

COURSE BACKGROUND

This professional and intensive course aims at providing better insight into the use of modern and advanced Terrestrial Laser Scanning (TLS) or known as Lidar for surveying /mapping and various applications. From the theoretical to the real case studies – this course provides a holistic knowledge on the most advanced tools to be intensively optimized in surveying and mapping application. It highlights the short- and long - range TLS LIDAR for multi-disciplinary purposes. The course emphasizes the use of 3D point - cloud and image-based LIDAR data for solving problem in a changing environment.

PROGRAMME

18 August (MONDAY)

PRINCIPLES OF LASER SCANNING

- The electromagnetic spectrum and laser properties
- Theoretical concepts and principles of TLS systems
- Static and dynamic system: an update
- Lidar filtering, accuracy and data management
- State of the art 3D short - and long - range laser scanners

LASER SCANNING IN PRACTICE

- Survey planning and design
- Field operational procedure and survey workflow
- Survey preparation, Setting up scanner—RIEGL VZ-1000 & Z+F IMAGER @5010c 3D Laser Scanner;
- Connecting the scanner , Scanner setting, Accessories of scanner—camera and calibration.

19 August (TUESDAY)

- TLS Data acquisition – critical and practical issues
- Scanning the object / building, Scanning target , measuring the targets - completeness checking
- Data preparation and management
- Registration & Geo-referencing with RIEGL Riscan Pro soft-ware inclu. - coordinate system and transformation and registration—by using reflectors (Control Points), Course Registration, Back sighting Orientation , Multi station Adjustment and natural target registration.

20 August (WEDNESDAY)

- TLS processing – A conceptual and methodological step
- 3D Point cloud processing with RIEGL Riscan Pro software
- Object Inspector
- Filter data
- Selection Mode– 3D view, selection tool (Spatial Filtering)- 3D view, Filter Data (polydata objects), Colour from images, Addition-al Filter (tile data), Terrain filter– 3D view, Export Data to extraction software
- Quality control & delivery
- Sample case study and application
- Discussion, Q & A session.

MASTER TRAINER

Dr Khamarul Azahari Razak, PhD in Lidar (Netherlands)
UTM Razak School of Engineering and Advanced Technology,
Universiti Teknologi Malaysia, UTM Kuala Lumpur.

TO REGISTER

To register: Please fill in registration form provided by KOJUTA – attached.

Completed Registration forms should be returned by FAX (03-41052850) to

PUAN JALITAH HASAN (KOJUTA)
TEL: 03- 4107 9277/ 03-4108 2850
Fax: 03- 4105 2850
Or email : jalitah@kojuta.com

Intensive Course on Modern Terrestrial Laser Scanning (TLS)



In Collaboration With



18, 19, 20 August 2014
Universiti Teknologi Malaysia
Jln Semarak, Kuala Lumpur



PROGRAM REGISTRATION FROM

Organized By: PERSATUAN JURUUKUR TANAH BERTAULIAH MALAYSIA (PEJUTA)
In collaboration with: KOPERASI JURUUKUR TANAH BERLESEN BERHAD (KOJUTA)
UNIVERSITI TEKNOLOGI MALAYSIA (UTM)

Program : “Intensive Course on Modern terrestrial Laser Scanner for Surveyor”
Date : 18-20 August 2014
Venue : Universiti Teknologi Malaysia, Jln Semarak, Kuala Lumpur.
Course Fee : RM300.00 only (*cross cheque made payable to PEJUTA*)
*** Registration closes on 11th August 2014.

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|------------------------------|-----------------------|
| Name of Participant : | I/C No: |
| Designation : | EPF No. : |
| Company : | Tel (Office) : |
| Address : | Mobile: |
| | Fax No.: |
| Email : | |

Please complete and return this form to: Fax: 03- 4105 2850 / 03- 4107 8277 or email to: jalifah@kojuta.com before or on 11 August 2014. (Please attach together company's EPF Statement)

For further inquiry please contact: PUAN JALITAH HASAN (012 353 0196)

TEL: 03- 4107 9277/ 03-4108 2850 Fax: 03- 4105 2850

- Please ensure that participants receive a course participation confirmation from PEJUTA to confirm the place and date of the course will be conducted.
- The organizer reserves the right to amend the dates and programs in line with the organization
- If the participants fail to attend this event, no refund will be made.
- However, if the notification of cancellation is received within 7 days before the course, 50% of the fee will be refunded.