

## EFDC\_Explorer7.3 - Level 2 Training Course Agenda

### Water Quality Modeling and Oil Spill Modeling

8-10 July, 2015 – Seoul, Korea

Note that this training course is Level 2 and assumes a basic understanding of the EFDC\_DSI / EFDC\_Explorer Modeling System. Those people who wish to participate that have never used EFDC\_Explorer are encouraged to work through the online video tutorials and example models available on our website. For more information please contact us at: [ee\\_training@ds-intl.biz](mailto:ee_training@ds-intl.biz)

Day 1 – Session 1	Welcome, Introduction Introduction to EFDC/EFDC_Explorer7.3 Modeling System Installation of EE7.3, CVLGrid1.0 and Copying Training Course files.
Day 1 – Session 2	Introduction and hands on with CVLGrid1.0 Overview of EFDC Model Theory
Lunch Break	
Day 1 – Session 3	Introduction to River1D Model Hands On – Building a 1D Grid with Conservative/Non-cons. Dye for WQ
Day 1 – Session 4	EFDC_Explorer WQ (Water Quality) Interface Hands on – 1D Water Quality Model
Day 2 – Session 1	EFDC WQ Theory Hands on – 1D Water Quality Model (Continued)
Day 2 – Session 2	Introduction to 3D Coastal Model Hands on - Construct Grid for 3D Coastal Model
Lunch Break	
Day 2 – Session 3	Hands on – Building 3D Coastal Hydrodynamic and WQ Model
Day 2 – Session 4	Hands on – Building 3D Coastal Hydrodynamic and WQ Model (Continued)
Day 3 – Session 1	Q&A Time to Discuss Users Models (based on attendees requirements)
Day 3 – Session 2	Lagrangian Particle Tracking and Oil Spill Modeling Theory Hands On – Oil Spill Modeling
Lunch Break	
Day 3 – Session 3	Hands On – Oil Spill Modeling (Continued)
Day 3 – Session 4	Optional Topics based on User Requests (as time permits) Presentation of Certificates

## **Level 2 Water Quality and Oil Spill Modeling Course Objectives**

Objective 1: Overview of EFDC/EFDC\_DSI Water Quality Capabilities

- EFDC Water Quality Theory
- EFDC Data Structure, Initial Conditions, Boundary Conditions

Objective 2: Overview of EFDC\_Explorer Water Quality Capabilities

- EFDC Data Structure, Initial Conditions, Boundary Conditions
- EE User Interface for Water Quality Modeling
- Building and assigning WQ initial and boundary conditions
- Introduction to the Sediment Diagenesis Sub-Model (if time permits)

Objective 3: Hands on Modeling Practice

- Hands on with EFDC\_Explorer/ EFDC\_DSI Modeling System
- Creating models
- Providing solutions to user problems

Objective 4: Introduction to Lagrangian Particle Tracking and Oil Spill EFDC\_DSI sub-model

- LPT and Oil Spill Theory
- Key Aspects of Oil Spill model setup and implementation