



# Second Edition of Summer School on Medical Imaging (SuSMI - 2026)

<https://sites.google.com/iitdm.ac.in/susmi-2026>

**June 15-19, 2026**

## About IITDM Kancheepuram

Indian Institute of Information Technology, Design and Manufacturing (IIITDM), Kancheepuram is a Centre of Excellence for technical education and research established in 2007 by the Ministry of Education, Government of India. To pursue design and manufacturing-oriented engineering education and research and for promoting the competitive advantage of Indian products in global markets. The Institute is presently offering UG, PG, and Ph.D. programs in Computer Engineering, Electronics and Communication Engineering, and Mechanical Engineering. More details at [www.iitdm.ac.in](http://www.iitdm.ac.in)

## About SuSMI 2026

SuSMI 2026 (Second Edition) is a premier summer school aimed at fostering innovation in clinical imaging procedures, machine learning applications, image processing algorithms, image capture techniques, quantum techniques, AR and VR techniques, imaging modalities etc. Through practical practice with cutting-edge tools and software, participants develop both theoretical understanding and practical abilities. Building on the success of its inaugural edition SuSMI 2025, SuSMI 2026 brings together researchers, academicians, industry experts, and policymakers to explore transformative solutions for a sustainable future. These programs frequently encourage multidisciplinary learning through expert lectures, interactive seminars, and group projects. A medical imaging summer school equips participants to support healthcare innovation and research by tackling practical issues in medical diagnosis and treatment planning.

## Topics to be covered

- Foundations of Medical Imaging: Basics of image formation and acquisition, Physics and principles behind imaging modalities: X-ray, CT, MRI, Ultrasound, PET, and SPECT, Overview of radiology and its clinical applications
- Image Processing and Analysis: Preprocessing techniques: noise reduction, filtering, and contrast enhancement, Image segmentation, classification and regression methods.
- Advanced Techniques and Trends: Machine learning and deep learning in medical imaging, 3D and 4D imaging, Multi-modal imaging
- Applications in Medicine: Imaging in oncology: tumor detection and staging, Cardiovascular imaging: heart and blood vessel analysis, Neurological imaging, etc.
- Emerging Technologies: Role of Quantum computing and nanotechnology in future imaging, Quantum Machine Learning, Hybrid imaging systems and wearable imaging devices, Applications of augmented reality (AR) and virtual reality (VR) in imaging.
- Hands-On Sessions: Practical sessions with imaging software (e.g., MATLAB, Python libraries, or proprietary tools), Case studies and problem-solving using real-world datasets, Demonstration of AI-based diagnostic tools.
- Ethical and Regulatory Aspects.

All lectures will be handled by the experts from IITs, IIITs, NITs, Industry and Regulatory bodies.

**Registration Fees:** ₹2500 approx. (INR) for Students (UG/PG/PhD), ₹4000 approx. (INR) for Faculty & Industry. The prices are inclusive of GST. The registration fees cover breakfast and lunch throughout five days of the school. The seats are limited to about 60. The registration is based on first-cum-first basis. For any clarification, please write to [susmischool@gmail.com](mailto:susmischool@gmail.com)

### Registration fees need to be paid to following account

Name of the Account: IIITDM IEEE ACCOUNT

Account Number: 6597898204

Bank and Branch: Indian Bank, Nallambakkam, IFSC Code: IDIB000N056

**Accommodation:** The in-campus accommodation can be provided based on the availability in the hostel.



Scan for more details

### Facilitators and Contact details:

**Dr. Priyanka Kokil**  
Associate Professor

**Dr. Uttam Pal**  
Assistant Professor

**Dr. Gowri A**  
Assistant Professor

**Dr. Tejendra Dixit**  
Assistant Professor

Department of Electronics and Communication Engineering, IIITDM Kancheepuram, Chennai 600127, India

Email: [susmischool@gmail.com](mailto:susmischool@gmail.com), Contact number: 9344998831