

# ALTERNATIVE <PATHWAYS>

## for LICENSED ELECTRICAL WORKERS

### LICENSED ELECTRICIAN PREPARATORY PROGRAMME [Programme Code: ENO32]

#### LEARNING OUTCOMES

The Licensed Electrician Preparatory Programme will equip participants with the necessary theoretical foundation and practical application skills to carry out the work of a Licensed Electrician.

#### PRE-REQUISITES

Applicants are required to have at least:

- 5 years of relevant local hands-on experience in electrical works; and
- GCE "N" Level with pass in English and Mathematics or Workplace Literacy and Numeracy (WPLN) Level 5

The programme is **optional** for applicants with:

- NITEC in Electrical Engineering and at least 2 years of relevant local hands-on experience in electrical works (after NITEC); or
- At least 10 years of relevant local hands-on experience in electrical works

#### PROGRAMME CONTENTS

##### Theoretical Foundation

Conducted by Singapore Polytechnic/Ngee Ann Polytechnic

| No.  | Description                       | Hours        | Total      |
|--|-----------------------------------|--------------|------------|
| <b>Module 1: Electrical Principles</b>                         |                                   |              |            |
| 1.1  | Basic Principles of Electricity   | 5            | 35         |
| 1.2  | AC Circuits                       | 15           |            |
| 1.3  | Basics of Three Phase AC Circuits | 15           |            |
| 1.4  | Written Assessment 1              | 2            | 2          |
| <b>Module 2: Electrical Installation Design</b>                |                                   |              |            |
| 2.1  | Statutory Act and Regulations     | 5            | 49         |
| 2.2  | Protective Devices and Cables     | 13           |            |
| 2.3  | Protection Against Electric Shock | 15           |            |
| 2.4  | Electrical System Design          | 7            |            |
| 2.5  | Temporary Electrical Installation | 9            |            |
| 2.6  | Written Assessment 2              | 2            | 2          |
| <b>Module 3: Testing and Maintenance of Electrical Systems</b> |                                   |              |            |
| 3.1  | Testing of Switchboards           | 9            | 28         |
| 3.2  | Maintenance of Switchboards       | 6            |            |
| 3.3  | Standby Generators                | 6            |            |
| 3.4  | Photovoltaic System               | 7            |            |
| 3.5  | Written Assessment 3              | 2            | 2          |
|  |                                   | <b>Total</b> | <b>118</b> |

## Practical Application

Conducted by Singapore Institute of Power and Gas

| No.  | Description  | Hours        | Total     |
|--|--|--------------|-----------|
| <b>Module 4: Safety and Connection Process</b>           |  |              |           |
| 4.1  | Safety & Licensing Requirements                          | 3.5          | 8         |
| 4.2  | The Supply Connection Process                            | 3.5          |           |
| 4.3  | Assessment   | 1.0          |           |
| <b>Module 5: Electrical Installation Less than 45kVA</b> |  |              |           |
| 5.1  | Practical Design of Small Electrical Installation        | 10.5         | 15        |
| 5.2  | Generator Supply for Small Electrical Installation       | 3.5          |           |
| 5.3  | Assessment   | 1.0          |           |
| <b>Module 6: Inspection and Testing</b>                  |  |              |           |
| 6.1  | Safety Requirements and Tools for Inspection and Testing | 7.0          | 15        |
| 6.2  | Practical Inspection and Testing of Small Installation   | 7.0          |           |
| 6.3  | Assessment   | 1.0          |           |
|  |  | <b>Total</b> | <b>38</b> |

### ASSESSMENT

For modules conducted by SP/NP, a written assessment will be conducted upon completion of each module. For modules conducted by SIPG, a practical assessment will be conducted upon completion of each module.

### PROGRAMME TIMING

The programme will be conducted during weekday evenings (6.30pm – 10.00pm) and Saturdays (8.30am – 6.00pm).

### CERTIFICATE

Participants who have successfully pass all theoretical and practical modules will be awarded a Certificate of Achievement jointly issued by SIPG and SP/NP.

### EMA LICENSING COMPETENCY ASSESSMENT

The “Certificate of Achievement” is required by EMA for participants without the relevant educational qualification. Participants are required to ensure that they satisfy the relevant work experience and pass the “EMA Licensing Competency Assessment” to qualify for an Electrician’s License.

Please refer to EMA website for more information on application for Electrician License: [EMA Website](#)

## PROGRAMME FEE

|              | Full Programme Fee | Nett Fee after SSG Funding*                              |  |                                     |
|--------------|--------------------|--|--|-------------------------------------|
|              |                    | Singapore Citizens and Permanent Residents <40 years old | Singapore Citizens ≥ 40 years old only | Enhanced Training Support for SMEs# |
| Without GST  | \$8,380.00         | \$2,514.00   | \$838.00                               | \$838.00                            |
| With 9% GST+ | \$9,134.20         | \$2740.26  | \$1064.26                              | \$1064.26                           |

\* Subjected to SSG's approval and changes.

+ 9% GST applicable for intakes starting from 1 Jan 2024

# For more information on the Enhanced Training Support for Small & Medium Enterprises (SMEs) scheme, please click [here](#).

Self-sponsored applicants may use their relevant SkillsFuture Credit (SFC) to offset the programme fee.

## PROGRAMME SCHEDULE

Next intake: May 2024 [Closed] / Feb 2025

Registration closing date: 4 weeks before programme commencement

*Application will be considered upon submission of completed application form and all necessary supporting documents. SIPG will contact the applicant after confirmation that all admission criteria are met.*

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## Registration Form Licensed Electrician Preparatory Programme

| PART A: PERSONAL PARTICULARS  |                   |  |  |  |
|---|-------------------|--|--|--|
| <input type="checkbox"/> Self-Sponsored Applicant   |                   | <input type="checkbox"/> Company-Sponsored Applicant |  |  |
| ** Full Name<br><small>(As in NRIC/FIN)</small>   |                   | Gender<br>M / F                                      | Date of Birth<br><small>(dd/mm/yy)</small>           |  |
| ** NRIC/FIN   |                   | ID Expiry Date<br><small>(dd/mm/yy)</small>          | Race:<br>Chinese / Malay / Indian / Others:<br>----- |  |
| ** Nationality  |                   | **Monthly Salary <sup>1</sup>                        |  |  |
| ** Contact Number   |                   | Email Address  |  |  |
| Address<br><small>(Residential address for self-sponsored applicants)</small>   |                   |  |  |  |
| FOR COMPANY-SPONSORED APPLICANTS ONLY   |                   |  |  |  |
| Eligibility for Enhanced Training Support for SMEs: Determination will be based on SSG system. Applicant must have continued to receive full salary under the <u>billing company</u> (as below) and CPF entitlements during the entire duration of the funded course. |                   |  |  |  |
| Company Name  |                   | UEN  |  |  |
| Company Address   |                   |  |  |  |
| Contact Person  |                   | Designation  |  |  |
| Contact Number  |                   | Email Address  |  |  |
| PART B: PRE-REQUISITES  |                   |  |  |  |
| 1. Please indicate your relevant <b>local hands-on electrical work experience</b> :   |                   |  |  |  |
| Employer Name   | Position Held     | Year of Joining                                      | Year of Leaving                                      |  |
|   |                   |  |  |  |
|   |                   |  |  |  |
|   |                   |  |  |  |
| 2. Please indicate your <b>educational qualifications</b> :   |                   |  |  |  |
| Qualification Title   | Name of Institute | Year Completed                                       |  |  |
|   |                   |  |  |  |
|   |                   |  |  |  |
|   |                   |  |  |  |
| Please attach <b>relevant supporting documents</b> . (Refer to <b>Annex A</b> for the list of supporting documents required.)   |                   |  |  |  |

<sup>1</sup> Salary range:

a) Unemployed b) Below \$1,000 c) \$1,000 - \$1,499 d) \$1,500 - \$1,999 e) \$2,000 - \$2,499 f) \$2,500 - \$2,999 g) \$3,000 - \$3,499 h) \$3,500 and above

\*\* Mandatory field

**PART C: PAYMENT**

Payment is only required after the programme has been scheduled for the applicant and applicant has confirmed his/her availability.

An invoice with the final amount (after funding, if any) and the available mode of payment will be sent to the applicant.

**PART D: DECLARATION**

By submitting this registration form:

- I hereby declare that all information given is true and accurate;
- I acknowledge that SIPG shall not be responsible should EMA rejects my application for licensing; and
- I agree to the terms and conditions stated below.

(i) For Self-Sponsored Application

(ii) For Company-Sponsored Application

Name:

\_\_\_\_\_

Name of Authorised  
Personnel:

\_\_\_\_\_

Signature:

\_\_\_\_\_

Signature:

\_\_\_\_\_

Date:

\_\_\_\_\_

Date:

\_\_\_\_\_

Company Stamp

**PART E: PERSONAL DATA PROTECTION ACT**

I/We acknowledge and agree that SIPG may collect, use and disclose to any third party any and all particulars relating to my/our personal information for the purposes of

- (i) providing the requested services in respect of the programme(s),
- (ii) billing and account management (including debt collection or recovery);
- (iii) conducting surveys or obtaining feedback;
- (iv) informing me/us of services and offers by SIPG, its related entities and business affiliates (unless I/we duly inform you otherwise); and
- (v) complying with all applicable laws and regulations, and business requirements.

Name:

\_\_\_\_\_

Signature:

\_\_\_\_\_

Date:

\_\_\_\_\_

**TERMS AND CONDITIONS:**

- 1) The company and individual applicant have read and understood the terms of the programme information and registration form.
- 2) The information collected on this form is used for programme registration, account servicing of programme-related activities and/or for application of programme-related funding to appropriate funding agencies.
- 3) This registration form must be submitted to SIPG at least 4 weeks before programme commencement.
- 4) Payment must be made to SIPG before programme commencement.
- 5) SIPG reserves the right to amend any details relating to the programme without any prior notice.
- 6) Request for withdrawal must be made in writing and are subject to approval by SIPG.
  - >5 working days before programme commencement : 100% refund.
  - Less than 5 working days before programme commencement : no refund.
- 7) Request for transfer/replacement must be made in writing at least 5 working days before programme commencement and is subject to approval by SIPG. SIPG reserves the right to impose an administration fee for such requests.
- 8) Trainee shall be bound by the terms and conditions of any applicable funding scheme as approved by SIPG.
- 9) In the event that the trainee fails to meet any of the requirements set under the funding scheme or has been granted funding for the same programme before, thereby resulting that his/her funding application is rejected, the trainee is liable to pay the balance of the full programme fee to SIPG.
- 10) Photographs of trainees may be taken at the event for SIPG's marketing materials and other publications.

**ANNEX A: LIST OF SUPPORTING DOCUMENTS REQUIRED**

Please submit all relevant supporting documents along with the application form via email.

Note: SIPG reserves the right to reject any application due to incomplete submission of supporting documents.

|   |  |
|---|--|
| 1 | <p><b>Company Testimonial Letter</b><br/>[To clearly state the years and job scope of relevant local hands-on electrical works experience]</p>   |
| 2 | <p><b>Educational Certificates</b></p> <ul style="list-style-type: none"> <li>i) Highest Qualification [<u>Minimum</u> of GCE 'N' Level with pass in English and Mathematics or Workplace Literacy and Numeracy (WPLN) Level 5]</li> <li style="text-align: center;"><u>OR</u></li> <li>ii) NITEC in Electrical Engineering</li> </ul> |