Department of ECE
Summary Sheet of VALUE ADD COURSES
ACADEMICYEAR2018-19

S. No	Nameoftheworkshop/ Seminar/ Conference	Type of the Event	Resource Person Details	Number Of Participants	Course No	Date From-To
1	PCB DESIGN AND ITS APPLICATIONS	VALUE ADDED COURSE	Mr. S. SAI SANDEEP	99	2018-19/PEC/ECE/IVYEAR/VAC001	11-02-2019 to 16-02-2019
2	MIXED SIGNAL DESIGN	VALUE ADDED COURSE	Dr.Aswin kumar SV	90	2018-19/PEC/ECE/IVYEAR/VAC002	15-02-2019 to 20-02-2019
3	CAD FOR VLSI	VALUE ADDED COURSE	Dr. V.Venkata Reddy	90	2018-19/PEC/ECE/IVYEAR/VAC003	11-03-2019 to 16-03-2019

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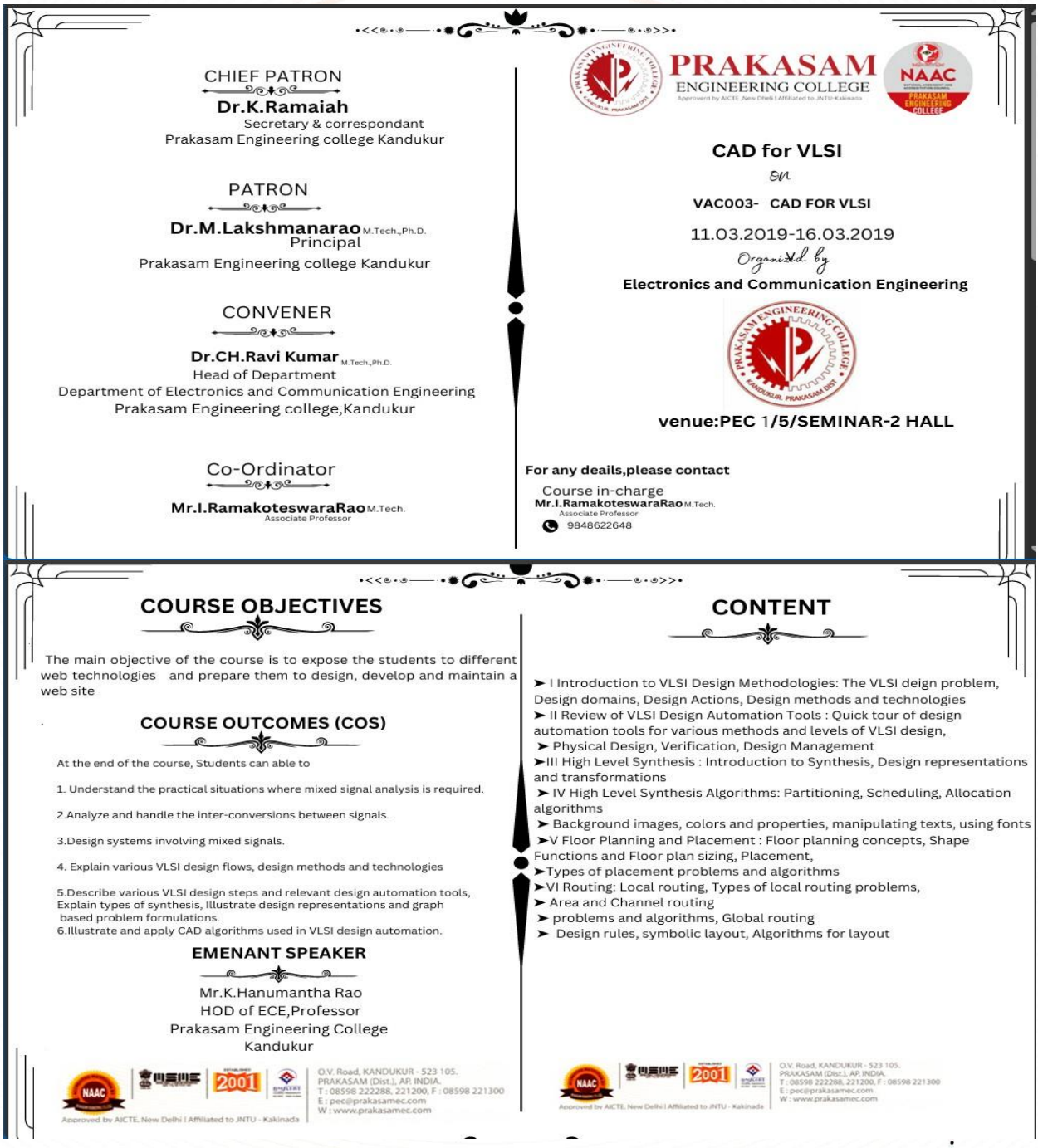
Department of ECE
BROCHERS of VALUE ADDED COURSES conducted in Academicyear2019-20

BROCHER

PCB DESIGN AND ITS APPLICATIONS11-02-2019 to 16-02-2019



CHIEF PATRON
Dr.K.Ramaiah
Secretary & correspondant
Prakasam Engineering college Kandukur

PATRON
Dr.M.Lakshmanarao M.Tech.,Ph.D.
Principal
Prakasam Engineering college Kandukur

CONVENER
Dr.CH.Ravi Kumar M.Tech.,Ph.D.
Head of Department
Department of Electronics and Communication Engineering
Prakasam Engineering college,Kandukur

Co-Ordinator
Mr.I.RamakoteswaraRao M.Tech.
Associate Professor

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CAD for VLSI
on
VAC003- CAD FOR VLSI
11.03.2019-16.03.2019
Organized by
Electronics and Communication Engineering

venue:PEC 1/5/SEMINAR-2 HALL

For any deails,please contact
Course in-charge
Mr.I.RamakoteswaraRao M.Tech.
Associate Professor
9848622648

COURSE OBJECTIVES

The main objective of the course is to expose the students to different web technologies and prepare them to design, develop and maintain a web site

COURSE OUTCOMES (COS)

At the end of the course, Students can able to

1. Understand the practical situations where mixed signal analysis is required.
2. Analyze and handle the inter-conversions between signals.
3. Design systems involving mixed signals.
4. Explain various VLSI design flows, design methods and technologies
5. Describe various VLSI design steps and relevant design automation tools, Explain types of synthesis, Illustrate design representations and graph based problem formulations.
6. Illustrate and apply CAD algorithms used in VLSI design automation.

EMENANT SPEAKER

Mr.K.Hanumantha Rao
HOD of ECE,Professor
Prakasam Engineering College
Kandukur

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CONTENT

➤ I Introduction to VLSI Design Methodologies: The VLSI deign problem, Design domains, Design Actions, Design methods and technologies
➤ II Review of VLSI Design Automation Tools : Quick tour of design automation tools for various methods and levels of VLSI design,
➤ Physical Design, Verification, Design Management
➤III High Level Synthesis : Introduction to Synthesis, Design representations and transformations
➤ IV High Level Synthesis Algorithms: Partitioning, Scheduling, Allocation algorithms
➤ Background images, colors and properties, manipulating texts, using fonts
➤V Floor Planning and Placement : Floor planning concepts, Shape Functions and Floor plan sizing, Placement,
➤Types of placement problems and algorithms
➤VI Routing: Local routing, Types of local routing problems,
➤ Area and Channel routing
➤ problems and algorithms, Global routing
➤ Design rules, symbolic layout, Algorithms for layout

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BROCHER

MIXED SIGNAL DESIGN15-02-2019 to 20-02-2019

CHIEF PATRON

Dr.K.Ramaiah

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Principal

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Head of Department

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Co-Ordinator

Mr.G.Suresh M.Tech.

Associate Professor

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Mixed Singal Desing

on

VAC001 - Mixed Singal Desing

15.02.2019-20.02.2019

Organized by

Electronics and Communication Engineering

venue:PEC 1/5/SEMINAR-2 HALL

For any deails,please contact

Course in-charge

Mr.G.Suresh M.Tech.

Associate Professor

9985191866

COURSE OBJECTIVES

To introduce how to handle the practical situations where mixed signal analysis is required.

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COURSE OUTCOMES (COS)

At the end of the course, student will be able to

1. Understand the practical situations where mixed signal analysis is required.
2. Analyze and handle the inter-conversions between signals.
3. Design systems involving mixed signals.
4. Understand the practical situations where mixed signal analysis is required.
5. Analyze and handle the inter-conversions between signals.

EMENANT SPEAKER

Mr.Aswin Kumar SV

HOD OF ECE & Associate Professor

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CONTENT

➤Analog and discrete-time signal processing, introduction to sampling theory; Analog continuous-time filters:

➤ passive and active filters. Basics of analog discrete-time filters and Z-transform.

➤ Switched-capacitor filters- Non idealities in switched-capacitor filters

At the end of the course, Students can able to

➤ Switched-capacitor filters- Non idealities in switched-capacitor filters

➤capacitor filter architectures

➤ Basics of data converters;

➤Successive approximation ADCs, Dual slope ADCs,

➤ Pipeline ADCs, Hybrid ADC structures, High-resolution ADCs, DACs

➤ Mixed-signal layout, Interconnects and data transmission

➤ Borders andboxes ,margins, padding lists, positioning using CSS

➤ data transmission, Current-mode signaling and data transmission

➤ Voltage-mode signaling

➤ Introduction to frequency synthesizers

➤ synchronization,

➤ Digital PLLs, DLLs.

➤ Basics of PLL,

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BROCHER

CAD FOR VLSI11-03-2019 to 16-03-2019

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PCB Design

On

VAC001 - PCB Design

11.02.2019-16.02.2019

Organized by

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Course in-charge
Mr.G.Suresh M.Tech.
Associate Professor
9985191866

COURSE OBJECTIVES

This course will teach teams of students how to design and fabricate PCB for prototyping as well as in Industrial Production environment.

COURSE OUTCOMES (COS)

At the end of the course, student will be able to

1.Establishing infrastructure and simulations

2. Concept of programming the in WSN environment

3. The students will be able to

4. Understand a single layer and multilayer PCB

5. Create and fabricate a PCB

6. Evaluate and test a PCB

EMENANT SPEAKER

Mr.S.SAI SANDEEP
VISHISHTA INNOVATORS PVT

PROJECT MANAGER,GUNTUR

CONTENT

➤Need for PCB, Types of PCBs : Single and Multilayer, Technology: Plated Through Hole, Surface Mount, PCB Material
➤ Electronic Component packaging, PCB Designing, Fabrication, Production.

➤ Proprietary tools like Eagle, Ultiboard, Orcad and Opensource
At the end of the course, Students can able to
➤ Transmission line
➤ Forms
➤ Cross talk and Thermal management
➤ Introduction to KiCad, Schematic entry / drawing,
➤ layering, component foot print library
➤ design rules, component placing: Manual & automatic, track routing
➤ track length, angle, joint & size,
➤ Autorouter setup
➤ IPC standards for schematicn
➤ material and documentation
➤ CNC Machine, Photo-Lithography process
➤ PCB Mass Manufacturing Process: Gerber Generation,
➤ CAM, panelization, cleaning, drilling,
➤ automated optical inspection,

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