Course Outcomes (CO's)

Master of Engineering (Digital Electronics)

M.E. 1st Semester

Course: Digital Instrumentation **Course Code: 1UMEF1**

At the end of Digital Instrumentation course the student will be able:

CO 1: To analyze Digital Time & Frequency Measurement Technique.

CO 2: To classify and explain Electronic Instruments for Signal Analysis.

CO 3: To explain Automated Measurement Systems.

CO 4: To explain Microcontroller and PC Based Data Acquisition Systems.

CO 5: To explain Microprocessor interfacing and computer based instrumentation.

CO 6: To analyze Intelligent Controllers and Medical Instrumentation Systems.

Course: Advanced Digital Signal Processing **Course Code: 1UMEF2**

At the end of Advanced Digital Signal Processing course the student will be able:

CO 1: To understand fundamental concept of DSP and Various operations of performed on discrete signals.

CO 2: To design digital filters.

CO 3: To describe multirate dsp and its applications.

CO 4: To elaborate LMS & RMS algorithm.

CO 5: To explain 2D transform and its application.

CO 6: To describe DSP processor & its application sin signal processing.

Course: Computer Communication Network **Course Code: 1UMEF3**

At the end of Computer Communication Network course the student will be able:

CO 1: To describe the functions of each layer in OSI and TCP/IP model.

CO 2: To functions of Application layer and Presentation layer paradigms and Protocols

CO 3: To describe the Session layer design issues and Transport layer services

CO 4: To classify the routing protocols and analyze how to assign the IP addresses for the given network.

CO 5: To describe the functions of data link layer and explain the protocols.

CO 6: To explain the types of transmission media with real time applications

Course: Digital Communication Techniques **Course Code: 1UMEF4**

At the end of Digital Communication Techniques course the student will be able:

CO 1: To classify modulation methods and explain various detectors.

CO 2: To compare and contrast various source encoding techniques.

CO 3: To compare and contrast various channel encoding techniques.

CO 4: To explain signal design for band limited channel.

CO 5: To discuss linear equalization techniques.

CO 6: To Describe and analyze spread spectrum techniques.

Course: Embedded System Design **Course Code: 1UMEF5**

At the end of Embedded system Design course the student will be able:

CO 1: To explain the embedded system concepts and architecture of embedded systems

CO 2: To describe the architecture of 8051 microcontroller and write embedded program for 8051 microcontroller.

CO 3: To design the interfacing for 8051 microcontroller.

CO 4: To understand the concepts of ARM architecture.

CO 5: To demonstrate the open source RTOS and solve the design issues for the same.

CO 6: To select elements for an embedded system

Course Outcomes (CO's)

Master of Engineering (Digital Electronics)

M.E. 2nd Semester

Course: Digital Image Processing **Course Code: 2UMEF1**

At the end of Digital Image Processing course the student will be able

CO 1: To describe the concepts of Digital Image Processing, image model with digitization.

CO 2: To understand the various Image Transform used in image processing.

CO 3: To apply the image enhancement algorithms to real problem.

CO 4: To explain Image restoration techniques and methods to remove blur in an image.

CO 5: To analyze Image compression and Segmentation techniques.

CO 6: To perform object detection using morphological operations.

Course: CMOS VLSI Design **Course Code: 2UMEF2**

At the end of CMOS VLSI Design course the student will be able

CO 1: understand integrated circuit manufacturing, power consumption, testability and reliability with IP based design .

CO 2: To design CMOS subsystem.

CO 3: To program using structural style for a sequence detector and ALU.

CO 4: To analyze CMOS Analog AIC.

CO 5: To explain and design the concepts of CMOS circuits.

CO 6: To understand the CMOS fabrication using p-well, n-well and twin-tub well process. Fabrication using p-well, n-well and twin-tub well process.

Course: Parallel Computing **Course Code: 2UMEF3**

At the end of Parallel Computing course the student will be able

CO 1: To analyze different Parallel Computer models.

CO 2: To explain Program partitioning and scheduling.

CO 3: To classify and explain linear pipeline processors and nonlinear pipeline processors.

CO 4: To explain Parallel and scalable architectures Multiprocessor.

CO 5: To describe Scalable, multithread and dataflow architecture.

CO 6: To classify Parallel Program Development and Environment

Course: Artificial Intelligent system **Course Code: 2UMEF4**

At the end of Artificial Intelligent System course the student will be able

CO 1: To describe the concepts of Fuzzy Set Theory.

CO 2: To understand the various Fuzzy rules, reasoning & decision making.

CO 3: To understand the Fuzzy Controller and fuzzy pattern recognition.

CO 4: To analyze Artificial Neural Networks and its models.

CO 5: To explain unsupervised learning and associative memories

CO 6: To explain support vector machines genetic algorithm:

Course: Micro Electro Mechanical System **Course Code: 2UMEF5**

At the end of Micro Electro Mechanical System Design course the student will be able

CO 1: To understand the concepts of MEMS with its challenges.

CO 2: To understand the various MEMS Applications.

CO 3: To apply the scaling laws in miniaturization for design considerations.

CO 4: To explain Micro Fabrication, diffusion, oxidation, deposition and its types.

CO 5: To analyze surface micromachining and MEMS packaging techniques.

CO 6: To understand the various MEMS devices and structures micro sensors.