

# GUJARAT TECHNOLOGICAL UNIVERSITY

## Biomedical Engineering

### M.E. Semester: II

Subject Name: **Advanced Biomedical Imaging**

Sr. No.	Course Content
1.	X-ray and Digital Radiography
2.	Computed Tomography
3.	Scintigraphy
4.	Single Photon Emission Computed tomography
5.	Positron Emission Tomography
6.	Photoacoustic Imaging
7.	Magnetic Resonance Imaging
8.	Functional Magnetic Resonance Imaging
9.	Magnetic Resonance Spectroscopy
10.	Magnetic Particle Imaging
11.	Ultrasound Imaging
12.	Thermal Imaging
13.	Diffusive Optical Imaging
14.	Biomedical Imaging at Nano Scale

## Reference Books:

1. Biomedical Imaging Karen M. Mudry, Robert Plonsey, Joseph Bronzino, CRC Press, 2003
2. Introduction to Biomedical Imaging Andrew Roy Webb, Wiley, 2003
3. Fundamentals of medical Imaging Paul Suetens, Cambridge University Press, 2002
4. Biomedical Imaging, visualization, and analysis Richard A. Robb, Wiley-Liss, 2000
5. Biomedical Imaging Feng Lin, Malini Olivo, Sun-Yuan Kung, Springer, 2009