



**2EN** Εναλλακτική Ενεργειακή Α.Ε.

μελέτες και εφαρμογές ανανεώσιμων πηγών ενέργειας

Η **Εναλλακτική Ενεργειακή Α.Ε.**  
σε συνεργασία με την **Windsim A.S.**  
**διοργανώνει** για δεύτερη χρονιά,  
**εκπαιδευτικό σεμινάριο** στην χρήση του λογισμικού

*windsim*

★ Το σεμινάριο θα πραγματοποιηθεί στην Αγγλική γλώσσα

**A κύκλος: The Basics**

12-13 Μαρτίου 2012

**B κύκλος: Advanced Usage & Concepts**

14-15 Μαρτίου 2012

**ΜΕΙΩΣΤΕ**  
**ΤΗΝ**  
**αβεβαιότητα**



**ΜΕΙΩΣΤΕ**  
**ΤΟ ΡΙΣΚΟ**

**Πληροφορίες - Δηλώσεις συμμετοχής:**

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## The Basics

Our basic course focuses on the advantages—but also the challenges—of applying CFD techniques to wind energy projects. After the course, you will be able to work efficiently with WindSim and be able to evaluate the quality of the results—with a certificate to prove it. No prior knowledge about WindSim or CFD is required.

### Course Content

- A brief look at WindSim's history
- A brief look at CFD
- WindSim installation
- Terrain module: Generation of a 3D model
- Tools: Terrain data conversion
- Wind Fields: Establish the numerical wind database
- Objects: Wind farm layout
- Tools: Climatology data conversion
- Results: Interpretation of the simulations, 2D results
- 3D Visualization: Interpretation of the simulations, 3D results
- Tools: Vertical profiles, 1D results
- Wind Resources: The wind resource map
- Energy: The annual energy production (AEP)
- Tools: The IEC standard
- Tools: Animations

## Advanced Usage & Concepts

You'll work along with other savvy WindSim users while guided by skilled instructors who will help you sharpen and expand your WindSim skills. And, you'll gain the insight you need to meet your project-specific challenges. After the course, you will be able to leverage many of the advanced features and powerful functionality of WindSim—with a certificate to prove it. Prior knowledge about WindSim or CFD is highly recommended.

### Course Content

- New developments
- Another look at CFD
- Terrain module: Obstacles, forest, porous disc
- Tools: Terrain data conversion
- Bringing my own data into action
- Turbulence modelling
- IEC criteria
- Optimizing Park Design
- On the Sensitivity of Numerical Wind Field Modelling
- Objects
- Climatology data: time history versus frequency distribution
- Wind Resources and Energy
- Sector interpolation
- Power history export
- Mesoscale coupling with temperature handling – How and why

