kV Substation Layout and Equipment
- Function/Design of Various Equipment
- Protective System for 33kV Equipment
- Labelling/Nomenclature of Switchgear
- Control Panel Alarms and Layout
- Safety Precautions
- Blackout Restoration Procedures
- Communication and SCADA Equipment (Basic)
- Troubleshooting Techniques

### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

### **Learning Type**

Internal Training

### **Target Groups**

11kV switching personnel intending to apply for the 33kV switching authorisation

### **Course Custodian**

Then Jung Seng

### E603

### 33kV Underground Cable-Jointing Practices



3 Days



16 participants

### **Learning Outcomes**

The course aims to upgrade the cable jointer's knowledge on underground cables, the correct jointing techniques, identification of unsafe and incorrect work practices and to prepare the cable jointers for 33kV cable jointing grading

### Contents

- The Construction and Design of Power Cables up to 33kV
- Jointing and Termination Instruction for Underground Cables
- Common Faults and Preventive Measures in Cable Termination and Jointing Methods

### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

### **Learning Type**

Internal Training

### **Target Groups**

33kV Cable jointers with at least 5 years' experience

### **Course Custodian**

Chiu Yii Lung



E511

### 132/275kV Switching Requirements



4 days



20 participants

### **Learning Outcomes**

The course aims to provide the participants with knowledge and skills on the operation and switching procedures of 132kV/275kV switchgear and isolators. This course also serves as the qualifying assessment for the application of Sarawak Energy's 132kV/275kV switching authorisation

### **Contents**

- System Overview
- 132/275kV Substation Layout and Equipment
- Function/Design of Various Equipment
- Protective System for 132/275kV Equipment
- Labelling/Nomenclature of Switchgear
- Control Panel Alarms and Layout
- Safety Designs 132/275kV Substation
- Total Blackout Restoration Procedures
- Communication and SCADA Equipment (Basic)
- Troubleshooting Techniques
- Synchronisation of System
- Practical Training

### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

### **Learning Type**

Internal Training

### **Target Groups**

Switching personnel intending to apply for the 132/275kV switching authorisation

### **Course Custodian**

Catherine Fong Oii Kah

### E405

### **Chargeman H2 Overhead Lines**



4 Days



20 participants

### Learning Outcomes

This course aims to upgrade the participants' knowledge and skills to enable compliance with the requirements for high voltage overhead lines based on OSHA (Amendment) 2022, Electricity Ordinance and Rules, Sarawak Energy's Overhead Line Design and construction Manual and Safety Rules

### Contents

- Electricity Rules, 1999
- Safety Rules for Work on High Voltage Equipment
- Local Earthing
- Pre-arranged Shutdown Work Practices
- Overhead Manual/Standard Practices
- Poles & Structures
- HT Constructions
- Stays
- Conductors
- Clearances
- Sag Table
- Pole-mounted Plant

### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

### Learning Type

Internal Training

### **Target Groups**

Overhead lines project/Maintenance supervisors with at least 4 years working experience intending to apply for Chargeman H2 Certificate

### **Course Custodian**

Hollis Micky Langgi



### Chargeman L1 Course Module 1



4 days



20 participants

#### **Learning Outcomes**

This course aims to provide the participants with the knowledge of statutory requirements, electrical terminology and firefighting equipment and to prepare the participants for the Chargeman L1 examination

#### **Contents**

- The Electricity Rules, 1999
- Fire Fighting System
- Electrical Basic
- Scope, Objective and Fundamental Requirements for Safety (IEE Wiring Regulation 16<sup>th</sup> Edition)
- General Requirements for Earthing and Bonding
- Isolation and Switching
- Protection Against Electric Shock
- Inspection and Testing
- Overcurrent and Earth Fault Protection
- Sizing of Conductors

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

#### **Learning Type**

Internal Training

#### **Target Groups**

Technical personnel intending to apply for Chargeman L1 certificate

#### **Course Custodian**

Phang Hiang Tzee

#### E212

### Chargeman L1 Course Module 2



4 Days



20 participants

#### **Learning Outcomes**

This course aims to provide the participants with the knowledge of wiring cables and its applications, and the requirements of consumer installations based on IEE's 16th Edition Wiring Regulation and Sarawak Energy's standards and to prepare the participants for the Chargeman L1 examination

#### **Contents**

- Consumer Installation
- Electrical Measuring and Testing Equipment
- Air Conditioner
- Protection Equipment in Low Voltage Installation
- Street Lighting
- Cables and Applications

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

#### **Learning Type**

Internal Training

#### **Target Groups**

Technical personnel intending to apply for Chargeman L1 certificate

#### **Course Custodian**

Li Zhen Er





### **Chargeman L1 Course Module 3**



4 days



20 participants

#### **Learning Outcomes**

This course aims to provide the participants with the knowledge on the requirements of IEE's 16th Edition Wiring Regulations and to prepare the participants for the Chargeman L1 examination

#### **Contents**

- Battery
  - Working principle
  - Types, sizes, maintenance and charging system
- Main Switchboard Equipment Checking
  - Earthing system, OCB, switchboard auxiliaries, switching tripping equipment, partition, relay and pilot wiring, etc.
- Transformer
  - Construction, types/differences, application
  - Function of important parts in a transformer
  - Overhauling, Testing and Commissioning
- Motor and Controlling Equipment
  - Types of motor, application, differences and ways of operation
  - Maintenance, fault detection and repair
  - Starter including protection characteristics
- Practical on Motor and Controlling Equipment
- Practical on Main Switchboard Equipment Checkina
- Practical on Transformer and Rectifier Testing
- Practical on Cable Testing

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

#### **Learning Type**

Internal Training

#### **Target Groups**

Technical personnel intending to apply for Chargeman L1 certificate

#### **Course Custodian**

Phang Hiang Tzee

#### **E223**

### **Chargeman L2 Overhead Lines**



4 Days



20 participants

#### **Learning Outcomes**

This course aims to upgrade the linesman's knowledge on the requirements for low voltage overhead lines based on OSHA (Amendment) 2022, Electricity Ordinance and Rules, Sarawak Energy's Overhead Lines Manual and Safety Rules

#### **Contents**

- Overview of the Occupational Safety and Health (Amendment) Act 2022
- The Electricity Rules,1999 and Sarawak Energy Electrical Safety Rules
- Overhead Construction and Design Manual
- Construction Codes, Poles & Structures, Stays, LT Pole-Top Constructions
- Attachments & Assemblies, Services, Earthing & Bonding
- HT/LT Mains Configuration
- Sag Tables, Clearances
- Lines Shutdown Procedures
- Local Earthing
- Pole Top Rescue

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

#### **Learning Type**

Internal Training

#### **Target Groups**

Linesman with at least 2 years working experience intending to apply for Chargeman L2 Certification

#### **Course Custodian**

Hollis Micky Langgi

**Remarks** Effective **September 1, 2024**, participants who successfully complete the Chargeman L2OH course (E223) will also receive the **Distribution Working at Height (DWAH) S701 Certificate of Attendance and Result Slip.** This integration ensures that DWAH training, previously a separate course, is now embedded within the Chargeman L2OH syllabus.



### Chargeman L2 & H2 Underground Cable-Laying



3 days



20 participants

#### **Learning Outcomes**

The aim of this course is to provide the participants with the knowledge on Sarawak Energy's cable laying standards and requirements and to prepare the participants for the Chargeman L2 & H2 Underground Cable-Laying examination.

#### **Contents**

- Types of Undergrounds Cables
- Procedures and Requirements on Laying of High and Low Voltage Cables
- Direct Laid and Duct Laid Systems
- Methods of Cable Sealing
- Conductors Losses
- Sarawak Energy/SESCO's Standard Cable Trenches, Joint Pit and Cable Markers

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

#### **Learning Type**

Internal Training

#### **Target Groups**

Technical personnel involved in project/maintenance of underground cable intending to apply for Chargeman L2 & H2 cable laying certificate

#### **Course Custodian**

Chiu Yii Ling

E703

### Chargeman L3 -Generators and Synchronising



3 Days



20 participants

#### **Learning Outcomes**

This course aims to provide the participants with theoretical and practical training on generator operation and synchronising and to prepare the participants for the Chargeman L3 examination.

#### Contents

- Statutory & Safety Requirements
  - Occupational Safety & Health (Amendment) Act 2022
  - Workplace Hazards
- Generators & Power System Operation
  - Synchronous Generators
  - Electrical Auxiliaries
  - Synchronising & Parallel Operation of Generators
  - Generator Protection
  - System Consideration
- Practical
  - Identification & Servicing of Generator Major Components
  - Synchronising & Parallel Running of Generators

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

#### **Learning Type**

Internal Training

#### **Target Groups**

Technical personnel who operate/maintain generators intending to apply for Chargeman L3 certification

#### **Course Custodian**

Phang Hiang Tzee





### Distribution Protection Control & Instrumentation



2 days



20 participants

#### **Learning Outcomes**

This session aims to provide an overview of the protection setting, scheme and philosophy for distribution network involving 33kV and 11kV system. It also provides guidelines on preparing Isolation and Normalisation, Request for Online Test and Sanction to Test.

#### **Contents**

- Distribution protection principles and schemes
- Request for Online Test and Sanction to Test
- Preparation and performing of protection isolation and normalisation for PCI works up to 33kV

#### Methodology

Blended- Online

#### **Learning Type**

Internal Training

#### **Target Groups**

Distribution Protection, Control and Instrumentation personnel who wish to apply or renew their CAC PCI Authorisation – Isolation for PCI Works up to 33kV

#### **Course Custodian**

Wong Kin Hong

#### E809

## Transmission Protection Control & Instrumentation



2 Days



20 participants

#### **Learning Outcomes**

This session aims to provide an overview of the protection setting, scheme and philosophy for Transmission network involving up to 275kV system. It also provides guidelines on preparing Isolation and Normalization, Request for Online Test and Sanction to Test.

#### Contents

- Transmission protection principles and schemes
- Request for Online Test and Sanction to Test
- Preparation and performing of protection isolation and normalization for PCI works up to 275kV

#### Methodology

Blended- Online

#### **Learning Type**

Internal Training

#### **Target Groups**

Transmission Protection, Control and Instrumentation personnel who wish to apply or renew their CAC PCI Authorisation – Isolation for Class 1 PCI Works up to 275kV

#### **Course Custodian**

Wong Kin Hong



# Electrical Power System Fundamentals for NonTechnical Personnel Course



2 days



20 participants

#### **Learning Outcomes**

This course aims to provide the non-technical personnel especially front counter personnel with basic knowledge on the fundamentals of electrical power systems and installations within Sarawak Energy to enable them to answer customers' enquiries.

#### **Contents**

- Overview of the Sarawak Energy Power System
- Basic Electrical Terminology
  - Current, Voltage
  - Power, Power Factor, kWh
- Identification of Basic Electrical Equipment and Wiring Installations
- Tariff Calculation for Various Class of Customers
- Load Consumption for Appliances and Calculation of Energy Cost
- Safety Requirements of Electrical Installations
- and Appliances
- Earthing of Installations
- Frequently Asked Questions (FAQ) by Customers

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, field study

#### **Learning Type**

Internal Training

#### **Target Groups**

Non-technical personnel who are interested to know about power system fundamental especially front liners

#### **Course Custodian**

Li Zhen Er

#### E309

# Electricity Ordinance and Electricity Rules 1999 (EOER) Course



1 Day



30 participants

#### **Learning Outcomes**

This course aims to provide the participants with the necessary knowledge in order to prepare them for the Electricity Ordinance and Electricity Rules 1999 (EOER) examination.

#### Contents

- Sarawak Electricity Ordinance
- Electricity Rules 1999

#### Methodology

Online lecturing

#### **Learning Type**

Internal Training

#### **Target Groups**

- \* Applicants intending to sit for Electricity Ordinance and Electricity Rules 1999 (EOER) examinations
- \* As required by EIU

#### **Course Custodian**

Chiu Yii Lung



#### **Internal Wiring Testing**



1 day



20 participants

#### **Learning Outcomes**

This course aims to upgrade the participant's theoretical and practical knowledge on the technical requirements of internal wiring testing and to prepare the participants for the Electrical Installation Contractor Testing Authorisation Examination (EICTAE).

#### **Contents**

- Low Voltage Requirements in Sarawak Energy Electrical Safety Rules
- Occupational Safety and Health (Amendment) Act 2022
- Duties of Employees and Employers
- Single Line Drawing
- Electric Shock Treatment
- Sizing of Conductors
- Earthing Requirements
- IEE's Wiring Regulations 16th Edition on
- Testing Requirements

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

#### **Learning Type**

Internal Training

#### **Target Groups**

Technical personnel intending to apply for Electrical Installation Contractor Testing Authorisation under the Electricity Rules 1999

#### **Course Custodian**

Then Jung Seng

#### E903

#### Introductory Course on Sarawak Energy Power System Module 1 – Statutory Requirements



2 Days



20 participants

#### **Learning Outcomes**

This course aims to provide the participants with the knowledge on the various rules, regulations and laws adopted by Sarawak Energy.

#### Contents

- Occupational Safety & Health (Amendment) Act 2022
- Sarawak Energy Electrical Safety Rules
- The Electricity Ordinance (Revised 2002)
- The Electricity Rules, 1999
- Electrical Installations in High Rise Buildings
- Requirements of IEE's 16th Edition Wiring Regulations
  - Sizing of Conductors
  - Inspection of Consumer Premises
  - General Protection and Requirements
  - Purchasing Principles & Practices

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

#### **Learning Type**

Internal Training

#### **Target Groups**

Newly recruited engineers and engineering assistants

#### **Course Custodian**

Then Jung Seng



#### Introductory Course on Sarawak Energy Power System Module 2 – Cables and Lines



1 day



20 participants

#### **Learning Outcomes**

This course aims to provide the participants with an understanding of the fundamental principles of installation, commissioning, operation and maintenance of underground cables and overhead lines works as practised by Sarawak Energy.

#### Contents

- Safety Requirements in Underground Cable Works
- Design of High and Low Voltage Power Cables
- Underground Cable Laying Practices
- Cable Preparation
- Common Faults and Preventive Measures in Termination and Jointing Methods
- Stress Control in Polymeric Joints and Terminations
- Overhead Lines Safety Requirements
- Overhead Lines Installation Standards
- Pole-Top Rescue Procedures

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

#### **Learning Type**

Internal Training

#### **Target Groups**

New Recruited Engineers and engineering assistants

#### **Course Custodian**

Hollis Micky Langgi

#### E905

#### Introductory Course on Sarawak Energy Power System Module 3 – Generators and Protection



3 Days



20 participants

#### **Learning Outcomes**

This course aims to provide the participants with the knowledge on the fundamental principles of installation, commissioning, operation and maintenance of generators and protection systems employed by Sarawak Energy.

#### Contents

- Operations and Functions of Generating Sets
- Procedures for Parallel Operation of Generators
- Common Faults, Troubleshooting and Preventive Measures
- Types of Protective Relays and Their Operation
- Protection Schemes and how they operate
- Protection of the Various Components of the Power System
- Fault Level Calculations
- Relay Settings
- Grading of Relays

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

#### **Learning Type**

Internal Training

#### **Target Groups**

Newly recruited engineers and engineering assistants

#### **Course Custodian**

Phang Hiang Tzee



#### Introductory Course on Sarawak Energy Power System Module 4 – High Voltage Systems



3 days



20 participants

#### **Learning Outcomes**

This course aims to provide the participants with an understanding of the fundamental principles of installation, commissioning, operation and maintenance of high voltage equipment and systems employed by Sarawak Energy.

#### **Contents**

- Safety Rules on the Operation of Substation Switchgear and Transformers
- Operation and Functions of Switchgear
- Procedures for Repair and Maintenance of Substation Equipment
- Testing Requirements
- High Voltage Fault and Preventive Measures (Switchgear and Transformer)
- Distribution Networks, System Planning and Design

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

#### **Learning Type**

Internal Training

#### **Target Groups**

Engineers and engineering assistants

#### **Course Custodian**

Then Jung Seng

#### E200

#### Low Voltage Distribution System and Switching Requirements



3 Days



20 participants

#### **Learning Outcomes**

This course aims to create a better understanding for electricians and operators on Sarawak Energy's low voltage distribution system, knowledge on the procedures and safety requirements of low voltage switching

#### **Contents**

- Statutory Requirements
- Sarawak Energy Electrical Safety Rules
- Measuring Instruments
- Sarawak Energy Transmission and Distribution System
- Overhead Lines & Underground Cables Jumpers/Tails Connection
- The Requirement of Earthing Equipment for LV Overhead Lines
- Technical Control Centre Service
- Pre-arranged Shutdown Practices
- Treatment For Electric Shock
- Low Voltage Switching at Distribution Pillar
- Earthing For Distribution Pillar
- Usage of Test equipment/Pillar Testing and Measurement

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

#### **Learning Type**

Internal Training

#### **Target Groups**

Electricians and operators with at least 1 year experience who involves with LV switching such as isolating cutout fuses, pillar fuses, etc.

#### **Course Custodian**

Hollis Micky Langgi





#### **Overhead Live Line Work**



3 days



20 participants

#### **Learning Outcomes**

This course aims to provide knowledge and skills on low voltage overhead live-line works based on Sarawak Energy's approved safety requirements and standard procedures

#### **Contents**

- Types of Live-Line Work
- Live-Line Work Certificate
- Rubber Gloves Method
- Requirements for Performing Live-Line Work
- Safety Observer and Live-Line Worker
- Tools and Materials
- Live-Line Work Procedures

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

#### **Learning Type**

Internal Training

#### **Target Groups**

Linesman intending to apply for Live Line Work Certification. The applicant must hold a Chargeman L2 Certificate and have at least 5 years' working experience on overhead lines

#### **Course Custodian**

Hollis Micky Langgi

#### E505

### Refresher Course for HV Switching Personnel



2 Days



20 participants

#### **Learning Outcomes**

This course aims to refresh the switching personnel on safety rules regarding switching operations and requirements and to provide the switching personnel with the necessary knowledge on the operating new equipment

#### Contents

- Electrical Safety Rules and Procedures Regarding High Voltage (HV) Switching
- Switching Operations of HV Equipment
- Protective Relay Used in 11kV and 33kV System
- Auto-recloser
- Standard Operating Practices on HV Switching
- Safety Briefing and Lessons Learnt

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

#### **Learning Type**

Internal Training

#### **Target Groups**

11kV/33kV switching personnel applying for renewal of switching certificate

#### **Course Custodian**

Then Jung Seng



#### Low Voltage Main Switchboard Requirement & Testing



2 days



20 participants

#### **Learning Outcomes**

This module aims to provide the participants with the knowledge on main-switchboard installations, testing and protection requirements

#### **Contents**

- Requirements for Main-Switchboard (MSB) Room
- MSB Installation Requirements
- Technical Requirements for Use of IDMT Earth Fault Protection
- MSB Testing Requirements
  - Insulation Resistance Test
  - CT Ratio Test
  - CT Polarity Test
  - Primary Current Injection Test

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

#### **Learning Type**

**Internal Training** 

#### **Target Groups**

Wireman, electricians, installation testers and internal wiring contractors

#### **Course Custodian**

Then Jung Seng

#### E225

#### Meter Inspection, Installation and Disconnection



1 Day



20 participants

#### **Learning Outcomes**

The purpose of this course is to brief our staff concerned on the right approach in carrying out meter installation, inspection and disconnection especially on the aspect of safety

#### Contents

- Electrical Safety Rules for works on LV equipment.
- LV distribution system
- Earthing
- Installation practices based on SOP
- Meter inspection
- Disconnection procedures

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, field study

#### **Learning Type**

Internal Training

#### **Target Groups**

Retail technical staff from RPU, meter installation, inspection and disconnection sections

#### **Course Custodian**

Then Jung Seng



# Refresher Course For 132/275kV Switching Personnel



3 days



20 participants

#### **Learning Outcomes**

This course aims to refresh the participants' knowledge on 132/275kV switching procedures

#### **Contents**

- System Overview
- 132/275kV Substation Layout and Equipment
- Function/Design of Various Equipment
- Protective System for 132/275kV Equipment
- Labelling/Nomenclature of Switchgear
- Control Panel Alarms and Layout
- Safety Designs on 132/275kV Substation
- Total Blackout Restoration Procedures
- Communication and SCADA Equipment (Basic)
- Troubleshooting Techniques
- Synchronisation of System
- Practical Training

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, field study

#### **Learning Type**

Internal Training

#### **Target Groups**

132/275kV switching personnel applying for renewal of switching certificate

#### **Course Custodian**

Catherine Fong Oii Kah

#### E512

#### Refresher Course for Power Station Switching Personnel



2 Days



20 participants

#### **Learning Outcomes**

Refresher course on the safety rules & requirements regarding the switching operation in power stations

#### **Contents**

- Safety Rules Regarding Control, Operation and Maintenance of HV Apparatus.
- Major Electrical Equipment in Power Plants
- Electrical Protection Systems
- Synchronisation and Parallel Operation of Generators
- Operation & Guidelines on New Equipment
- Station Switching Procedures & Requirements
- System Operation

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, field study

#### **Learning Type**

Internal Training

#### **Target Groups**

Power station switching personnel applying for renewal of switching certificate

#### **Course Custodian**

Leslie Gunting Jonathan Ensawing





### **Street Lighting Maintenance Course**



1 Day



20 participants

#### **Learning Outcomes**

This course aims to maintain the knowledge and skills of the participants with regards to safety, operation, maintenance and troubleshooting of Street Lighting installations. This course also serves as a revision on street lighting installations for on-site personnel

#### **Contents**

- Safety Working Procedures and Guidelines
- Street Lighting Types: Bracket and Column
- Street Lighting Construction: Components and Functions
- Street Lighting Maintenance and Troubleshooting

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

#### **Learning Type**

Internal Training

#### **Target Groups**

Street lighting installations for onsite personnel that attended and passed the E204 Low Voltage Distribution System Practices Course and E201 Low Voltage Switching Requirements Course

#### **Course Custodian**

Hollis Micky Langgi

#### E509

### **Substation Routine Maintenance Course**



2 Days



20 participants

#### **Learning Outcomes**

This course aims to upgrade the knowledge of the technical personnel on routine maintenance of 11kV distribution substations

#### Contents

- Sarawak Energy Electrical Safety Rules on HV requirements
- Standards for Substation Inspection and Maintenance
- Distribution Transformers Maintenance Standards
- 11kV Ring Main Unit Maintenance Standards
- Substation Property Maintenance Standards
- 11kV Substation Routine Maintenance

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

#### **Learning Type**

Internal Training

#### **Target Groups**

Technicians involved in routine substation maintenance

#### **Course Custodian**

Then Jung Seng



# Switching Requirements for Major Power Stations Course



4 days



20 participants

#### **Learning Outcomes**

This course aims to provide the participants with the knowledge on switching procedures and safety requirements in major power stations

#### **Contents**

- Electrical Safety Rules Regarding the Control,
   Operation and Maintenance of High Voltage
   Apparatus
- High Voltage Switchgear & Switching Requirements
- Electrical Protection Systems
- Major Electrical Equipment in Power Plants
- Synchronisation and Parallel Operation of Generators
- System and Switching Requirements

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical,

#### **Learning Type**

Internal Training

#### **Target Groups**

Switching personnel in major power stations intending to apply for switching certificate

#### **Course Custodian**

Leslie Gunting Jonathan Ensawing

E203

# Switching Requirements for Rural Power Stations Course



4 Days



20 participants

#### **Learning Outcomes**

This course aims to provide the participants with the knowledge on switching procedures and safety requirements in rural power stations

#### **Contents**

- Sarawak Energy Electrical Safety Rules
- Street Lighting & Low Voltage Distribution Practices
- Safety Requirements of Overhead Lines Distribution Systems
- Safety Requirements of Underground Cables
- Major Electrical Equipment in Rural Power Stations
- Electrical Protection Schemes
- Synchronisation & Parallel Operation of Generators
- System Requirements in SEB Power Systems
- Switching Requirements in Power Stations

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment

#### **Learning Type**

Internal Training

#### **Target Groups**

Switching personnel in rural power stations intending to apply for switching certificate

#### **Course Custodian**

Li Zhen Er



# High Voltage Overhead Lines Testing & Commissioning



2 days



20 participants

#### **Learning Outcomes**

This course aims to provide the participants with the theoretical and practical knowledge on technical requirements of High Voltage Overhead Lines testing and commissioning

#### **Contents**

- Statutory Requirements
- Sarawak Energy Electrical Safety Rules
- Overhead Construction and Design Manual
- Inspection, Testing & Commissioning
  - installation, inspection checklist
  - earth resistance test
  - insulation test
  - pressure test
  - voltage/ampere test
- Phase sequence test
- Safety during commissioning

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment, practical

#### **Learning Type**

**Internal Training** 

#### **Target Groups**

Overhead lines project supervisor with holding Chargeman H2 Overhead lines competency certificate

#### **Course Custodian**

Hollis Micky Langgi

E202

#### **LV Fuse Switching**



2 Days



20 participants

#### **Learning Outcomes**

This course aims is designed to offer contractors providing standby contract service a better understanding of the procedures and safety requirements for replacing pillar fuses and polemounted fuses in Sarawak Energy's low-voltage distribution system

#### **Contents**

- Statutory Requirements
- SE Electrical Safety Rules
- Measuring Instruments
- SEB/SESCO's Distribution System
- LV Pole Mounted Fuses, LV Pillar, and Cut-Outs
- Standby Services
- Mobile Field Force Automation (MFFA)

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment and practical

#### **Learning Type**

Internal Training

#### **Target Groups**

Intended for competent persons (contractors) who are assigned to carry out work in the 24-hour standby service contract

#### **Course Custodian**

Willie Anak William Silan





#### **Chargeman H1 Module 1**



4 days



20 participants

#### **Learning Outcomes**

This course aims to provide participants with knowledge of Statutory Requirements & Safety Practices related to HV installation, High Voltage Substations and Substation Accessories, and to prepare participants for the EIU Chargeman H1 exam

#### **Contents**

By end of the programme, the participant will be able to understand:

- The relevant statutory requirements and safety rules
- Different types of HV substation
- Safety practices for working on HV equipment
- Fire Fighting System
- Remote Supervisory System
- SESCO's SCADA System

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion and assignment

#### **Learning Type**

Internal Training

#### **Target Groups**

Intended for Technical personnel who hold a Chargeman L1 certificate and intend to apply for a Chargeman H1 certificate

#### **Course Custodian**

Leslie Gunting Jonathan Ensawing

#### E522

#### **Chargeman H1 Module 2**



4 days



20 participants

#### **Learning Outcomes**

This course aims to provide participants with knowledge of the different types of High Voltage Switchgear, both indoor and outdoor, as well as Switching Operating Procedures, preparing participants for the EIU Chargeman H1 exam

#### Contents

By end of the programme, the participant will be able to understand:

- Overview of HV Switchgear
- HV Indoor Substation with AIS Switchgear
- Types of Switchgear and its function
- Vacuum Circuit Breaker and its related Test
- DC Power Supply
- Switching Operating Procedure and Switching Simulation on Virtual Reality (VR)
- RMU Substation Maintenance

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion and assignment

#### **Learning Type**

Internal Training

#### **Target Groups**

Intended for Technical personnel who hold a Chargeman L1 certificate and intend to apply for a Chargeman H1 certificate

#### **Course Custodian**

Wong Kin Hong





#### **Chargeman H1 Module 3**



4 days



20 participants

#### **Learning Outcomes**

This course aims to prepare participants for the EIU Chargeman H1 exam by providing them with knowledge of Power Transformers, Voltage Regulating Devices and Earthing for 11kV distribution systems

#### **Contents**

By end of the programme, the participant will be able to understand:

- Overview of HV Transformers
- Design and Operation of Power Transformer
- Phase Shifting Transformer
- Voltage Control and Power Factor Correction
- HV Capacitor Bank, SVC and Reactors
- Voltage Regulator
- Earthing
- 11kV Consumer Installation

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion and assignment

#### **Learning Type**

**Internal Training** 

#### **Target Groups**

Intended for Technical personnel who hold a Chargeman L1 certificate and intend to apply for a Chargeman H1 certificate

#### **Course Custodian**

Catherine Fong Oii Kah

#### E524

#### **Chargeman H1 Module 4**



4 days



20 participants

#### **Learning Outcomes**

This course aims to give a competent person a better understanding of the procedures and safety requirements for fuse replacement work in Sarawak Energy's low-voltage distribution system

#### Contents

By end of the programme, the participant will be able to understand:

- General Conditions on Testing & Commissioning of HV Equipment
- Testing on Circuit Breaker and Transformer
- HV Cables
- 33kV GIS Switchgear
- Siemens \*DA 33kV GIS Switchgear
- HV Faults and Preventive Measures
- Protection and Control on HV Equipment

#### Methodology

Blended learning: Self-study, online lecturing, focused group discussion, assignment and practical

#### **Learning Type**

Internal Training

#### **Target Groups**

Intended for Technical personnel who hold a Chargeman L1 certificate and intend to apply for a Chargeman H1 certificate

#### **Course Custodian**

Chiu Yii Lung



# The Programme Schedule 2025



### **HSE Critical Roles Training**

CODE	PROGRAMME TITLE	NO. OF DAYS (DURATION)	COURSE LINK	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
S200	Safety Awareness Course for Working Near to Electrical Installations	1	Link			6					20				
\$300	Safety Awareness Course for Working Near to Power Stations (Electrical)	1	Link			20						4			
S401	Safety Awareness Course for Working Near to 33/11kV Overhead Lines	1	Link		24		11								
S402	Safety Awareness Course for Working Near EHV Transmission Lines	1	Link					6			15				
S500	Safety Awareness Course for Working Near to Substations	1	Link				4	8		4					
\$501	Safety Awareness Course for Working Near EHV Substations	1	Link						13				9		
\$701	Distribution Working at Height	1	Link			12			19	23		2	14	19	
SBOT	Steam Boiler Operator Training	5	Link				21-25		16-20		4-8		6-10		
SBORW	Steam Boiler Operator Revision Workshop	2	Link					13-14		16-17		18-19		12-13	_



	First-Aid Course  *For Sarawak Energy Employees K: Kuching S: Sibu M: Miri BRO: Bintulu Regional Office BPS: Bintulu Power Station	3	Link	6-8(K) 6,9&10(K) 13-15(S) 13,16&17(S)	17-19(K) 17,20&21(K)	٠,	21-23(BPS)	14-16(BRO)	16, 19&20(K) 23-25(M) 23, 26&27(M)	7-9(K)	11,14&15(K) 25-27(BPS) 25,28&29(BPS)	(BRO)	6-8(BPS) 6,9&10(BPS) 27-29(K) 27,30&31(K)	3-5(S) 3,6&7(S) 10-12(BRO) 10,13&14(BRO) 24-26(K) 24,27&28(K)	1-3(K) 1,4&5(K) 15-17(K) 15,18&19(K)	
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To view programme details, click on the name of the programme.

For non-employees who wish to attend the course, please scan the barcode to complete your registration.

Course

### **Electrical (Theory)**

CODE	PROGRAMME TITLE	NO. OF DAYS (DURATION)	COURSE LINK	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC
E500(T)	11kV Switching Requirements Course	3	Link	13-15				19-21	9-11				20-22		
E602(T)	11kV Underground Cable-Jointing Practices	1	Link				4						3		
E511(T)	132/275kV Switching Requirements	4	Link					19-22			18-21				
E503(T)	33kV Switching Requirements	3	Link		17-19					16-18		8-10	27-29		
E603(T)	33kV Underground Cable-Jointing Practices	1	Link							14					
E405(T)	Chargeman H2 Overhead Lines	2	Link			24-25				3-4	13-14 25-26		16-17		
E211(T)	Chargeman L1 Course Module 1	4	Link		17-20			5-8				29-30	1-2		
E212(T)	Chargeman L1 Course Module 2	4	Link		24-27			13-16					13-16		
E213(T)	Chargeman L1 Course Module 3	3	Link			3-5		19-21					20-22		
E223(T)	Chargeman L2 Overhead Lines	2	Link			10-11		8-9	23-24	31	1	8-9		3-4	
E604(T)	Chargeman L2 & H2 U/G Cable Laying	2	Link			26-27		21-22					20-21		

CODE	PROGRAMME TITLE	NO. OF DAYS (DURATION)	COURSE LINK	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC
E703(T)	Chargeman L3 Course-Generators & Synchronising	2	Link		3-4		2-3		9-10		11-12	8-9			
E808(T)	Distribution Protection Control & Instrumentation	2	Link					22-23				17-18			
E309(T)	Electricity Ordinance & Electricity Rules	1	Link		28	7		2		1				7	
E209(T)	Electrical Power System Fundamentals for Non-Technical Personnel	2	Link										6-7		
E406(T)	High Voltage Overhead Lines Testing & Commissioning	1	Link				14								
E221(T)	Internal Wiring Testing	2	Link									17-18			
E903(T)	Introductory Course on Sarawak Energy Power System Module 1: Statutory Requirements	3	Link						16-18						
E904(T)	Introductory Course on Sarawak Energy Power System Module 2: Cables and Lines	1	Link				25								
	Introductory Course on Sarawak Energy Power System Module 3: Generators and Protection	3	Link									23-25			

### **Electrical (Theory)**

CODE	PROGRAMME TITLE	NO. OF DAYS (DURATION)	COURSE LINK	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
E906(T)	Introductory Course on Sarawak Energy Power System Module 4: High Voltage Systems	3	Link							29-31					
	Low Voltage Distribution System Practices and Switching Requirement	2	Link		26-27		15-16	19-20				18-19	1-2 30-31		
E206(T)	Low Voltage Main Switchboard Requirement & Testing	2	Link										16-17		
E202(T)	LV Fuse Switching	1	Link	20		14									
E225(T)	Meter Inspection, Installation and Disconnection	1	Link								19				
E222(T)	Overhead Live Line Work	1	Link						13			10			
E505(T)	Refresher Course for HV Switching Personnel	2	Link			4-5			19-20			3-4		25-26	
E506(T)	Refresher course for 132/275kV Switching Personnel	3	Link			11-13								10-12	
E512(T)	Refresher course for Power Station Switching Personnel	2	Link											4-5	



E514(T)	Street Lighting Maintenance Course	1	Link		4								21	
E509(T)	Substation Routine Maintenance	2	Link							4-5				
E502(T)	Switching Requirements for Major Power Stations	3	Link			24-26			7-9					
E203(T)	Switching Requirements for Rural Power Stations	3	Link								29-30	1		
E809(T)	Transmission Protection Control & Instrumentation	2	Link	13-14					23-24					
E521(T)	Chargeman H1 Module 1	4	Link				7-10		7-10				3-6	
E522(T)	Chargeman H1 Module 2	4	Link				14-17		14-17				10-13	
E523(T)	Chargeman H1 Module 3	4	Link				21-24		21-25				17-20	
E524(T)	Chargeman H1 Module 4	3	Link				28-30		28-30				24-26	

To view programme details, click on the name of the programme.

For non-employees who wish to attend the course, please scan the barcode to complete your registration.

Course

### **Electrical (Practical)**

Reminder: This practical session is only for those who have completed the theory session. No registration is required as it will be assigned by the LMS admin. Please use the schedule as a reference when planning your theory session, as the practical session will be assigned as soon as possible after the completion of your theory session.

CODE	PROGRAMME TITLE	NO. OF DAYS (DURATION)	COURSE LINK (STAFF)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC
E602(P)	11kV Underground Cable-Jointing Practices	2	Link				9-10						6-7		
E603(P)	33kV Underground Cable-Jointing Practices	2	Link							17-18					
E405(P)	Chargeman H2 Overhead Lines	1	Link			28	2			8 9	18 19 28 29		22 23		
E213(P)	Chargeman L1 Course Module 3	1	Link			10 11		26 27					27 28		
E223(P)	Chargeman L2 Overhead Lines	2	Link			18-19 20-21		13-14 15-16		10-11 15-16	4-5 7-8	22-23 24-25		10-11 13-14	
E604(P)	Chargeman L2 & H2 U/G Cable Laying	1	Link				7 8	26 27					28 29		
E703(P)	Chargeman L3 Course-Generators & Synchronising	1	Link		10 11		7 8		12 13		14 15	11 12			
E406(P)	High Voltage Overhead Lines Testing & Commissioning	1	Link				17								
E200(P)	Low Voltage Distribution System Practices and Switching Requirement	1	Link			3 4	21 22	28 29				29 30	9 10	5 6	
E222(P)	Overhead Live Line Work	1	Link						16 17			15			



E3U3(D)	Switching Requirements for Rural Power Stations	1	Link								3		
E202(P)	LV Fuse Switching	1	Link	21	17								
E524(P)	Chargeman H1 Module 4	1	Link			29 30			4 5			27 28	
S701(P)	Distribution Working at Height	1	Link		13		20	24		3	15	20	
E500(P)	11kV Switching Requirements Course	1	Link	17		23	13				24		

To view programme details, click on the name of the programme.

For non-employees who wish to attend the course, please scan the barcode to complete your registration.

Course

### **2025 Theory Exam Schedule**

CODE	EXAMINATION TITLE	NO. OF DAYS (DURATION)	EXAM LINK (Staff)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC
Т-А	Chargeman L1	1	Link		12	5	9			2		3		12	
T-E	Electrical Installation Contractor Testing Authorisation	1	Link											12	
T-L3	Chargeman L3 - Generators & Synchronising	1	Link		12		9			2		3		12	
T-LHUG	Chargeman L2 & H2 U/G Cable Laying	1	Link		12		9			2		3		12	
T-OLL	Overhead Live Line Work	1	Link		12		9			2		3		12	
T-A3	Chargeman H2 Overhead Lines	1	Link			5		7			6				3
T-A2	Chargeman L2 Overhead Lines	1	Link			5		7			6		8		3
T-G	Grading of 11kV Cable Jointers	1	Link			5		7			6		8		3
T-G33	Grading of 33kV Cable Jointers	1	Link			5		7			6		8		3
Т-К	100kW Electrical Contractor Registration	1	Link			5		7			6		8		3
T-EOER	Electricity Ordinance & Electricity Rules	1	Link			5		7			6		8		3
Т-Н	Chargeman H1	1	Link			5		7			6		8		3

Remarks: To view programme details, click on the name of the programme.

### **2025 Practical Exam Schedule**

CODE	EXAMINATION TITLE	NO. OF DAYS (DURATION)	EXAM LINK	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC
P-G	Grading of 11kV Cable Jointers	2	Link	6 7									13 14		
P-G33	Grading of 33kV Cable Jointers	2	Link	6 7									13 14		
P-A3	Chargeman H2 Overhead Lines	1	Link	8 9			28 29 30			28 29	21 22	11 12		17 18 26 27	
P-A	Chargeman L1	1	Link			18 19 20				29 30 31				3 4 5	
P-A2	Chargeman L2 Overhead Lines	1	Link	13 14 15 16				5 6 7	16 17 18 19	24 25	11 12	2 3 4 26	24 27		1 2 3 4 5
P-L3	Chargeman L3 - Generators & Synchronising	1	Link				15 16 17		16 17 18	14 15 16		17 18 19			
P-LHUG	Chargeman L2 & H2 U/G Cable Laying	1	Link				23 24		9 10					24 25	
P-E	Electrical Installation Contractor Testing Authorisation	1	Link											17	
P-OLL	Overhead Live Line Work	1	Link		11 12									19 20	
P-H	Chargeman H1	1	Link						23 24 25 26		18 19 20 21				8 9 10 11

To view programme details, click on the name of the programme.

For non-employees who wish to attend the course, please scan the barcode to complete your registration.

Exar





### January 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			New Year's Day			
			1	2	3	4
	•P-G •P-G33	•P-G •P-G33	•P-A3	•P-A3		
5	6	7	8	9	10	11
	●E500(T) ●E809(T) ●P-A2	●E500(T) ●E809(T) ●P-A2	•E500(T) •P-A2	•P-A2	•E500(P)	
12	13	14	15	16	17	18
	•E202(T)	•E202(P)				
19	20	21	22	23	24	25
			Chinese New Year	Chinese New Year		
26	27	28	29	30	31	
T: Theory		P: Practical		T-xx: Theory Exam	P-xx:	Practical Exam





### February 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
	•E703(T)	•E703(T) •E514(T)				
2	3	4	5	6	7	8
	●E703(P)	•P-OLL •E703(P)	P-OLL  T-LHUG  T-LHUG  T-OLL			
9	10	11	12	13	14	15
	•E211(T) •E503(T)	•E211(T) •E503(T)	•E211(T) •E503(T)	•E211(T)		
16	17	18	19	20	21	22
	•S401(T) •E212(T)	•E212(T)	•E212(T) •E200(T)	•E212(T) •E200(T)	•E309(T)	
23	24	25	26	27	28	
T: Theory	V	P: Practical		T-xx: Theory Exam	P-xx:	Practical Exam





### **March 2025**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	•E213(T) •E200(P)	•E213(T) •E505(T) •E200(P)	•E213(T) •E505(T) •T-A •T-A3 •T-A2 •T-G •T-G33 •T-K •T-EOER •T-H 5	•S200(T)	•E309(T)	8
9	•E223(T) •E213(P)	•E223(T) •E506(T) •E213(P) 11	•S701(T) •E506(T)	•S701(P) •E506(T)	•E202(T)	15
16	•E202(P)	•E223(P) •P-A 18	•E223(P) •P-A	•E223(P) •S300(T)_ •P-A 20	•E223(P) 21	22
23	• E405(T) •E502(T)	• E405(T) •E502(T) 25	• E604(T) •E502(T)	•E604(T) 27	•E405(P) 28	29
30	Hari Raya Aidilfitri 31					
T: Theory	/	P: Practical	•	T-xx: Theory Exam	P-xx:	Practical Exam



# April 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		Hari Raya Aidilfitri	•E703(T) •E405(P)	•E703(T)	•S500 (T) •E602(T)	
		1	2	3	4	5
	• E604(P) •E521(T) •E703(P)	•E521(T) • E604(P) •E703(P)	•E521(T) •E602(P) •T-A •T-L3 •T-LHUG •T-OLL	•E521(T) •E602(P)	•S401(T)	
6	7	8	9	10	11	12
	•E522(T) •E406(T)	•E200(T) •E522(T) •P-L3	•E200(T) •E522(T) •P-L3	•E522(T) •E406(P) •P-L3	Good Friday	
13	14	15	16	17	18	19
	•E523(T) •E200(P) •SBOT	•E523(T) •E200(P) •SBOT	•E523(T) •P-LHUG •SBOT	•E523(T) •P-LHUG •SBOT	• E904(T) •SBOT	
20	21	22	23	24	25	26
	•E524(T) •P-A3	●E524(T) ●P-A3	•E524(T) •P-A3			
27	28	29	30			

T: Theory

P: Practical

T-xx: Theory Exam



# sarawak energy — May 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				Labour Day	•E309(T)	3
4	•E211(T) •P-A2	•S402(T) •E211(T) •P-A2	•E211(T) •T-A3 •T-A2 •T-G •T-G33 •T-K •T-EOER •T-H •P-A2	•S500(T) •E211(T) •E223(T)	•E223(T)	10
11	Wesak Day	•E212(T) •E223(P) •SBORW	•E212(T) •E223(P) •SBORW	•E212(T) •E223(P)	•E212(T) •E223(P)	17
18	•E213(T) •E511(T) •E200(T) •E500(T)	•E213(T) •E511(T) •E200(T) •E500(T)	•E213(T) •E604(T) •E511(T) •E500(T)	• E604(T) •E511(T) •E808(T)	•E500(P) •E808(T)	24
25	•E213(P) •E604(P)	•E213(P) •E604(P)	•E200(P)	•E200(P) •E524(P)	•E524(P)	31

T: Theory

P: Practical

T-xx: Theory Exam





### June 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Hari Gawai	Hari Gawai	Agong's Birthday	Agong's Birthday			Hari Raya Haji
1	2	3	4	5	6	7
	•E703(T) •P-LHUG •E500(T)	•E703(T) •P-LHUG •E500(T)	•E500(T)	•E703(P)	•S501(T) •E703(P) •E500(P) •E222(T)	
8	9	10	11	12	13	14
	•E903(T) •P-A2 •P-L3 •SBOT •E222(P)	•E903(T) •P-A2 •P-L3 •SBOT •E222(P)	•E903(T) •P-A2 •P-L3 •SBOT	•S701(T) •E505(T) •P-A2 •SBOT	•S701(P) •E505(T) •SBOT	
15	16	17	18	19	20	21
	•E223(T) •P-H	●E223(T) ●P-H	•P-H	•P-H	Awal Muharram	
22	23	24	25	26	27	28
29	30					

T: Theory

P: Practical

T-xx: Theory Exam



# July 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		•E309(T)	•T-A •T-L3 •T-LHUG •T-OLL	●E405(T)	•S500(T) •E405(T)	5
6	•E521(T) •E502(T) 7	• E521(T) •E405(P) •E502(T)	•E521(T) •E405(P) •E502(T)	•E521(T) •E223(P)	•E223(P) 11	12
13	•E603(T) •E522(T) •P-L3 14	•E522(T) •E223(P) •P-L3 15	•E522(T) •E223(P) •P-L3 •E503(T) •SBORW	•E522(T) •E603(P) •E503(T) •SBORW 17	• E603(P) •E503(T)	19
20	•E523(T)	Sarawak Day	• E523(T) •E809(T) •S701(T) 23	• E523(T) •E809(T) •S701(P) •P-A2 24	• E523(T) •P-A2	26
27	•E524(T) •P-A3	•E906(T) •E524(T) •P-A3 •P-A 29	•E906(T) •E524(T) •P-A 30	•E906(T) •E223(T) •P-A 31		

T: Theory

P: Practical

T-xx: Theory Exam





### August 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					•E223(T)	2
3	•E524(P) •E223(P) •E509(T) •SBOT 4	•E223(P) •E524(P) •E509(T) •SBOT 5	•T-A3 •T-A2 •T-G •T-G33 •T-K •T-EOER •T-H •SBOT	•E223(P) •SBOT	•E223(P) •SBOT	9
10	●E703(T) ●P-A2	●E703(T) ●P-A2	•E405(T) 13	●E405(T) ●E703(P)	•S402(T) •E703(P) 15	16
17	•E511(T) •E405(P) •P-H	•E511(T) •E225(T) •E405(P) •P-H 19	•E511(T) •S200(T) •P-H 20	•E511(T) •P-A3 •P-H	•P-A3	23
24	•E405(T) 25	•E405(T) 26	27	•E405(P) 28	•E405(P) 29	30
Merdeka Day						

T: Theory

P: Practical

T-xx: Theory Exam



### September 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	Merdeka Day	•\$701(T) •P-A2	•E505(T) •T-A •T-L3 •T-LHUG •T-OLL •S701(P) •P-A2	•S300(T) •E505(T) •P-A2	Prophet Muhammad's Birthday	6
7	•E223(T) •E703(T) •E503(T)	•E223(T) •E703(T) •E503(T)	•E222(T) •E503(T)	•E703(P) •P-A3	•P-A3 •E703(P) 12	13
14	•E222(P)	Malaysia Day	•E808(T) •E221(T) •P-L3	•E808(T) •E221(T) •E200(T) •P-L3 •SBORW	•E200(T) •P-L3 •SBORW	20
21	•E223(P)	•E905(T) •E223(P)	•E905(T) •E223(P)	•E905(T) •E223(P)	•P-A2	27
28	•E200(P) •E203(T) •E211(T)	•E200(P) •E203(T) •E211(T)				

T: Theory

P: Practical

T-xx: Theory Exam

P-xx: Practical Exam



### October 2025

T: Theory

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			•E203(T) •E200(T) •E211(T)	•E200(T) •E211(T)	•E602(T) •E203(P)	
			1	2	3	4
_	•E602(P) •E209(T) •SBOT	•E602(P) •E209(T) •SBOT	•T-H •T-A3 •T-A2 •T-G •T-G33 •T-K •T-EOER	•S501(T) •E200(P) •SBOT	•E200(P) •SBOT	Sarawak Governor's Birthday
5	0	/	•SBOT 8	9	10	11
	•E212(T) •P-G •P-G33	•E212(T) •S701(T) •P-G •P-G33	•E212(T) •S701(P)	•E405(T) •E212(T) •E206(T)	•E405(T) •E206(T)	
12	13	14	15	16	17	18
	•E500(T) •E213(T) •E604(T)	•E500(T) •E213(T) •E604(T)	•E500(T) •E213(T) •E405(P)	•E405(P)	•E500(P) •P-A2	
19	20	21	22	23	24	25
	•E503(T) •P-A2 •E213(P)	•E503(T) •E213(P) •E604(P)	• E503(T) •E604(P)	•E200(T)	•E200(T)	
26	27	28	29	30	31	

P: Practical

T-xx: Theory Exam



### November 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	•E521(T) •E223(T) •P-A	•E512(T) •E521(T) •E223(T) •P-A	• E512(T) •E521(T) •E200(P) •P-A 5	•E521(T) •E200(P)	•E309(T) 7	8
9	•E506(T) •E522(T) •E223(P) 10	•E506(T) •E522(T) •E223(P) 11	•E506(T) •E522(T) •T-A •T-E •T-L3 •T-LHUG •T-OLL 12 •SBORW	•E223(P) •E522(T) •SBORW 13	•E223(P) 14	15
16	•E523(T) •P-A3 •P-E 17	•E523(T) •P-A3	•E523(T) •S701(T) •P-OLL 19	•E523(T) •S701(P) •P-OLL 20	•E514(T) 21	22
23	•E524(T) •P-LHUG 24	•E505(T) •E524(T) 25 •P-LHUG	•E505(T) •E524(T) •P-A3 26	•P-A3 • E524(P) 27	• E524(P) 28	29
30						

T: Theory

P: Practical

T-xx: Theory Exam





### December 2025

T: Theory

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	•P-A2	•P-A2	•T-A3 •T-A2 •T-G •T-G33 •T-K •T-EOER •T-H •P-A2	•P-A2	•P-A2	6
7	•P-H	•P-H 9	•P-H	•P-H	12	13
14	15	16	17	18	19	20
21	22	23	24	Christmas Day	26	27
28	29	30	31			
	25		51			

P: Practical

T-xx: Theory Exam

#### **ACKNOWLEDGEMENT**

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#### **Contact Us**

This Learning Directory is intended to be a live document that is regularly updated to reflect changes. Programme details and dates may be adjusted to meet business needs. For enquiries or clarification, please contact the L&D Team.

T: +6082 309448

E: learning@sarawakenergy.com