Course Number and Name

BEC5L1 -DIGITAL SIGNAL PROCESSING LABORATORY

Credits and Contact Hours

2 and 45

Course Coordinator's Name

Dr B.Karthik

Text Books and References

Lab Manual

Course Description

- To implement Linear and Circular Convolution
- To implement FIR and IIR filters
- To study the architecture of DSP processor.

Prerequisites	Co-requisites
Object Oriented Programming & data Structures Lab	Digital Signal Processing

required, elective, or selected elective (as per Table 5-1)

Required

Course Outcomes (COs)

CO1 Experiment concepts of DSPand its applications usingMATLABSoftware

CO2 To understand about the basic signal generation

CO3 To learn Fourier Transform Concepts

CO4 To design FIR filters

CO5 To design IIR filters.

CO6 Demonstrate their abilities towards DSP processor based implementation of DSP systems

Student Outcomes (SOs) from Criterion 3 covered by this Course

COs/SOs	a	b	c	d	e	f	g	h	i	j	k
CO1	H	H		M	H	M			M		
CO2	L		M		H		M				
CO3	M				H		M		M	M	
CO4	M	M	M		H		M		M	M	
CO5	M	M	M		H				M		
CO6	L			M						H	

List of Topics Covered

1. Waveform generation
2. Sampling and its effect on aliasing
3. Linear and circular convolution
4. DFT computation
5. Fast Fourier transforms
6. FIR Filters Implementation
7. IIR Filters Implementation
8. Quantisation Noise.
9. Multirate Signal Processing
10 .DSP processor implementation.