



Area of expertise: Composites

Academic studies: Aerospace engineering



Christian Liebold
DYNAmore

Short/Long Fibre Reinforced Composites

Course Objective

As advances in technology have progressed the use of more and more short and long fibre reinforced plastic materials are used to manufacture components within the automotive industry as well as aircraft parts etc. This course will cover:

- › Introduction to composite materials
- › Explanation of anisotropy and direction definitions
- › Material modelling
- › Evaluation of process simulation results
- › Homogenisation strategies
- › Introduction to ENVYO® to close the simulation process chain for short fibre reinforced composites
- › Discussion of material models available in LS-DYNA for short fibre reinforced composite modelling.

The aim of this course is to demonstrate how new material models in LS-DYNA can be used to help reduce the cost of manufacturing using special manufacturing techniques. The problem is that the quality of these products depends heavily on the manufacturing process and as a result some will be weaker than others just due to the way it has been manufactured. In order to, try and regulate this more and more material models are becoming available in LS-DYNA to provide more accurate simulations, some of which have been developed by DYNAmore themselves. This course will introduce and discuss the material models available in LS-DYNA.

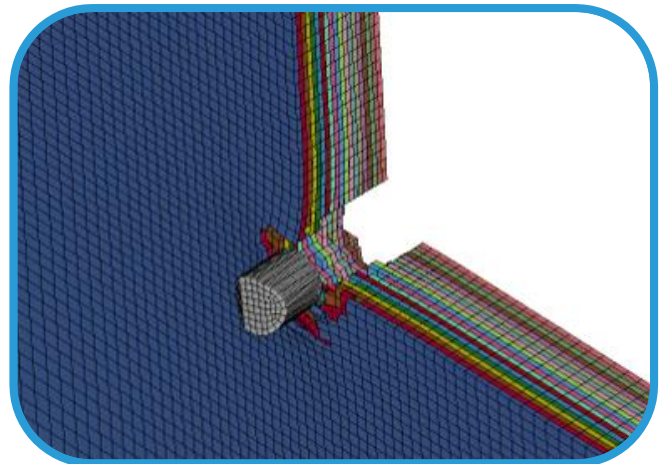
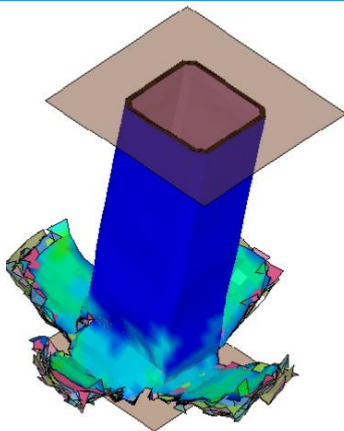
For who?

For engineers/designers who are looking at the design and manufacture of components using reinforced composite materials.

Extra details:

This course is delivered by DYNAmore.

PRICE: £ 400 + VAT



Location: The Arup Campus, Blythe Gate, Blythe Valley Park, Birmingham, Solihull B90 8AE