

COURSE OUTCOMES (M.E - APPLIED ELECTRONICS)

REGULATION: 2017

S.NO	COURSE NAME	COURSE OUT COMES	
1	C101 - MA7157 - Applied Mathematics For Electronics Engineers	C101.1	Understand the logic of fuzzy systems.
		C101.2	Analyze the concepts of matrix theory.
		C101.3	Analyze the concepts of one dimensional random variable..
		C101.4	Analyze the principle behind dynamic programming.
		C101.5	Analyze the various types of queueing theory.
2	C102 - AP 7101 - Advanced Digital Signal Processing	C102.1	Understand the discrete time signal processing and filter design
		C102.2	Explain the power spectrum estimation and model based approaches
		C102.3	Explain the linear estimation and prediction methodologies in DSP
		C102.4	To design adaptive filter for given application
		C102.5	To design multirate DSP systems
3	C103 - AP7102-Advanced Digital Logic System Design	C103.1	To analyze synchronous and asynchronous sequential circuits
		C103.2	Understand different fault diagnosis and testing methods of system design
		C103.3	Apply the techniques to estimate the performance of digital systems
		C103.4	Understand the timing analysis of memory and PLD
		C103.5	Design the hazard free circuits
4	C104 - AP7103-Advanced Microprocessor And Microcontroller	C104.1	Understand the fundamental concepts of microprocessor architecture
		C104.2	Understand the high performance CISC architecture -PENTIUM PROCESSOR
		C104.3	Understand the high performance RISC architecture – ARM PROCESSOR
		C104.4	Understand the fundamental concepts of microcontroller architecture of MOTOROLA 68HC11
		C104.5	Understand the fundamental concepts of PIC microcontroller architecture

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5	C105 - DS7201- Advanced Digital Image Processing	C105.1	Understand the image fundamentals and mathematical transforms for image processing and image enhancement techniques.
		C105.2	Understand the techniques for image restoration and representation.
		C105.3	Understand the feature extraction techniques from the images.
		C105.4	Understand the basic concepts of image registration and image fusion methods.
		C105.5	Analyze the constraints in image processing that dealing with 3D data sheets.
6	C106 - VL7201- CAD for VLSI Circuits	C106.1	Understand the fundamental features of design methods of VLSI
		C106.2	Understand the flow control of VLSI design
		C106.3	Understand the concepts of various algorithms used for floor planning, routing techniques.
		C106.4	Analyze the simulation parameters of VLSI design flow at various levels.
		C106.5	Understand and analyze the synthesis and modeling of various design automation.
7	C107 - AP7111-Electronics System Design Laboratory I	C107.1	To design PIC 51 microcontroller and 16 bit 8086 microprocessor and different interfaces
		C107.2	Implement the adaptive filters and multistage multirate system in DSP processor
		C107.3	Implement the real time signal processing system
		C107.4	Design the sensors using simulation packages
		C107.5	Design and analyze the synchronous and asynchronous sequential logic circuits.
8	C108 - AP7201- Analysis And Design Of Analog Integrated Circuits	C108.1	Design the single stage amplifier using PMOS and NMOS circuits in different loads.
		C108.2	Analyze the high frequency concepts and noise performance of single stage amplifiers.
		C108.3	Understand the different concepts of operational amplifiers.
		C108.4	Analyze the stability and frequency compensation of operational amplifiers.
		C108.5	Understand the concepts of biasing circuits and their concepts of voltage and current reference circuits.
9	02- Asic And FPGA Design	C109.1	Understand the basic concept and design flow of different types of ASIC
		C109.2	Understand the concepts about partitioning, floor planning, routing of ASIC.
		C109.3	Understand the synthesis, simulation and testing of systems.

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	C109 - AP72	C109.4	Understand the basic concept and architecture of different types of FPGA
		C109.5	Understand the design architecture and issues of SOC
10	C110 - AP7203-Embedded Systems	C110.1	Understand the basic fundamentals of microprocessor, embedded and microcontroller.
		C110.2	Understand the flow control of hardware and software design architecture of embedded processor.
		C110.3	Understand the flow control of distributed embedded architecture.
		C110.4	Analyze the characteristics of real time embedded systems
		C110.5	Formulate the system design techniques of embedded systems.
11	C111 - CP7103- Multicore Architecture	C111.1	Understand the recent trends in the field of computer architecture and performance related parameters.
		C111.2	Understand the features, issues and problems related to multiprocessing techniques.
		C111.3	Understand different types of multicore architectures.
		C111.4	Explain the architectures of programming model of warehouse scale system.
		C111.5	Explain the architecture of various embedded systems
12	C112 - VL7202-Low Power Vlsi Design	C112.1	Understand the various sources of power consumption in CMOS circuits.
		C112.2	Understand the power optimization techniques in CMOS circuits.
		C112.3	Analyze the design concepts of low power circuits.
		C112.4	Analyze the various power reduction and estimation methods.
		C112.5	Analyze the synthesis and design flow of low power system in software basis.
13	C113 - NC7101- High Performance Networks	C113.1	Understand the concepts of multimedia networking
		C113.2	Understand the basic concepts of advanced networks like VPN, PPP, MPLS.
		C113.3	Understand and analyze the types of VPN and tunneling protocols for security.
		C113.4	Understand the traffic modeling of network performance evaluation.
		C113.5	Understand the network security in many layers and network management.
14	Electronics System Laboratory II	C114.1	Understand the concepts of 32 bit microcontroller RTOS with its application.
		C114.2	Design the wireless networks using embedded system programming.
		C114.3	Design and implementation of ARM with FPGA, ALU with FPGA using verilog and VHDL.

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	C114 - AP7211 - Design I	C114.4	Analyze the programming skill of flash controller verification, testing.
		C114.5	Analyze the design, simulation concepts of system integrity, ASIC
15	C201 - AP7301 - Electromagnetic Interference And Compatibility	C201.1	Understand the basics of EMI and its sources
		C201.2	Understand the coupling principles behind the EMI
		C201.3	Understand the concepts of controlling principles of EMI.
		C201.4	Understand the solution methods for EMI/EMC in PCB
		C201.5	Understand the measurement techniques for emission and immunity of EMI/EMC
16	C202 - VL7301 - Testing Of VLSI Circuits.	C202.1	Understand various types of faults and concepts about fault detection and dominance.
		C202.2	Understand the concepts of test generation methods of DFT-BIST
		C202.3	Understand the design flow of testability
		C202.4	Understand the concepts of test pattern generation of BIST
		C202.5	Understand the fault diagnosis of the circuits.
17	C203 - CP7023 - Reconfigurable Computing	C203.1	Understand the basic architecture of reconfigurable computing devices.
		C203.2	Understand the need of reconfigurable computing architectures.
		C203.3	Understand the programming concepts of reconfigurable systems using HDL language.
		C203.4	Understand the mapping designs of reconfigurable platforms for routing protocols
		C203.5	Design the various applications of FPGA.
18	C204 - PROJECT PHASE I	C204.1	Understand fundamental knowledge in various engineering subjects and applications.
		C204.2	Identify the problem and do literature survey.
		C204.3	Design engineering solutions to complex problems utilizing a system approach.
		C204.4	Create a model for specific application.
		C204.5	Evaluate the performance using parameters and conclude the project.
	PHASE II	C205.1	Design engineering solutions to complex problems utilizing a system approach.

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19	C205- PROJECT PHASE	C205.2	Create a model for specific application.
		C205.3	Evaluate the performance using parameters.
		C205.4	Apply other techniques to evaluate the designed system.
		C205.5	Evaluate the system performance and conclude the project