

1 Description of Mimics software

Materialise's Interactive Medical Image Control System (MIMICS) Student Edition is a software tool for education in biomedical engineering and other sciences. Mimics Student Edition visualizes and segments medical images (such as CT and MRI) and renders 3D objects.

Together with the Mimics Student Edition, biomedical and other datasets relevant in education are provided. These datasets contain stacks of 2D images and can be used for numerous applications of Engineering on Anatomy including measuring, designing, modeling and 3D printing.

Mimics Student Edition enables users to control and correct the segmentation of medical images such as CT and MRI-scans. A trained software user can easily and accurately define 3D models for visualization and/or production. The software also provides a way to remove image artifacts that may appear due to a patient's metal implants.

Additional modules provide more extensive capabilities such as the ability to perform CAD operations (for designing custom prosthesis or optimizing new devices based on image data) or preparing finite element meshes.

2 Indications for use

Mimics Student Edition (hereafter 'Mimics SE') is intended for academic educational purposes only. It is intended as a software interface and image segmentation system for the transfer of imaging information from a variety of imaging sources to an output file. It is also used as software for simulating, measuring and modeling in the field of biomedical research. "Mimics SE" must not be used, and is not intended to be used, for any medical purpose whatsoever. Usage of the software signifies your acceptance of the above.

3 Best-practice tips and precautions

Be advised that the quality of medical images determines the accuracy of the 3D model in Mimics. Scanning protocols are left to the discretion of the user; however, we recommend that industry standards are referenced and followed.

Please be aware that the Dicom coordinate system is reset for each Dicom series originating from all Hitachi scanners and from Siemens Symphony, Sonata and Harmony scanners with software versions older than Syngo MR B13.

Mimics displays measurements with 4 digits behind the decimal point. Accuracy of measurements is limited by the pixel size of the images.

4 Instructions for use

4.1. Starting Mimics

After installing the software on your PC, double click the Mimics icon for the Student Edition on your desktop. You may also click on the **Start Button → All Programs → Materialise → Mimics Student Edition** to begin.

Materialise software is protected by a key file. When you start Mimics SE for the first time, you need to connect to a floating license server. Please contact your license administrator for the correct floating license server. Your license administrator is also responsible in case of expired licenses or license problems. Mimics Student Edition requires permanent network connectivity with the floating license server.

4.2. Minimum system requirements

Software	Hardware
Windows® 10 version – 64bit	Third generation Intel® Core™ i3 or equivalent
Internet Explorer® 11 or equivalent	8 GB RAM
PDF viewer	DirectX® 11.0 compliant graphics card with 1GB RAM
.NET framework 4.6.1 (or higher)	15 GB free hard disk space

Note: Mac® users can install the MIS using Boot Camp® in combination with a supported Windows OS.

4.3. Preferred system requirements

Software	Hardware
Windows® 10 version – 64bit	Third generation Intel® Core™ i5/i7 or equivalent
Internet Explorer® 11 or equivalent	16 GB RAM
PDF viewer	DirectX® 11.0 compliant AMD Radeon/NVIDIA GeForce® card with 2GB RAM
.NET framework 4.6.1 (or higher)	20 GB free hard disk space
	Resolution of 1920x1080 or higher

Note: Other qualifications may apply. When working with datasets larger than 1GB the system should comply with the recommended system requirements. Advanced segmentation tools such as Smart Expand and Coronary segmentation require hardware as specified in the recommended requirements even for smaller datasets.

It is recommended to use our software within a hardware and/or network environment in which cyber security controls have been implemented including anti-virus and use of firewall.



5 Manufacturer contact details



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