



## Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 9001-2015 Certified

Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.

Phone No. 08645 - 350200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in

Admin Off: 29-35-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129.

Ref: KLEF/RO/ECE/CIRCULAR

Date: 03-07-2020

### CIRCULAR

**Sub:** Organizing event "Workshop" for the students of Electronics and Communication Engineering, of Vaddeswaram Campus of KLEF – Reg.

\*\*\*

This is to inform that the Department of Electronics and Communication Engineering, KLEF, is Organizing a "Workshop on Analog Circuit Design And Simulation" for the students of Electronics and communication Engineering, Vaddeswaram Campus of KLEF on, 06-07-2020, as details below:

Event Name: "Workshop"

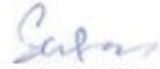
Date: 06-07-2020

Venue: R-106

All the students of ECE, are invited to attend this program.

Dy-HOD's & Year coordinators are requested to bring this information to the attention of all ECE students and encourage them to participate in this program.

To  
All ECE Students,  
All ECE Faculty,  
Principal.

  
**HOD-ECE**  
Professor & Alternate HOD  
Department of E.  
K L University  
VADESWARAM  
Guntur Dt., A.P.



## **Koneru Lakshmaiah Education Foundation**

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by **NAAC** as 'A++' ❖ Approved by AICTE ❖ ISO 9001-2015 Certified

**Campus:** Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.

Phone No. 08645 - 350200; [www.klef.ac.in](http://www.klef.ac.in); [www.klef.edu.in](http://www.klef.edu.in); [www.kluniversity.in](http://www.kluniversity.in)

**Admin Off:** 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129.

### **A One-Day Workshop On “VLSI Circuit Simulation and Analysis: Tools and Techniques”**

**By**

**Always@VLSI**

**Department Of ECE**

**Name of the event:**VLSI Circuit Simulation and Analysis: Tools and Techniques

**Dates:**05-07-2018

**Venue:**R106

**No. of students participated:** 36

#### **Objective of the event:**

The objective of the event "VLSI Circuit Simulation and Analysis: Tools and Techniques" is to provide participants with a comprehensive understanding of the various tools and techniques used in simulating and analyzing VLSI circuits. Through this event, participants will gain insights into the following:

- Understanding the fundamentals of VLSI circuit simulation and analysis.
- Exploring different simulation and analysis tools commonly used in VLSI design.
- Learning advanced techniques for accurate modeling and simulation of VLSI circuits.
- Mastering the use of simulation tools for performance analysis, timing verification, and power estimation.
- Exploring methods for signal integrity analysis and noise characterization in VLSI circuits.
- Understanding the importance of statistical analysis and Monte Carlo simulations in VLSI design.
- Hands-on experience with industry-standard simulation and analysis tools.

- Discussing case studies and real-world examples to understand the practical application of simulation and analysis techniques.
- Exploring emerging trends and advancements in VLSI circuit simulation and analysis.

Overall, the event aims to equip participants with the knowledge and skills necessary to effectively simulate and analyze VLSI circuits using state-of-the-art tools and techniques, thereby enhancing their capabilities in VLSI design and verification.

### **Description of the event:**

The "VLSI Circuit Simulation and Analysis: Tools and Techniques" event is a comprehensive workshop designed to delve into the intricate world of simulating and analyzing Very Large Scale Integration (VLSI) circuits. With the ever-increasing complexity of integrated circuits, mastering simulation and analysis tools and techniques is crucial for successful VLSI design. Throughout the event, participants will be immersed in a series of interactive sessions, lectures, and hands-on activities led by industry experts and seasoned professionals. The workshop will cover a wide array of topics, ranging from fundamental principles to advanced methodologies, ensuring a holistic understanding of VLSI circuit simulation and analysis.

Key areas of focus include:

**Fundamentals of VLSI Circuit Simulation:** Participants will gain insights into the basics of VLSI circuit simulation, including device modeling, circuit simulation algorithms, and simulation environments.  
**Simulation Tools Overview:** An in-depth exploration of various simulation tools commonly used in VLSI design, such as SPICE (Simulation Program with Integrated Circuit Emphasis), Verilog-A, and SystemVerilog.

**Advanced Simulation Techniques:** Participants will learn advanced simulation techniques for accurate modeling and analysis of VLSI circuits, including transient analysis, AC analysis, and noise analysis.  
**Performance Analysis and Timing Verification:** Understanding how to use simulation tools for performance analysis, timing verification, and optimization of VLSI circuits.

**Power Estimation and Optimization:** Techniques for power estimation and optimization using simulation tools, including dynamic power analysis, leakage power analysis, and low-power design methodologies.  
**Signal Integrity and Noise Characterization:** Exploring methods for signal integrity analysis and noise characterization in VLSI circuits, including parasitic extraction and electromagnetic simulation.

Statistical Analysis and Monte Carlo Simulations: Understanding the importance of statistical analysis and Monte Carlo simulations in VLSI design for assessing circuit performance variability and reliability. Hands-on Workshops: Participants will have the opportunity to apply their knowledge through hands-on workshops using industry-standard simulation tools, gaining practical experience in VLSI circuit simulation and analysis.

Emerging Trends and Future Directions: Discussion on emerging trends and advancements in VLSI circuit simulation and analysis, including machine learning-based modeling and simulation techniques, quantum simulation, and beyond. By the end of the event, participants will emerge with a comprehensive understanding of VLSI circuit simulation and analysis, equipped with the tools and techniques necessary to tackle the complexities of modern integrated circuit design effectively. Whether you're a seasoned professional or just starting in the field of VLSI design, this workshop offers invaluable insights and practical skills to enhance your expertise.

### **Outcome of the event:**

Overall, the outcome of the event will be participants who are well-equipped with the knowledge, skills, and tools necessary to excel in VLSI circuit simulation and analysis, contributing to the advancement of the field and the development of innovative integrated circuits.

**Photos of the event:**



**Demonstrating simulation tools to students.**

**Participant's List:**

S.NO	ID.NO	NAME	BRANCH	SIGNATURE
1.	160041019	KIRIGADALA RUDREGOWDA	ECE	Kirigadala Rudregowda
2.	160041017	VINJAMURI PAVAN KUMAR	ECE	Vinjamuri Pavan Kumar
3.	160041010	KOLLIPARA SAI SREE ROHINI	ECE	Rohini
4.	160041008	KANKANAMPATI MANISHA	ECE	Kankanampati Manisha
5.	160041006	JANGA SATYA RISHI TEJA	ECE	Janga Satya Rishi Teja
6.	160040996	KONAKALLA GEETHA SREE	ECE	Konakalla Geetha Sree
7.	160040947	VENKATA PRUDHVI	ECE	Venkata Prudhvi
8.	160040939	VEERA LOHIT K	ECE	Veera Lohith K
9.	160040925	SIVA PRUDHVISH VALIVETI	ECE	Siva Prudhvish Valiveti
10.	160040922	VALE TARUN KUMAR	ECE	Vale Tarun Kumar
11.	160040921	VAKALAPUDI SAI RAJESH	ECE	Vakalapudi Sai Rajesh
12.	160040920	VADLAMUDI VENKATA	ECE	Vadlamudi Venkata
13.	160040916	VADDEVALLI PAVAN	ECE	Vaddevalli Pavan
14.	160040910	KOTI REDDY UPPELA	ECE	U. Koti Reddy
15.	160040909	UPPALAPATI CHANDU	ECE	Chandu
16.	160040904	S. TUMPUDI NIKHILESH	ECE	Nikhilesh
17.	160040895	P. THUMMURU	ECE	P. Thummuru
18.	160040894	B. PRASANTH KUMAR REDDY	ECE	B. Prasant Kumar Reddy
19.	160040891	MADHUSUDHAN	ECE	Madhusudhan
20.	160040890	ABHISHEK THOTAKURA	ECE	Abhishek Thotakura
21.	160040885	THOPURI CHANAKYA	ECE	Chanakya
22.	160040884	THOMMANDRU JAYARAM	ECE	Jayaram
23.	160040883	THIRUMALASETTY BALAJI	ECE	Balaji
24.	160040859	SURI KAVYA	ECE	Kavya
25.	160040858	NARENDRA SURARAPU	ECE	N. Surarapu
26.	160040854	SUNKAVALI SURYA TEJA	ECE	Surya Teja
27.	160040850	M. SUDINEEDI VENKATA	ECE	M. Sudineedi Venkata
28.	160040841	SOMU VENKATASAINIKHIL	ECE	Somu Venkatasainikhil
29.	160040840	SOMIREDDY JAYA SAI SRI	ECE	Jaya Sai Sri
30.	160040830	SHAKAMURI MEGHANA	ECE	Meghana
31.	160040829	SHAIK YASWANTH BASHA	ECE	Yaswanth Basha
32.	160041022	GORRIPATI DIVYA SAI TEJA	ECE	Divya Sai Teja
33.	160040976	YADAVALLI SUNDAR SAI	ECE	Sundar Sai
34.	160040975	YACHAMANENI TANMAYEE	ECE	Tanmayee
35.	160040963	VENKATA SAI AJAY	ECE	Sai Ajay
36.	160040948	VELLATURI VENKATA	ECE	Venkata V

S. Vaitu

In charge

Always@VLSI Technical Club

S. Srinivas

HOD-ECE

Professor & Alternate HOD  
Department of E  
K L University  
VADESWARAM  
Guntur Dt., A.P.