**MANGALORE    UNIVERSITY**

# DEPARTMENT OF ELECTRONICS
## MSc Electronics

### ELS 553 - VIDEO PROCESSING

**Unit – I**                                                                                    **15 hours**

introduction to video processing, sampling and aliasing, introduction to digital filtering, video scaling, video de interlacing, alpha blending, sensor processing for image sensors, video interfaces, video rotation,

**Unit-II**                                                                                    **15 hours**

Entropy, predictive coding and quantization, image compression fundamentals, video compression fundamentals, MPEG-2, h.264 video compression standard, video noise and compression artifacts,

**Unit-III**                                                                                    **12 hours**

Video modulation and transport, video over ip, segmentation and focus, memory considerations when building a video processing design, debugging FPGA-based video systems

**Text book:**

(1). "Digital Video Processing For Engineers - A Foundation For Embedded Systems Design" - Michael Parker, SuhelDhanani, Elsevier, 2013.