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REGISTRATION FORM

'INTRODUCTION TO LiDAR SURVEY TECHNOLOGY'
8th May 2013 at Wisma IEM, Petaling Jaya

No	Name(s)	M'ship No.	Grade	Fee (RM)*
			Total Payable	

***Fees MUST be fully paid A WEEK BEFORE the commencement of the course. Bookings by fax from outstations MUST be forwarded with payments at least A WEEK BEFORE the day of the course. Seats could only be confirmed upon payment.**

Enclosed herewith a crossed cheque No: _____for the sum of RM _____ issued in favour of "**The Institution of Engineers, Malaysia**" and crossed 'A/C payee only'. I/We understand that the fee is not refundable if I/We withdraw after my/our application is accepted by the Organising Committee as stated in the **cancellation term**. If I/We fail to attend the seminar, the paid registration fee will not be refunded.

Contact Person: _____ Designation:_____

Name of Organization: _____

Address: _____

_____

Telephone No.: _____ (O) _____ (Fax)

_____ (H) _____ (HP)

Email: _____

_____ _____
Signature & Stamp Date

Photocopies are acceptable

The Institution of Engineers, Malaysia

1-Day Course On

'INTRODUCTION TO LiDAR SURVEY TECHNOLOGY'

Organized By:
Women Engineers Section, IEM

Date : 8th May 2013

Venue : Tan Sri Prof. Chin Fung Kee Auditorium
3rd Floor, Wisma IEM
Petaling Jaya, Selangor

Time : 8.30 am – 5.30 pm

BEM Approved CPD Hours = 7
Ref. No: IEM/11/HQ/370/C

Registration Fee	Normal	On-line
IEM Graduate Members :	RM320.00	RM300.00
IEM Corporate Members :	RM370.00	RM350.00
Non IEM Members :	RM480.00	RM450.00

Synopsis

LiDAR survey is being increasing used worldwide for accurate, cost effective and fast acquisition of topographical and imagery data for many engineering, environmental, natural resources and infrastructures applications. In fact, LiDAR has been in use in Malaysia since 1989 and its users have seen many cost, accuracy and speed advantages. However, poor understanding of LiDAR can sometime lead to inferior analysis and often, the full benefit of the LiDAR data is unrealized. The principals of LiDAR and how it can be used effectively by all the professionals will be taught during this course. There will be a hand-on practical using Merrick Advanced Remote Sensing (MARS) software, a popular freeware for LiDAR data. Participants must bring their own laptop for practical.

About The Course Leader

Engr. Trudy R Ganendra graduated from University of Cambridge in 1997 with a Masters of Engineering and in 1999, obtained a Masters of Science from Imperial College in Environmental Engineering.

In 2001, she was appointed as the Director of Ground Data Solutions R&D Sdn Bhd (GDS), a Malaysian-owned high-tech LiDAR survey and mapping service provider. GDS has been providing accurate and cost efficient maps and mapping products to a broad range of clients since 1991 and has been widely used by developers, planners and designers throughout South East Asia. GDS is the only local Malaysian service provider of Airborne Laser and Digital Imagery Survey system who owns LiDAR system, is involved in the research and development of systems, and also is a direct operator with a proven track record of more than 20 years in airborne laser survey projects in Malaysia and South East Asia.

She is responsible for the daily operation of GDS in both business and operational capacities. Her business responsibilities encompass corporate policies, financial analysis and strategic relations. The operational aspects involve bidding, planning and execution as well as reporting and client liaison. She has successfully executed 62 Lidar projects to date.

Benefits

- Gain a basic understanding of LiDAR
- Understand how to create a TOR for LiDAR survey which will meet your project's requirements
- Understand how to use LiDAR data
- Know how to analyze the quality of the LiDAR data
- Know the potential applications of LiDAR data

- Dam
- Road
- Mining
- Water Supply and Flood Management
- Telecommunications & Other Urban Planning
- Forest/Habitat Assessment
- Slope Stability
- Pipeline
- Railway
- Transmission Line

Course Schedule & Outline

08:30 - 09:00	Course Registration
09:00 - 10:30	**Session 1:** **Introduction to LiDAR** • Introduction to Trainers • What is LiDAR? • Type of LiDAR • What is Waveform Laser? • LiDAR data and point clouds • Basic terminology of LiDAR • Main component of LiDAR • LiDAR survey procedure • Advantages of LiDAR • Characteristics comparison of different survey techniques • LiDAR applications • Example of LiDAR data before and after cleaning • The quality of LiDAR data • Conclusion • Q&A Hardcopies of presentation will be provided to attendees

Course Schedule & Outline

10:30 - 10:45	Tea Break
10:45 - 13:00	**Session 2: Introduction to Software using LiDAR data** **Introduction to Microstation, Terra Scan & Terra Modeler Softwares** • Introduction to Microstation • Introduction to Terra applications • TerraScan • TerraModeler • Quality of LiDAR data **Introduction to MOSS/MX** • Introduction to MOSS/MX • Capabilities of MOSS/MX • Using MOSS/MX & LiDAR for Alignment Design of ROAD & RAILWAY **Introduction to PLS-CADD & LiDAR** • Basic Overview and Introduction on PLS-CADD software • Optimum Spotting Using PLS-CADD & LiDAR for New Transmission Route Alignment Design • Introduction to Transmission Line Re-rating Technology Using PLS-CADD & LiDAR for Transmission Line Operation and Maintenance **Introduction to Preparing a LiDAR Request for Proposal** • Specifications details • Experience evaluation • Q&A Hardcopies of presentation will be provided to attendees
13:00 - 14:00	***Lunch Break***
14:00 - 15:45	**Session 3: Introduction to LiDAR Software (I) HANDS ON PRACTICAL** • Introduction to LiDAR Software ✓ LiDAR Software Function Tools • Procedure to read LiDAR point cloud • Procedure to read ortho image Hardcopies of presentation will be provided to attendees
15:45 - 16:00	***Tea Break***
16:00 - 17:00	**Session 4: Introduction to LiDAR Software (II) HANDS ON PRACTICAL** • Procedure to view LiDAR data in different mode ✓ LiDAR coloured by elevation ✓ LiDAR coloured by intensity mode ✓ LiDAR coloured by classification ✓ LiDAR cloured by returns ✓ LiDAR coloured by flightline • Procedure to view 3D visualization • Procedure to view point cloud profile
17:00 - 17:30	• Feedback / Questionnaires • Q&A

Cancellation Policy

IEM reserves the right to postpone, reschedule, allocate or cancel the course. Full refund less 30% if cancellation is received in writing more than 7 days before start date of the event. No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with prior notification and substitute will be charged according to membership status.