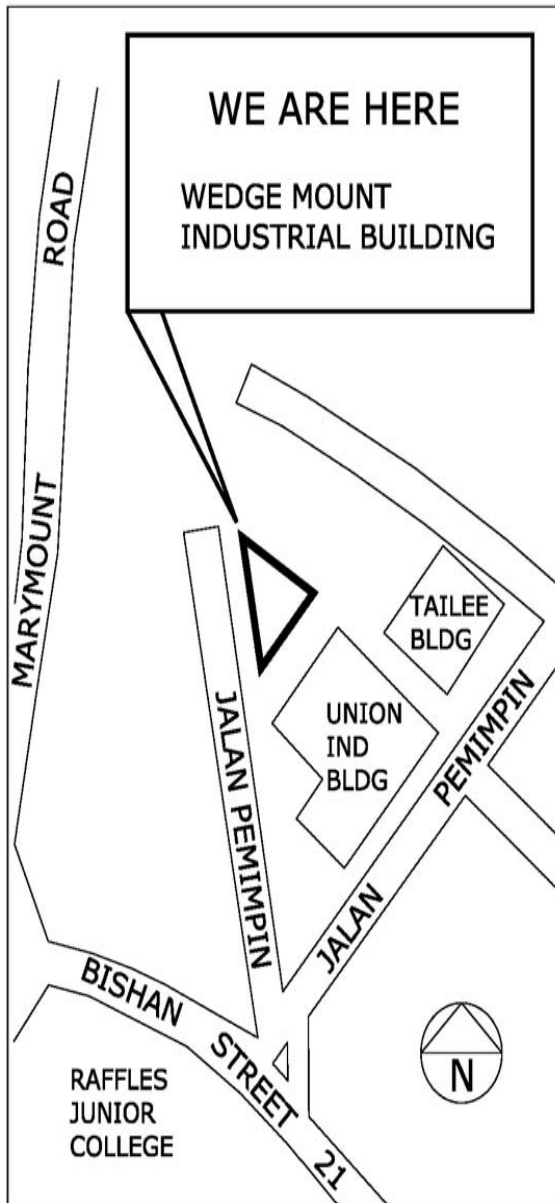


# Location Map of GPS Lands Training Centre



\* Take SBS Bus 410 [Green Plate] from Bishan Bus Interchange  
\* Alight at Raffles Junior College Bus Stop

## Enrolment

### Training Venue

GPS Lands Training Centre  
No 35 Jalan Pemimpin #05-02,  
Wedge Mount Industrial Building  
Singapore 577176  
Tel: (65) 6354 5950  
Fax: (65) 6354 5949

### Application

Where the application period ends on a public holiday or a Sunday, the closing date for applications will be the first work day following the stated closing date.

### Registration & Payment

Registration is confirmed upon payment. Cheque should be crossed and made payable to **“Singapore Institute of Surveyors & Valuers”** and mail it together with your completed registration form to **20 Maxwell Road #10-09B Maxwell House, Singapore 069113.**

### Withdrawal and Deferment

No refund will be made and no request for deferment will be granted unless a written notice is given no less than seven (7) days prior to the course commencement

SISV & GPS Lands reserve the right to amend the course details, revise the course fee without prior notice, to cancel, postpone or change the venue of the course in the event of any unforeseen circumstances.

### Enquiries

Contact: Ms. Janet Han (janet@sisv.org.sg) /  
Mr. Joe (jumain@sisv.org.sg)  
Tel: (65) 6222 3030  
Fax: (65) 6225 2453  
Website: <http://www.sisv.org.sg>

Contact: Ms. Irene Lee (Irene@gpslands.com)  
Tel: (65) 6354 5950  
Fax: (65) 6354 5949  
Website: [www.gpslands.com](http://www.gpslands.com)



Singapore Institute of Surveyors & Valuers

Course Conducted By:



## BASIC LAND SURVEYING COURSE



APPLICATIONS IN:

## BASIC LAND SURVEYING

# Course Details

## Introduction to Land Surveying

### 1. Introduction

- a) What is land surveying? Explain Plane & Geodetic Surveying. Field & Office Work. Use of surveying for boundary definition, for construction, horizontal control & vertical control.
- b) Engineering, cadastral, hydrographic & photogrammetric Surveys.

### 2. Principles of Surveying

- a. Concept of point location by:
  - i. Trilateration
  - ii. Offsets
  - iii. Traversing
  - iv. Intersection

### 3. The Surveyor' Work

- a) Verify/establish horizontal & vertical controls
- b) Locating/refixing the positions of boundary marks in a cadastral survey
- c) Carry out a topographical survey
- d) Horizontal & Vertical monitoring of structures, dams, tunnels etc
- e) Carry out a pre-computation for a setting out survey
- f) Setting out building corners, roads, drains etc

### 4. Equipment

- a) Measurement of distance : tapes, chains, edmi
- b) Measurement of angles/bearings : theodolite, total stations, robotic system
- c) Measurement of N,E,Z coordinates : GPS, Total station

### 5) Field Procedure

- a) Working from whole to part
- b) Recce
- c) Planning & obtaining datum for survey
- d) Observation & recording

**COURSE DURATION:** 12 hours

## Horizontal Control Survey

### 1. Establishing horizontal controls using total station &/or GPS

- a. Controls for setting out/traverses
- b. Concept of true north, grid north, bearings, angles etc
- c. Linear measurement with tapes, chains, edmi
- d. Accuracies & errors in linear measurements
- e. Method of measuring angles, bearings & their associated errors & accuracies

### 2. Traverses

- a. Open & close traverses
- b. Datum to commence survey
- c. Cadastral survey traverse & connection to ISN marks

### 3. Computations

- a. Linear Misclose
- b. Precision & Accuracy
- c. Adjustments: Bowditch Rule, Transit Rule & Least Square
- d. Calculate setting out data
- e. Calculate areas & volumes
- f. Calculate clearances, distance, angles, coordinates

**COURSE DURATION:** 48 hours

## Vertical Control Survey

### 1. Ordinary levelling:

- a. Basic knowledge & Equipment
- b. Principle of finding height/reduced levels
- c. Booking, calculations & checks
- d. Accuracy, precision & errors
- e. Adjustments

### 2. Permanent adjustment

### 3. Applications of levelling:

- a. Long & cross sections
- b. Contouring
- c. Setting out proposed levels
- d. Monitoring of settlement markers

**COURSE DURATION:** 18 hours

**Course Fee:     **S\$1,300** (SISV Member)  
                              **S\$1,500** (SISV Non-member)**

**SDF Assistance: S\$156\***

(\* Terms and Conditions Apply)

**Total Duration: 78 hours**

**(2 week nights of 3 hrs each + 1 Saturday of 4 hrs )**

Note:

(I) Course Fees inclusive of training materials

(II) Min 12 Pax to start course

(III) Course Fees exclude GST

(\*) Companies sponsoring eligible employees are

required to register as a **SDF EasyNet** user through a one Time online registration. Click on: "**Register Now!**" found in the top banner on the SDF EasyNet homepage: <http://www.sdf.gov.sg>