

## OpenFOAM Training Course

### Day 1 (9:00 – 14:00 and 15:00 - 18:00)

1. Introduction to OpenFOAM
2. Initial Case: Vena Contracta
3. Introduction to VOF: Green Water Loading

### Day 2 (9:00 – 14:00 and 15:00 - 18:00)

1. Introduction to IHFOAM (1.0)
2. Wave Generation and Absorption Boundary Conditions
3. Dynamic Mesh Refinement
4. Usage of the Boundary Conditions
5. Coastal Processes: Run-Up on a Beach
6. Practical Exercise I

### Day 3 (9:00 – 14:00 and 15:00 - 18:00)

1. Simulation of a Vertical Breakwater
2. Introduction to Mesh Movement: Sloshing Tank
3. 6DOF Floating Body Simulation
4. Introduction to IHFOAM (2.0)
5. Simulation of a Porous Dam Break
6. Practical Exercise II

### Day 4 (9:00 – 14:00)

1. Simulation of a Rubble-Mound Breakwater
2. Q&A
3. Practical Exercise III