

# K. RAMAKRISHNAN COLLEGE OF ENGINEERING (Approved by AICTE & Affiliated to Anna University) Tiruchirappalli - 621 112 Accredited by NAAC with 'A' Grade- ISO 9001: 2015 Certified Institution



### **DIGITAL SIGNAL PROCESSING LABORATORY**

Laboratory In- charge: Mrs.D.Dharini AP/ECE

Technical supporting staff: Mr.M. Hariharan





Snapshot of Digital Signal Processing Laboratory Area of the laboratory: 104.96 Sq.m



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#### **Major Equipment:**

- Personal Computer INTEL PENTIUM DUAL CORE
- DSP Starter Kits- TMS320VC5416
- MATLAB R2015a
- Cathode Ray Oscilloscope TXTR Interface using PT100 with ADC

#### **List of Experiments:**

- Generation of sequences (functional & random) & correlation using MATLAB
- Linear and Circular Convolutions using MATLAB
- Spectrum Analysis using DFT using MATLAB
- FIR Filter design, IIR filter and Multirate filters and equalization using MATLAB
- Study of architecture of DSP processor
- MAC operations using various addressing modes using DSP processor
- Linear, circular Convolution and FFT implementation using DSP processor
- Waveform generation, IIR and FIR implementation
- Study of Finite Word Length Effect

#### **Beyond the syllabus experiments:**

- Design of musical instrument tuning using filters
- Design of Composite Video Signal Processing using DM6437

#### **Utilization of the laboratory:**

• Digital Signal Processing Laboratory for III year ECE/V sem