3D INNOVATION LAB | HU HUMANITAS UNIVERSITY

Innovation. Compliance. Care.

materialise
innovators you can count on

Mimics Course Milano

Interactive Software Workshop: Medical Image Segmentation and Patient-Specific Design Course Using Materialise Mimics and 3-matic – HUMANITAS

Dates: February 24-25, 2027	**Venue:** Innovation Building, Humanitas University, Pieve Emanuele (MI), Italy

About the training



About this course

- Dates: February 24 -25, 2027
- Partecipation fee: 220€ (VAT excl.)
- Lunch is included in the price



Practical Information

- Venue: 3D Innovation Lab, Humanitas University, Pieve Emanuele (MI)
- Language: English
- Please bring your own laptop (avoid MacBooks if possible)



Participation requirements

No prior knowledge of Mimics is necessary to participate



Certification

Upon completion of the course you will receive a certificate of participation.

Trainers



Roxana Yousefnezhad
Application Engineer, Materialise



Angelika Thorne
Application Engineer, Materialise

Program: Day 1

Time (CEST)	Session
9:00 - 9:30 am	Registration and Course Introduction
9:30 - 10:15 am	Introduction to Materialise and the Mimics Platform
10:15 - 11:15 am	Introduction to Mimics: Basic Bone Segmentation (Metal Noise Reduction in a CT Scan, Nerve Tracking)
11:15 - 11:45 am	Advanced Segmentation Techniques and Mask Editing (Metal Noise Reduction in a CT Scan, Nerve Tracking)
11:45 am - 12:15 pm	3D Model Generation and STL Optimization (STL Fixing)
12:15 - 1:00 pm	Humanitas 3D Innovation Lab Presentation and Facility Tour
1:00 - 2:00 pm	*Lunch Break*
2:00 - 2:30 pm	Model Analysis and Measurements
2:30 - 4:00 pm	Soft Tissue Segmentation and Preparation of an Anatomical Model for Additive Manufacturing
4:00 - 4:15 pm	*Coffee Break*
4:15 - 5:30 pm	Virtual Planning And Design of a Patient-Specific Surgical Drill Guide
5:30 - 6:00 pm	Wrap-up

Program: Day 2

Time (CEST)	Session
8:00 - 9:00 am	Welcome
9:00 - 10:00 am	Virtual Surgical Planning: Osteotomies, Mirroring and Repositioning of Bone Fragments
10:00 - 10:15 am	*Coffee Break*
10:15 - 11:45 am	Designing a Benchtop Model for Additive Manufacturing (vessels, hollow structures, flow connectors, base and supports)
11:45 am - 1:00 pm	Emerging Technologies in Healthcare: AI, Automation, and Augmented Reality
1:00 - 2:00 pm	*Lunch Break*
2:00 - 2:30 pm	Scripting for Faster and Automated Design Workflow
2:30 - 4:30 pm	Structural Heart Workflow: Segmentation (manual / semi-automatic / automatic) and Design of a Walled Heart Model for 3D printing
2:30 - 4:00 pm	Soft Tissue Segmentation and Preparation of an Anatomical Model for Additive Manufacturing
4:30 - 4:45 pm	*Coffee Break*
4:45 - 5:30 pm	Final Session at the 3D Innovation Lab – Hands-On Session Using Guides Designed by Participants and Printed Overnight
5:30 - 6:00 pm	Q&A Session, Discussion of Results CLOSING