

MESHFREE – Advanced

Virtual course

https://www.meshfree.eu/en/events.html



Course content

Using water management of vehicles as an example, participants will learn selected advanced features.

Lectures and practical exercises will alternate. The following topics will be elaborated.

- Movement of geometrical parts (driving movement of a car, fluid-structure-interaction)
- Anisotropic porosity (e.g., for engine compartment components)
- Generation of droplets
- Options for performance enhancement (adaptive refinement of flow domain, feeder-cutter-principle)
- Postprocessing options (e.g., flux measurement, mapping of quantities onto geometries)

Prerequisites

Successful completion of the "Introduction to MESHFREE" course or the <u>"Getting Started > Basics"</u> in the MESHFREE documentation is a mandatory prerequisite for this course.

Technical aspects:

- Participants need a PC or laptop with (integrated) webcam as well as microphone and loudspeakers (a headset would be optimal).
- MESHFREE as well as ParaView must be installed on the participants' PC or laptop in a Linux-based system (real or virtual machine). *MESHFREE is currently compiled on Red Hat Enterprise Linux 7 and OracleLinux 8.*

Video conference tool

We will use Microsoft Teams for communication. For this, we will create a team solely for this course that participants will be added to by email address. Specific topics and questions can be discussed on separate channels if needed.



Course language

English

Course instructor

MESHFREE team (Fraunhofer ITWM)

Course duration

Two half days of training, each from 9:00 to 13:00.

All times in UTC+2:00 from last Sunday in March to last Sunday in October, UTC+1:00 from last Sunday in October to last Sunday in March.

Registration

Please register bindingly via mail to <u>support@meshfree.eu</u> up to two weeks before the course date.

The course will only take place if there are at least four binding registrations.

Please note that export control must be carried out for non-German participants/organizations.

Course fees

None

Keep up to date on the planning of future courses without obligation via the following mailing list: <u>meshfree-training-interest@itwm.fraunhofer.de</u>

Please contact us to be included.