

# Digital Signal Processing & Digital Image Processing

## Laboratory

Lab Area: 132.25 Sq.m



### Digital Signal Processing

For the course on digital signal processing various signal processing operations are performed using MATLAB® with signal processing toolbox. Emulations can be done using DSP Starter Kit which are TMS320C5416, TMS320C6711 and TMS320C6713. This lab is equipped with 40 computers and 1 server. Embedded tool kit of Labview 12 SP1 is used to process various digital signals.

### Digital Image Processing

This course involves experiments for final year students on digital image processing. The course is a challenging mixture of mathematical theory and practical implementation issues. In practical session various algorithms such as negative of an image, arithmetic and logical operators, mirror of an image, thresholding of an image, histogram processing and histogram equalization, low pass filter, high pass filter, median filter are implemented in C language.

This laboratory has Spice Creator 10 users software for Digital, Analog & mixed schematic Design & Circuit Simulations. This laboratory has Circuit Creator 10 users software for schematic capture & PCB design & Layout. A well prepared manual is made available to students for ready reference. Department keeps on upgrading the laboratory at regular interval to cope up with relevant advancement occurring in the field. This laboratory has 18 Nos. of Acer Veriton Core i3 530, 2.93 Ghz, 500 GB, 4 GB DDR III Computer with MATLAB Software for Signal

Processing and Communication PG course & one printer.