



Course: M.Tech	Name of Faculty: Arun A. Balakrishnan
Topic: ELE 3203 – Digital Image Processing	Semester: II
Lecture Hall: 118	Timings: Slot A= A1+D2'

Week and date	Lecture topics	Assignments	Remarks
Week 1: Jan 3-6	Fundamentals of Digital Image Processing		
Week 2: Jan 9-13	Image enhancement – Enhancement by Point Processing, Spatial Filtering	<i>Assignment-1</i>	
Week 3: Jan 16-20	Frequency Domain Filtering, Colour Image Processing		
Week 4: Jan 23 - 28	Wavelet Transforms - 1D and 2D - fundamentals	<i>Assignment-1 submission</i>	
Week 5: Jan 30 – Feb 3	Degradation Models, Algebraic approach to Restoration		
Week 6: Feb 6 - 10	First Internals		
Week 7: Feb 13 - 18	Inverse Filtering, Wiener Filter, Constrained Least Squares and Interactive Restoration	<i>Assignment-2</i>	
Week 8: Feb 20 - 24	Restoration in Spatial Domain, Geometric Transformation		
Week 9: Feb 27 – Mar 3	Error-Free Compression, Lossy Compression - Lossy Predictive Coding		
Week 10: Mar 6 - 10	Transform Coding, Wavelet Coding	<i>Assignment-2 submission</i>	
Week 11: Mar 13 - 17	Lossless Compression - Variable Length Coding, Arithmetic Coding, Lossless Predictive Coding		
Week 12: Mar 20 - 24	Image Compression Standards		
Week 13: Mar 27 - 31	Second Internals		
Week 14: Apr 3 - 7	Image Segmentation, Representation and Description		
Week 15: Apr 10 - 14	Recognition and Interpretation		