



## Course ID: 12d – 1F

### Half Day – Flood Modeling

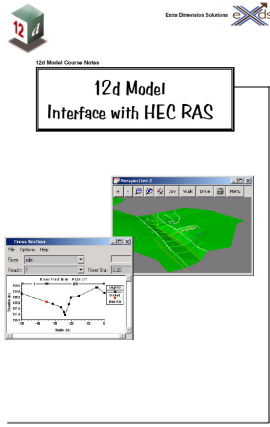
#### Summary:

This session is intended for users with some knowledge of 12d Model, who wish to use 12d Model to create HEC-RAS projects, and to display the results of the HEC-RAS analysis.

#### Prerequisites:

Experience in 12d Model with completion of the One Day – Introduction to 12d Model Software (12d – 1A) or working through the “Getting Started for Design” manual is required.

#### Course Contents:

 <p>12d Model Course Notes <b>12d Model Interface with HEC RAS</b></p>	<h4>12d Model HEC RAS Interface</h4> <p>Instruction will be given in the use of HEC-RAS as a flood analysis tool, however this course is not a substitute for the 2 day courses in HEC RAS run at the UTS.</p> <p>The course will cover:</p> <ul style="list-style-type: none"><li>• Reading survey data into 12d Model, and triangulating that data to create a surface. Inspecting contours, and determining the location of overbanks.</li><li>• Locating cross sections along the channel (both manually, and automatically).</li><li>• Using 12d Model to create a HEC-RAS "Project".</li><li>• Using HEC RAS to determine flood water levels along the channel.</li><li>• Adding "Interpolated" cross sections in HEC-RAS and reading these back to 12d Model.</li><li>• Reading the flood water levels back into 12d Model, and forming a water surface. The use of "Shape" strings, and HEC-RAS "Interpolated" sections.</li><li>• Creating depth contours, and colouring the water surface by depth.</li><li>• Creating a Perspective view of the channel, showing the area of inundation</li><li>• Plotting longitudinal profiles, and cross sections of the channel.</li></ul> <p>As well as giving the user hands-on experience in the use of the 12d Model / HEC-RAS interface, this course will also explore the methods and assumptions that 12d Model uses when exchanging data with HEC RAS.</p>
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Please note the content for all EXDS training is the use of 12d Model Software, EXDS does not teach civil and surveying principles.

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