

Training Agenda: Day 1

Module 1: **Introduction to DIGIMAT**

This module briefly introduces DIGIMAT and will provide the user with some technical information on the way the program operates, e.g. licensing, file organization.

Module 2: **Digmat-MF**

Introduction to Digmat-MF, the mean-field homogenization module of the DIGIMAT software suite. The mean-field homogenization concept will be introduced as well as the material models available in DIGIMAT. Some guidelines and recommendations of use are also given.

Coffee break

Module 3: **Hands-on exercises**

These guided exercises will help the user get familiar with Digmat-MF. The user will learn how to reverse engineer the material properties of a PARAGF composite, based on partial knowledge of its tensile response. He (She) will also observe how the microstructure of the material affects its macroscopic response.

Lunch

Module 4: **Digmat-MX**

Introduction to the capabilities of Digmat-MX, in particular the database structure and the reverse-engineering capability. General user's procedure and workflow to perform a reverse-engineering will be introduced.

Module 5: **Hands-on exercises**

Guided exercises will help the user getting familiar with Digmat-MX. The user will learn how to reverse engineer the material properties of a PAGF in an automated way using the built-in optimization engine of Digmat-MX. He (She) will also observe how to use the material database provided in Digmat-MX.

Module 6: **Conclusions and Q&A**

An open discussion between the users and e-Xstream's staff will allow the former to clear up the last dark zones that may remain after this first day of training.

Training Agenda: Day 2

Module 1: **Digmat to CAE**

Introduction to the capabilities of Digmat to CAE, the definition of failure criteria and the parallel computation capability. General user's procedure and workflow will be introduced to the user.

Coffee break

Module 2: **Map**

The mapping module of the DIGIMAT software suite will be presented to the user, showing him (her) how orientation tensors, initial stresses/temperatures can be mapped from one mesh onto another one. Some theoretical aspects of the mapping procedure will be broached as well.

Lunch

Module 3: **Hands-on exercises**

The user will be guided through the complete procedure necessary to setup a model ready for a coupled analysis Digmat to CAE analysis, from the material definition to the FE model update, after having mapped the orientation tensors from the injection mesh onto the structural mesh.

Module 4: **Conclusions and Q&A**

An open discussion between the users and e-Xstream's staff will allow the former to clear up the last dark zones that may remain after this one-day training.