



S.S.G.M.C.E. SHEGAON

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

**COURSE OUTCOMES OF ALL COURSES OF THE SECOND SEMESTER M.E.
(DIGITAL ELECTRONICS)**

2UMEF1- Digital Image Processing

After successfully completing the course, the students will be able to:

CO1	Understand and analyze basic terminology of digital image processing, elements of visual perception, image quantization, image types. Zoom operation, Basic gray level Transformations, Histogram Processing, etc
CO2	Examine and analyze various types of images, intensity transformations, and various spatial domain image transforms. Analyze Arithmetic and logic operations, spatial domain filtering, bit-plane slicing, median filter, color image processing, fundamentals, and color image models.
CO3	Examine and analyze the 2D Fourier transform and other frequency domain transformation and enhancement techniques. Examine and analyze the Image Restoration and Denoising models for image enhancement.
CO4	Evaluate and apply the methodologies for image segmentation, image Compression, and restoration etc. Analyze the image morphological techniques. Create a term/mini-project for practical applications to image processing.

2UMEF2- CMOS VLSI Design

After successfully completing the course, the students will be able to:

CO1	Build upon the theoretical, mathematical and physical analysis of digital VLSI circuits, for proper understanding of concept, working and analysis
CO2	Analyze the various analog integrated circuits

CO3	Analyse the various RF integrated circuits
CO4	Understand the various partitioning ,floor planning and placement algorithms in ASIC.

4UMEP1 / 2UMEF3- Parallel Computing

After successfully completing the course, the students will be able to:

CO1	Understand the concepts Parallel Computers, Data and Temporal Parallelism
CO2	Understand Pipelining and superscalar Techniques
CO3	Understand Parallel and scalable architectures
CO4	Understand Programming on Parallel Computers, Parallel Program Development and Environment

2UMEF4- Artificial Intelligent System

After successfully completing the course, the students will be able to:

CO1	Develop algorithms for supervised and unsupervised ANN
CO2	Implement the ANN concepts to solve real life problems
CO3	Analyze the ANN network.
CO4	Develop algorithms in fuzzy logic for applications such as pattern recognition
CO5	Implement the fuzzy logic concepts to solve real life problems.

2UMEF5- High Speed Digital System Design

After successfully completing the course, the students will be able to:

CO1	Understand fundamentals of transmission line , cross talk estimation and minimization.
CO2	Aware about non ideal interconnect issues and transmission line losses
CO3	Understand non ideal return paths , switching losses and different design methodology.
CO4	Know about the buffer modelling , timing analysis and high speed measurements techniques .