

## ORGANISER



## CO-ORGANISERS



### Attn to:

### 2-days Seminar on “Technical Talk On MSMA 2<sup>nd</sup> Edition Using MES Software”

Date: Refer to Flyers

Time: 9.00 am – 6.00 pm

Venue: Refer to Flyers

**BEM Approved**  
**Total CPD Hours: 13**  
**Ref No: IEM12/PP/034/S**  
**& IEM12/PP/035/W**

Registration Fee	RM100.00 per day	RM80.00 per day (Early bird, before 6/9/2012)
------------------	------------------	--

(Note: The CPD hour 6.5 per day)

### Synopsis:

The seminar introduces participants to the application of the latest urban drainage design procedure gazetted by the Government in 2012 - the *“Urban Stormwater Management Manual for Malaysia” @ MSMA 2<sup>nd</sup> Edition* published by the *Department of Irrigation and Drainage*. Also, the seminar provides C&S consultants an insight on how the latest civil software applications can improve and simplify the design process. By mastering these user-friendly and straight forward software, design engineers may save up to 80% computation time. Topics that will be elaborated include BIOECOD System, OSD & Detention Pond and also **JPS Plan Submission** base on MSMA 2<sup>nd</sup> Edition.

### Speakers:

MSMA 2<sup>nd</sup> Edition Main Contributor:



Prof. Dr. Nor Azazi Zakaria  
 Director of REDAC, USM

MSMA 2<sup>nd</sup> Edition Contributor:



Engr. Chang Chun Kiat  
 Research Officer of REDAC, USM



Engr. Leow Cheng Siang  
 Research Officer of REDAC, USM

### Seminar Schedule:

Day 1 (20 <sup>th</sup> September, Thursday)	
9.00am	Opening speech
9.10am	<b>An overview of MSMA 2<sup>nd</sup> Edition</b>
10.15am	Tea Break
10.30am	<b>BIOECOD System: Sport Field Design &amp; MES-BioFD Introduction</b>
11.45am	<b>JPS Technical Talk (JPS Plan Submission)</b>
1.00pm	Lunch
2.00pm	MiTS Demonstration
2.45pm	OSD Design Based On MSMA 2
4.00pm	Tea Break
4.15pm	Detention Pond Design Based On MSMA 2
5.30pm	Software Promotion
6.00pm	End of session

Day 2 (21 <sup>st</sup> September, Friday)	
8.30am	Trainees' laptop setup
9.00am	1. MES-BioFD Workshop (MSMA 2)
10.15am	Tea Break
10.30am	2. MiTS Workshop – DraNet (MSMA 2) 3. MiTS Workshop – PondCAD (MSMA 2)
12.30am	Lunch
1.30pm	4. MiTS Workshop – MES Road 5. MiTS Workshop – EW3D
3.30pm	Tea Break
3.45pm	7. MiTS Workshop – SewNet 8. MiTS Workshop – LoopWin Plus 9. MiTS Workshop – Clash Analysis
5.00pm	Q&A session
5.30pm	End of session

## Urban Storm Drainage Engineering:

1. BIOECOD System – You will learn to design sport field by using MES software.
2. Detention Basin design - You will learn about the principle of level pool routing and how to apply this in the design of a detention basin.
3. On-Site Detention (OSD) - You will learn how to design OSD to meet the requirements of *MSMA 2*.

## MES Infra Integrated Total Solution (MiTS) consists of:

### 1. **MES-Road** (Road & Highway)



- Comply with Road Engineering Association of Malaysia (REAM).
- Road and Highway Analysis, Design and Detailing software.
- Horizontal alignment design.
- Vertical alignment design.
- Road width design.
- Junction design.

### 2. **EW3D** (Earthworks 3D)



- Earthworks 3D Analysis and Design software.
- Analysis methods: Digital Terrain Method and Grid System.
- 3D visualization before and after development
- Auto generates:
  - Longitudinal sections
  - Cut/fill reports
  - Volume and quantity take off
  - Sloping and berm generation with different cut/fill ratio
- Auto balancing of cut and fill volume.

### 3. **SewNet** (Sewerage Network Design)



- Graphical manholes and pipes input with the latest GUI technology.
- Auto calculates Population Equivalent (PE).
- Auto proposes:
  - Pipes diameter
  - Gradient
  - Invert level
  - Drop manhole
- Auto generates
  - Graphical outputs needed by IWK.
  - Longitudinal section
  - Quantities take off.
- Partial or full flow design.

### 4. **LoopWinPlus** (Water Reticulation)



- Comply with Malaysia Local Authorities requirement.
- Apply Hardy-Cross method and Hazen-Williams formula.
- Graphical nodes and pipes input with the latest GUI technology.
- Looping and branching design for peak flow and fire flow.
- Auto calculates
  - Water demand for each node
  - Economical pipes diameter
- Auto generates
  - Graphical outputs with all information needed by local authorities (LAP, SATU, etc)
  - Longitudinal section
  - Quantities take off
- Multiple tapping points and networks design.
- Critical Node Indication.

### 5. **PondCAD** (MSMA 2)



- Comply with Malaysia Urban Stormwater Management Manual 2<sup>nd</sup> Edition (MSMA 2).
- Consists of:
  - IDF
  - On Site Detention (OSD) – above or below ground
  - Detention Pond
  - Rain Water Harvesting
  - Sediment Basin – wet or dry basin
- Covers :
  - Rainfall IDF
  - Temporal Pattern and Time Area Method
  - Rational Method
  - Level Pool Routing
  - Pond sizing with detailing
  - Outlets design
- Auto generates
  - Report and graphical outputs with all information needed by JPS.

### 6. **DraNet** (Drain Network Design)



- Comply with Malaysia Urban Stormwater Management Manual 2<sup>nd</sup> Edition (MSMA 2).
- Graphical sumps and pipes input with the latest GUI technology.
- Auto design drain channels for open drains and culverts.
- Auto proposes:
  - Cascading drain
  - Drain sizes
  - Catchment areas
  - IDF intensities
  - Run-off coefficients
  - Gradients
  - Invert levels
- Auto generates
  - Graphical output needed by JPS.
  - Longitudinal section
  - Quantities take off



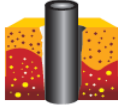


**New MES Software to try out:**



➤ **MES-BioFD**

- The 1<sup>st</sup> Bio-filtration Subsurface Drainage System design software by using drainage cell.
- State-of-art technology that in collaboration with REDAC (USM).
- Prevent ponding on sport field surface after raining period.
- Control both the quality and quantity of stormwater.
- Provide safer, more economical and eco-friendly sport field design.
- Auto generate graph and detailing that can be exported to MS Office or CAD application (AutoCAD) for submission.



➤ **MES-GeoF**

- The soil profile and geotechnical foundation analysis software that in collaboration with JKR Selangor.
- Generate soil profile from borelog report that can be imported from excel file.
- Trace column load drawing and generate calculation based on it.
- Able to view and compare the foundation analysis of different sizes, type and capacity.
- Supported pile types include circular pile, square pile and pad footing; sizes provided are based on local manufacturer's availability.

**REPLY SLIP**

**Sales & Support Office:**

13A, Jalan Kenari 2, Bandar Puchong Jaya, 47100 Puchong, Selangor.

**Tel:**

03-5885 1250

**Fax:**

03-5885 1251

**Seminar on "Technical Talk On MSMA 2<sup>nd</sup> Edition Using MES Software"**

I would like to participate for the above briefing on **20<sup>th</sup> & 21<sup>st</sup> September 2012 (Thursday & Friday)** (\*\*Please select your participation besides the name). Enclosed herewith a crossed cheque No./Ref. No ..... for the amount of RM ..... issue in favour of "MES Innovation Sdn Bhd" (MBB: 5-12343-54675-0) and crossed "A/C Payee only". I understand that the fee is not refundable if I withdraw after my application is accepted by MES Innovation Sdn Bhd but substitution of participants will be allowed. If I fail to attend the visit, I will still settle the registration fee in full.

Company: .....

- Name : 1.) ..... ( Day 1 / Day 2 / 2 Days )
- 2.) ..... ( Day 1 / Day 2 / 2 Days )
- 3.) ..... ( Day 1 / Day 2 / 2 Days )
- 4.) ..... ( Day 1 / Day 2 / 2 Days )
- 5.) ..... ( Day 1 / Day 2 / 2 Days )

Contact Person: ..... Tel/Hp. No. : ..... Date: .....

Email Address: ..... Signature : .....

*(Please bring along this flyer for confirmation of attendance)*