

Academics

1. Subjects Taught

M.Tech (BMSP & I)

1. Theory and design of biomedical instruments
2. Biomedical instrumentation
3. Clinical Instrumentation 1
4. Clinical Instrumentation II

BE (IT)

1. Communication systems
2. Instrument transducers
3. Linear IC's
4. Data converters
5. Process control
6. Optical Instrumentation
7. Signal conditioning circuits
8. Pneumatic instrumentation
9. Biomedical instrumentation
10. Automobile Instrumentation
11. Analog and digital communication
- 12.

2. List of short-term courses/ National level Technical symposium conducted

- National level workshop on "Laboratory Equipments Operation and Maintenance for Technical staff" 25th to 29th April 2016

3. U.G. Project Guided: 31 M.Tech Project Guided: 25

List of M.Tech Projects Guided

1. One- dimension & two-dimension signal compression using wavelet transform.
2. Wavelet based denoising of bio-medical signal & images.
3. Characterization of Z-axis hydraulic vibration platform
4. "Neuroprosthesis"- Development and evaluation of functional electrical stimulator (FES), clinical application in incomplete spinal cord injury & stroke patients for the correction of drop-foot.

5. Pap smear test to detect cervical cancer at its early stage.
6. Computer based estimation of sat extension in the abdomen using MRI images.
7. Low-cost pulse oximeter.
8. Design of Receiver circuitry for ultrasound scanner.
9. Segmentation of soft exudates and detection of early perfusion problems in screening of diabetic retinopathy
10. Porting the source code of Electro Surgical unit from Compass embedded C compiler to Keil embedded C compiler.
11. Thyroid Disease Diagnosis using Hierarchical Neural network.
12. Medical image retrieval based on neighbourhood color moment histogram
13. Effect of phoneme and variation of formants at different speaking rates
14. Face recognition using function based analysis
15. Detection of micro calcification in mammogram images using probabilistic neural network
16. Detection of lever injury in CT images
17. ECG feature extraction and classification of arrhythmia using SVM classifier
18. Automatic speaker recognition system for kannada language using mel frequency cepstral coefficients (MFCC) and artificial neural network(ANN)
19. Seizure detection and noise cancellation in electroencephalaogram
20. Design and classification of velopharyngeal closure based on cineradiographic images
21. Regional language based robot for bio-medical applications
22. Medical information security by steganography and cryptography
23. Conversion of English text-to speech with increasing intelligibility
24. Multi-Parameter patient monitoring system for health kiosk
25. Fingerprint Recognition System