



**Department of EEE**  
**Summary Sheet of Add on Courses Conducted**  
**ACADEMIC YEAR 2018-19**

S. No	Name of the Event	Type of the Event	Course Code	Number of Hours	Number of Students Enrolled
1	ENERGY AUDITING	Value added course	2018-19/PEC/EEE/VAC01	31 Hrs	90
2	DATA ANALYTICS FOR SMART GRID TECHNOLOGY	Value added course	2018-19/PEC/EEE/VAC02	30 Hrs	64



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## Summary report of ENERGY AUDITING



**PRAKASAM**  
ENGINEERING COLLEGE

<b>Value added course</b>			
<b>Document ID:</b>	2018-19/PEC/EEE/VAC01	<b>Document Name:</b>	Report

### Course Summary Report

Value added-courses in "Energy Auditing." were organized by the Department of Electrical And Electronics Engineering, Prakasam engineering college from 02-07-2018 to 06-07-2018. The total period of course is 31 hours. Totally 90 students have enrolled of this course and participated during the course. The institutes Principal Dr.M.LakshmanaRao appreciated the Departments efforts and congratulated the student for participating. Thanks to entire faculty and co-coordinator, the event was success

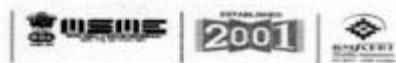
Students in the course obtained the following outcomes:

- To understand Energy Audit procedure along with relevant technologies/ tools
- To understand Energy Conservation measures undertaken across different user segments using case studies
- To develop Energy Audit Report writing skills

  
Co-ordinator

  
HOD

  
Principal  
PRAKASAM ENGINEERING COLLEGE  
KANDUKUR-523105, Prakasam Dt, AP



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## Brochure of ENERGY AUDITING

CHIEFPATRON  
**Dr.K.Ramaiah**  
Secretary&correspondant  
PrakasamEngineeringcollegeKandukur

PATRON  
**Dr.M.Lakshmana Rao**<sub>M.Tech.,Ph.D.</sub>  
Principal  
PrakasamEngineeringcollegeKandukur

CONVENER  
**Mr.S.K.Meera Shareef**  
M.Tech.,(Ph.D.)

Head of Department  
Department of Electrical and Electronics Engineering  
Prakasam Engineering college::Kandukur

Co-Ordinator  
**Mr.P.YEDUKONDALU**<sub>M.Tech.</sub>

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### COURSE OBJECTIVES

The aim of the course is to understand Energy Audit procedure along with relevant technologies/tools.  
To understand Energy conservation measures undertaken across different user segments using case studies  
To understand and develop the Energy Audit Report working skills

### COURSE OUTCOMES(COS)

- To understand Energy Audit procedure along with relevant technologies/ tools
- To understand Energy Conservation measures undertaken across different user segments using case studies
- To develop Energy Audit Report writing skills

### EMINENT SPEAKER

Mr.J.Alla Bagash, M.Tech  
Associate Professor  
Prakasam Engineering College

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### Value Added Course

on

### VAC01-ENERGY AUDITING

02-07-2018 to 03-07-2018

Organized by

Department of EEE



venue:B2/F2/13/SEMINARHALL-1

### For any details, please contact::

Course in-charge  
**Mr.P.YEDUKONDALU** M.Tech.  
Assistant Professor  
9963283978

### CONTENT

- General Aspects of Energy Management and Energy Audit
- Energy Scenario, Basics of Energy and its various forms
- Energy Management & Audit
- Material and Energy balance
- Energy Action Planning
- Financial Management, Project Management
- Energy Monitoring and Targeting, Global environmental concerns.
- Energy Efficiency in Thermal Utilities
- Fuels and Combustion, Boilers, Steam System
- Furnaces, Insulation and Refractories,
- FBC boilers, Cogeneration,
- Waste Heat Recovery
- Energy Efficiency in Electrical Utilities:
- Electrical system, Electric motors,
- Compressed Air System:
- HVAC and Refrigeration System,
- Vapour absorption refrigeration system,
- Fans and blowers, Pumps and Pumping System:
- Cooling Tower, Lighting System,
- Diesel Generating system
- Energy Efficient Technologies in Electrical Systems

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## Summary report of DATA ANALYTICS FOR SMART GRID TECHNOLOGY



PRAKASAM  
ENGINEERING COLLEGE

Value added course			
Document ID:	2018-19/PEC/EEE/VAC02	Document Name:	Summary Report

### Course Summary Report

Value added-courses in "VAC02- Data Analytics for Smart Grid Technology" were organized by the Department of Electrical And Electronics Engineering at Prakasam engineering college from March 04 to March 08 in 2019. The total period of course is 30 hours. Totally, 64 students have enrolled of this course and participated during the course. The institutes Principal, Dr. M. Lakshman Rao appreciated the Departments efforts and congratulated the student for participating. Thanks to entire faculty and co-coordinator, the event was success

Students in the course obtained the following outcomes:

- Students able to Enumerate research integrating cloud computing and big data applications for smart grid
- Able to Evaluate current status of smart grid simulation tools
- Able to Analyze the benefits of cloud computing and big data analytics for smart grid
- technology and applications of big data and cloud computing

### COURSE PHOTO:



  
Co-ordinator

  
HOD

  
Principal  
PRINCIPAL  
PRAKASAM ENGINEERING COLLEGE  
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## Brochure of DATA ANALYTICS FOR SMART GRID TECHNOLOGY

**CHIEFPATRON**  
**Dr.K.Ramaiah**  
Secretary&correspondant  
Prakasam Engineering College, Kandukur

**PATRON**  
**Dr.M.LAKSHMAN RAO** M.Tech.,Ph.D.  
Principal  
Prakasam Engineering College, Kandukur

**CONVENER**  
**Mr.SK.MEERA SHAREEF** M.Tech.,(Ph.D.)  
Head of Department  
Department of Electrical and Electronics  
Engineering  
Prakasam Engineering College, Kandukur

**Co-Ordinator**  
**Ms.P.M.RUPA** M.Tech.  
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**PRAKASAM ENGINEERING COLLEGE**  
Approved by AICTE, New Delhi | Affiliated to JNTU-Kakinada

**Value Added Course**  
on  
**VAC02 - Data Analytics for Smart Grid Technology**  
04-03-2019 to 08-03-2019  
Organized by  
**Department of ELECTRICAL AND ELECTRONICS  
ENGINEERING**

**Venue: SEMINARHALL-1**

**For any details, please contact**  
Course in-charge  
**Ms.P.M.RUPA M.Tech.**  
Assistant Professor  
9494742233

**COURSE OBJECTIVES**  
Smart electric power grids, including definition, design criteria, technology and IoT, Information processing and communications to the power grid. Understanding the development of the smart grid, Smart grid design, implementation, evaluation and management of smart electricity infrastructure

**COURSE OUTCOMES (COS)**

- Enumerate research integrating cloud computing and big data applications for smart grid
- Able to Evaluate current status of smart grid simulation tools
- Able to Analyze the benefits of cloud computing and big data analytics for smart grid
- technology and applications of big data and cloud computing

**EMENANTSPEAKER**

**Mr.V.HARI BABU** M.Tech  
Associate Professor  
Prakasam Engineering College, Kandukur

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**CONTENT**

- Cloud Computing Applications for Smart Grid Cloud
- Computing in smart grid, Cloud computing architecture
- Demand Response Geographical Load
- Balancing Dynamic Pricing Virtual Power Plant Advanced Metering Infrastructure
- Cloud Based Security and Privacy
- Smart Grid Data Management and Applications
- Pricing and energy forecasting in Demand Response
- case study on Energy Forecast, Smart Meter Data Management
- PHEVs: Internet of Vehicles
- Smart Buildings
- Smart Grid Design and Deployment
- Attack detection, current problem and techniques
- Secure Data Learning Scheme, Logical Security Architecture
- Smart Metering Data Set Analysis
- A Case Study, Security Schemes for AMI Private Networks, Simulation Tools- Worldwide Initiatives
- Probability and Statistics
- Random variable and sample space, empirical approach to probability conditional probability
- Independent events Bayes' Theorem
- mathematical approaches
- mathematical expectation moment generating function
- Chebyshev's inequality Bernoulli trials the Binomial
- negative binomial, geometric, Poisson
- normal rectangular, exponential, Gaussian, beta and gamma distributions, sampling and large sample tests
- linear and polynomial fitting by the methods