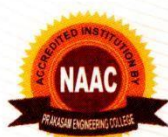




Department of ECE
Summary Sheet of VALUE ADD COURSES
ACADEMIC YEAR 2019-20

S. No	Name of the workshop/ Seminar/ Conference	Type of the Event	Resource Person Details	Number Of Participants	Course No	Date From-To
1	5G COMMUNICATIONS	VALUE ADDED COURSE	Dr. PRASANNA MURALI KRISHNA	95	2019-20/PEC/ECE/IVYE AR/VAC001	03-02-2020 to 07-02-2020
2	NANO ELECTRONICS	VALUE ADDED COURSE	Dr. V.Venkata Reddy	90	2019-20/PEC/ECE/IVYE AR/VAC002	19-08-2019 to 24-08-2019
3	OFDM/OFDMA COMMUNICATIONS	VALUE ADDED COURSE	Dr. CH.SRINIVASA REDDY	90	2019-20/PEC/ECE/IVYE AR/VAC003	25-11-2019 to 30-11-2019

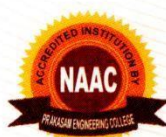
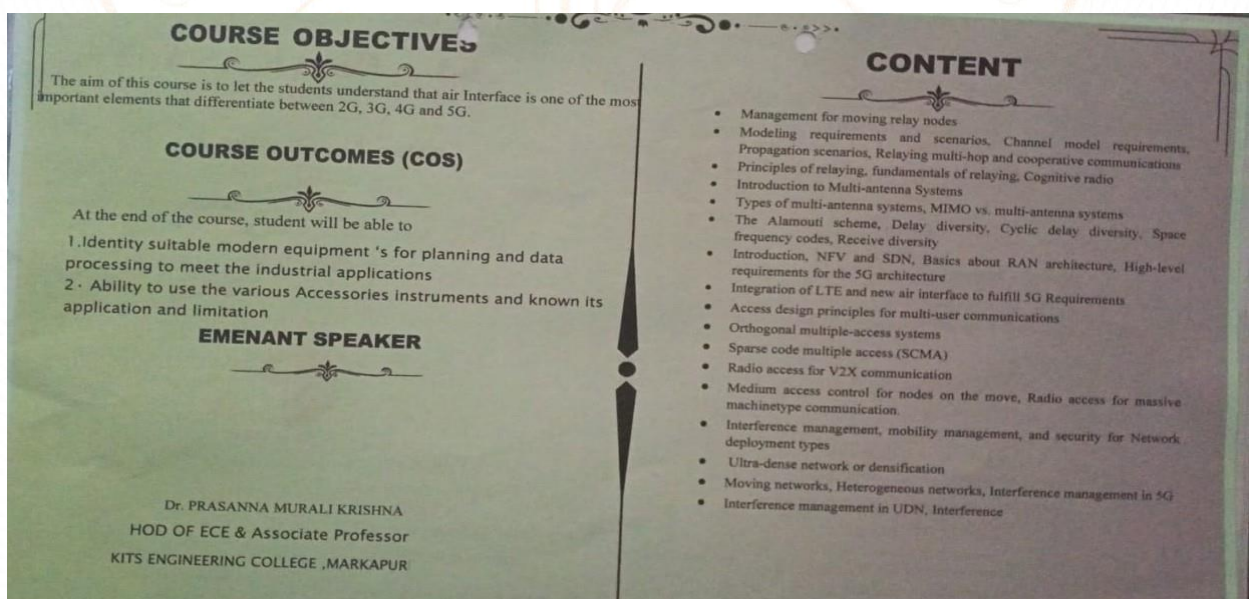




PRAKASAM
ENGINEERING COLLEGE

Department of ECE
BROCHERS of VALUE ADDED COURSES conducted in Academic year 2019-20

BROCHER
5G COMMUNICATIONS 03-02-2020 to 07-02-2020



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O.V. Road, KANDUKUR - 523 105.
PRAKASAM (Dist.), AP. INDIA.
T : 08598 222288, 221200, F : 08598 221300
E : pec@prakasamec.com
W : www.prakasamec.com

BROCHER
NANO ELECTRONICS 19-08-2019 to 24-08-2019

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.S.MADHAVA RAO M.tech Associate Professor.	 PRAKASAM ENGINEERING COLLEGE Approved by AICTE, New Delhi & Affiliated to JNTU-Kakinada Value Added Course ON VAC002-NANO ELECTRONICS 19.08.2019-24.08.2019 Organized by Department of Electronics and Communication Engineering  Venue: PEC 1/SEMINAR-2 HALL. For any details, please contact Course in-charge Mr.S.MADHAVA RAO M.Tech Associate Professor.  8886747999
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COURSE OBJECTIVES 1. To convey the basic concepts of Nano electronics to engineering students with no background in quantum mechanics and statistical mechanics. 2. Main objective of this is to provide the basic platform and deep information of different Nano electronics devices like MOSFET, FINFET, Nano metrology tools used to design the recently developing VLSI applications COURSE OUTCOMES (COS) At the end of the course, students will demonstrate the ability to 1. Understand various aspects of nano-technology and the processes involved in making nano components and material. 2. Leverage advantages of the nano-materials and appropriate use in solving practical problems. 3. Understand various aspects of nano-technology and the processes involved in making nano components and material. 4. Leverage advantages of the nano-materials and appropriate use in solving practical problems. EMENANT SPEAKER Dr. V.Venkata Reddy Associate Professor Vignan university, GUNTUR	CONTENT • Introduction to nanotechnology, Nano devices, Nano materials, Nano characterization • Definition of Technology node, Basic CMOS Process flow, meso structures • Dr. Babasaheb Ambedkar Technological University, Lonere. 80 Basics of Quantum Mechanics: Schrodinger equation • Density of States, Particle in a box Concepts • Degeneracy, Band Theory of Solids • Introduction, CMOS Scaling, The nanoscale MOSFET, Fin Fet's • Resonant Tunneling Diode, Coulomb dots, Quantum blockade, Single electron transistors, Carbon nanotube electronics • Vertical transistors, Fin FET and Surround gate FET • FTIR, XRD, AFM, SEM, TEM, EDAX Applications and interpretation of results • Soft lithography Microwave assisted synthesis
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Dr. V. Venkata Reddy, Ph.D., M.Tech.,
Prakasam Engineering College, AP, India
E-mail: vvr@pec.ac.in, vvr@vignan.ac.in



Dr. V. Venkata Reddy, Ph.D., M.Tech.,
Prakasam Engineering College, AP, India
E-mail: vvr@pec.ac.in, vvr@vignan.ac.in

BROCHER
OFDM/OFDMA COMMUNICATIONS 25-11-2019 to 30-11-2019

CHIEF PATRON Dr.K.Ramaiah Secretary & correspondent 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.J.Rama koteswara Rao M.Tech Associate Professor.	PRAKASAM ENGINEERING COLLEGE Approved by AICTE, New Delhi, Affiliated to JNTU Hyderabad Value Added Course ON VACD03-OFDM/OFDMA COMMUNICATIONS 25-11-2019 to 30-11-2019 Organized by Department of Electronics and Communication Engineering  VENUE: PEC 1/SEMINAR-2 HALL For any details, please contact Course in-charge Mr.J.Rama koteswara Rao M.Tech Associate Professor.
COURSE OBJECTIVES 1. Take a comprehensive look at OFDMA/OFDM including channel modeling, spectrum efficiency, and resource management 2. Know how OFDMA/OFDM can combine with MIMO to give high data rate transmissions COURSE OUTCOMES (COS) At the end of the course, students will demonstrate the ability to 1. Understand the components of a broadband wireless system 2. Ability to design OFDM transceiver structures 3. Enhance OFDM performance using MIMO and OFDMA techniques 4. Apply fundamental knowledge of OFDM-based standards such as 4G LTE, 5G, and Wi-Fi EMENANT SPEAKER Dr.CH. SRINIVASA REDDY Assistant Professor IIT BHUVENESWAR	CONTENT • RADIO CHANNEL MODELING, RESOURCE ALLOCATION, AND SPECTRUM EFFICIENCY Introduction • OFDM/OFDMA channel models • RESOURCE MANAGEMENT AND SYNCHRONIZATION • OFDM VS OFDMA Resource allocation and Scheduling algorithms • Synchronization in OFDMA downlink and uplink - Synchronization for WIMAX • ADAPTIVE MODULATION AND TRAINING SEQUENCE DESIGN • Adaptive modulation algorithms - Channel feedback - Optimal condition for training sequence • Realization of Optimal training - Differential Space time Block codes - Differential Space frequency block codes • COOPERATIVE OFDMA, PERFORMANCE AND OPTIMIZATION OF RELAY ASSISTED OFDMA NETWORKS • Cooperative OFDMA uplink - Channel capacity - Frequency offset • OFDMA SYSTEMS AND APPLICATIONS • OFDMA BASED MOBILE WIMA



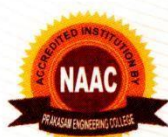
Prakasam Engineering College
Kandukur - 522 201
Phone: 0864-2551111, 2551112
Fax: 0864-2551113
Email: principal@prakasamengg.ac.in
www.prakasamengg.ac.in



Prakasam Engineering College
Kandukur - 522 201
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Fax: 0864-2551113
Email: principal@prakasamengg.ac.in
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