

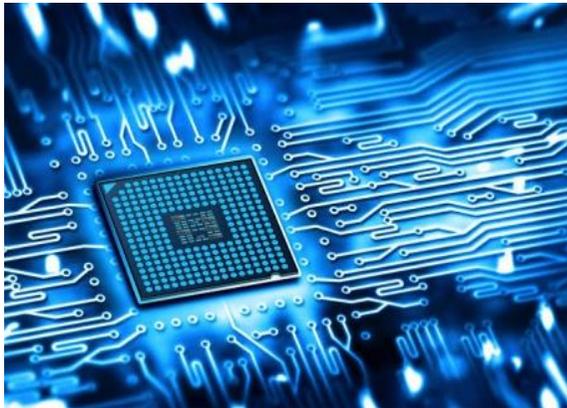
AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,
Accredited by NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)
Tamaram, Makavarapalem, Narsipatnam (RD),
Visakhapatnam-531113



*Certificate Course
on*

VLSI Design Engineering - Beginner to Intermediate Journey

From 11th SEP 2017 to 16th SEP 2017



ORGANIZED BY

**DEPT. OF ELECTRONICS AND COMMUNICATION ENGINEERING
AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY,
MAKAVARAPALEM (V), VISAKHAPATNAM-531113**

AVANTHI EDUCATIONAL SOCIETY

Avanthi Educational Society under the Leadership of Sri M.Srinivasa Rao garu as chairman was started in the Year 1991. Within a short span of its establishment, the group has made a remarkable stride in the field of education offering various courses at Under Graduate, Post Graduate, Pharmacy & Engineering levels. This milestone is achieved as the institution carved itself to impart quality and career oriented education, countering the challenges of the modern world through planning, dedication, determination, prompt execution and with the innovative ideas of our advisory board.

Today, Avanthi Educational Society is proud to have a strength of over 16000 students with 15 institutions under its ambit. It is the path of glory towards the success during the last 19 years. The institution has been adjudged many times as the second best educational institutions in the twin cities and 16th best in all over India through the impartial survey made by the renowned magazine "India Today".

AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

AIET started in the year 1999 and offers various courses at Engineering and PG level. The college is providing with rooms, computer centre, laboratories and seminar hall with audio-visual equipments. Industry Institute interaction is conducted regularly to emphasize on the latest trends in the present market.



It is very near to Narsipatnam. Frequent bus facilities are available both from and to Visakhapatnam and Narsipatnam. Very safe and secure hostel facility is available for Girl students. These are the additional facilities besides excellent academic atmosphere in the college campus.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

The ECE Department was established in the year 1999 with an intake of 60 students and this was increased to 120 students in the 2007 and increased to 180 students in the 2012. The department has an eminent faculty and well supported infrastructure and laboratories. The faculty keeps abreast with the latest advances in technology and ensures that hardware equipment and related software are upgraded to ensure its students are able to keep pace with current trends in technology and the industry.

The department also offers a Post – Graduate courses in DECS and VLSI Design. The students are encouraged to participate in workshops, industrial internship, industrial visits and seminars; along with the projects assigned during the course, these activities enable them to broaden their outlook and build in professionalism that makes their transition from college to industry smoother after graduation.

ABOUT COURSE

Very large-scale integration (VLSI) is the process of creating an integrated circuit (IC) by combining millions of **MOS Atransistors** onto a single chip. VLSI began in the 1970s when **MOS integrated circuit** (Metal Oxide Semiconductor) chips were widely adopted, enabling complex **semiconductor** and **telecommunication** technologies to be developed. The **microprocessor** and **memory chips** are VLSI devices. Before the introduction of VLSI technology, most ICs had a limited set of functions they could perform. An **electronic circuit** might consist of a **CPU, ROM, RAM** and other **glue logic**. VLSI enables IC designers to add all of these **into one chip**.

TOPICS TO BE COVERED

- **Day-1:** Introduction to VLSI
- **Day-2:** Describe ASIC /FPGA design flow
- **Day-3:** To Know about VLSI physical design consideration
- **Day-4:** VLSI fundamentals-deep dive concepts.
- **Day-5:** Verilog introduction
- **Day-6:** Become Familiar with Verilog and VLSI related additional concepts.

For Registration please contact Mr K.Santosh Kumar, Assistant Professor, ECE

CHIEF PATRON Smt.M.Gnaneswari President, Avanthi Educational Society	PATRON Dr. C P V N J Mohan Rao Principal, Avanthi Institute Of Engineering And Technology	CHAIRMAN Sri. E. Govinda Head of the Department Electronics and Communication Engineering
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AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CIRCULAR

Date: 06/09/2017.

This is informed to all the IV B.Tech ECE students that our department is planning to conduct one week course on “**VLSI Design Engineering - Beginner to Intermediate Journey**” scheduled from 11-09-2017 to 16-09-2017. It is directed to all the students of IV ECE to utilize this opportunity to enhance your technical skills. For more details about registration process and participation contact Course Coordinator MrK.Santosh Kumar, Assistant Professor, ECE.

Resource Person Details:

1. Dr. M.Rajan Babu,
Professor,
Department of ECE,
Lendi institute of engineering and technology,
Vizianagaram.
2. Dr .PA. Nageswara Rao
Associate Professor,
Department of ECE,
Gayatri vidya parishad college, Rushikonda,
Visakhapatnam.


E. Govinda

Head of the Department,
HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
Avanathi Institute of Engg.&Tech.
Makavarapalem, Visakhapatnam Dist-531113.


Copy to: Principal, AIET

Principal
Avanathi Institute of Engg. & Technology
Tamaram, Makavarapalem Md.,
Visakhapatnam District., Pin: 531113



AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

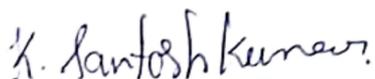
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VLSI Design Engineering - Beginner to Intermediate Journey

From 11-09-2017 to 16-09-2017

SYLLABUS

- Day-1: Introduction to VLSI
- Day-2: Describe ASIC /FPGA design flow
- Day-3: To Know about VLSI physical design consideration
- Day-4: VLSI fundamentals-deep dive concepts.
- Day-5: Verilog introduction
- Day-6: Become Familiar with Verilog and VLSI related additional concepts.

 E. Govinda CHAIRMAN & Head of the Department Electronics and Communication Engineering	 K. Santosh Kumar Asst. Professor Coordinator
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HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
Avanthi Institute of Engg. & Tech.
Makavarapalem, Visakhapatnam District



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VLSI Design Engineering - Beginner to Intermediate Journey

From 11th SEP 2017 to 16th SEP 2017

Schedule

Day-1 (11/09/2017)

09:00 to 10:00	Inaugural Session
10:00 to 12:00	Introduction to VLSI
12:00 to 01:00	Lunch Break
01:00 to 04:00	Integrated circuits, programmable logic devices

Day-2 (12/09/2017)

09:00 to 12:00	Gate Level Modeling
12:00 to 01:00	Lunch Break
01:00 to 04:00	Explanation of gate level modelling examples

Day-3 (13/09/2017)

09:00 to 12:00	Modeling at Dataflow Level
12:00 to 01:00	Lunch Break
01:00 to 04:00	Data flow modelling techniques

Day-4 (14/09/2017)

09:00 to 12:00	Behavioral Modeling
12:00 to 01:00	Lunch Break
01:00 to 04:00	Procedural statements, simulation controlling

Day-5(15/09/2017)

09:00 to 12:00	Switch Level Modeling
12:00 to 01:00	Lunch Break
01:00 to 04:00	Explanation of mos switches

Day-6(16/09/2017)

09:00 to 12:00	System Tasks, Functions and Compiler Directives
12:00 to 01:00	Lunch Break
01:00 to 04:00	Terminating simulation and conclusion

 E. Govinda CHAIRMAN & Head of the Department Electronics and Communication Engineering	 K. Santosh Kumar Asst. Professor Coordinator
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AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

VLSI DESIGN ENGINEERING-BEGINNER TO INTERMEDIATE JOURNEY

III BTECH ECE STUDENTS ATTENDANCE LIST

From 11-09-2017 to 16-09-2017

S.NO	ROLL NO	STUDENT NAME	11/9	12/9	13/9	14/9	15/9	16/9
1	14811A0401	ADDEPALLI Y N R SABAREESH	✓	✓	✓	✓	✓	✓
2	14811A0402	AKULA VEERRAJU	✓	✓	✓	✓	✓	✓
3	14811A0403	ALLA SAI SOWJANYA	✓	✓	✓	✓	✓	✓
4	14811A0404	ARUN KUMAR YANDAKURTI	✓	✓	✓	✓	✓	✓
5	14811A0405	ATLA MANOJ KUMAR	✓	✓	✓	✓	✓	✓
6	14811A0406	BANDAM ARUNA	✓	✓	✓	✓	✓	✓
7	14811A0407	BATTULA RAKESH	✓	✓	✓	✓	✓	✓
8	14811A0408	BODALA TARANI SAI SUSHMA	✓	✓	✓	✓	✓	✓
9	14811A0409	BOTCHA SRILATHA	✓	✓	✓	✓	✓	✓
10	14811A0410	CHINTAKAYALA RAMU	✓	✓	✓	✓	✓	✓
11	14811A0411	DATTI ATCHUTARAO	✓	✓	✓	✓	✓	✓
12	14811A0412	DOPPA BABY LAVANYA LAKSHMI	✓	✓	✓	X	✓	✓
13	14811A0413	DUNGALA RAMA DEVI	✓	✓	✓	✓	✓	✓
14	14811A0414	ETAMSETTI GOWTHAMI	✓	✓	✓	✓	✓	✓
15	14811A0415	GATTA SAI KIRAN	✓	✓	✓	✓	✓	✓
16	14811A0416	GAVIREDDI DEVI	✓	✓	✓	✓	✓	✓
17	14811A0417	GEDDAM JYOTHI	✓	✓	✓	✓	✓	✓
18	14811A0418	GOLLU GOPAL	✓	✓	✓	✓	✓	✓
19	14811A0419	GUMMALA POOJA BHARATI	✓	✓	✓	✓	✓	✓
20	14811A0420	GUNDUBOGULA ABHIPRIYA	✓	✓	✓	✓	✓	✓
21	14811A0421	GUNTA SRILEKHA	✓	✓	✓	✓	✓	✓
22	14811A0422	IMMIDISETTI PRIYANKA	✓	✓	✓	✓	✓	✓
23	14811A0423	JAVVADI CHAKRA SAI	✓	✓	✓	✓	✓	✓
25	14811A0424	JYOTHI SUNDEEP KUMAR	✓	✓	✓	✓	✓	✓
26	14811A0425	KACHCHALLA KUMARI	✓	✓	✓	✓	✓	✓
27	14811A0426	KADARI SRINU	✓	✓	✓	✓	✓	✓
28	14811A0427	KADUPUTLA MOHANAKRISHNA	✓	✓	✓	✓	✓	✓
29	14811A0428	KALLA DURGA BHAVANI	✓	✓	✓	✓	✓	✓
30	14811A0429	KALLA NAGENDRA	✓	✓	✓	X	✓	✓
31	14811A0430	KANDREGULA RAVI	✓	✓	✓	✓	✓	✓

32	14811A0431	KANNURU PADMAJA	✓	✓	✓	✓	✓	✓
33	14811A0433	KOLLANA CHAITANYA	✓	✓	✓	✓	✓	✓
34	14811A0434	KOLLI ANVESH	✓	✓	✓	✓	✓	✓
35	14811A0435	KORASALA BHASKAR	✓	✓	✓	✓	✓	✓
36	14811A0436	KOTA VANITHA	✓	✓	✓	✓	✓	✓
37	14811A0437	KOTA VEERA VENKATA SATYA RAHUL	✓	✓	✓	✓	✓	✓
38	14811A0438	LEKKALA RAMATULASI	✓	✓	✓	✓	✓	✓
39	14811A0439	MADIREDDY RAGINI SAI SNEHITHA	✓	✓	✓	✓	✓	✓
40	14811A0440	MAKIREDDI CHINNA	✓	✓	✓	✓	✓	✓
41	14811A0441	MANTRIPRAGADA PHANI RAJA MITRA	✓	✓	✓	✓	✓	✓
42	14811A0442	MEESALA KEERTHI PRIYA	✓	✓	✓	✓	✓	✓
43	14811A0443	MOGALAPALLI ALEKYA	✓	✓	✓	✓	✓	✓
44	14811A0444	NADELLA RESHMA PRIYANKA	✓	✓	✓	✓	✓	✓
45	14811A0445	NAUGAPU HARISH	✓	✓	✓	✓	✓	✓
46	14811A0446	NOOTHI SIRISHA	✓	✓	✓	✓	✓	✓
47	14811A0447	PAKKURTHI VISWANADH	✓	✓	✓	✓	✓	✓
48	14811A0448	PATCHIGOLLA SITARATNAM	✓	✓	✓	✓	✓	✓
49	14811A0449	PERRAJ ABHISHEK CHAGANTI	✓	✓	✓	✓	✓	✓
50	14811A0450	POLISETTY CHARMILA	✓	✓	✓	✓	✓	✓
51	14811A0451	POOSARLA SWAROOP RAJU	✓	✓	✓	✓	✓	✓
52	14811A0452	PRASADI MANJULA	✓	✓	✓	✗	✓	✓
53	14811A0453	PUTRUPAKALA RESHMA	✓	✓	✓	✓	✓	✓
54	14811A0454	RAJANA HARIKA DURGA LAKSHMI	✓	✓	✓	✓	✓	✓
55	14811A0455	RAPETI JAGADEESH KUMAR	✓	✓	✓	✓	✓	✓
56	14811A0456	RAPETI PRASANNA TULASI DURGA	✓	✓	✓	✓	✓	✓
57	14811A0457	REDDI SAILAJA	✓	✓	✓	✓	✓	✓
58	14811A0458	RUTTALA JYOTHI	✓	✓	✓	✓	✓	✓
59	14811A0459	RUTTALA REVATHI	✓	✓	✓	✓	✓	✓
60	14811A0460	SAYAM YUVARAMA CHANDRA HAS	✓	✓	✓	✓	✓	✓
61	14811A0461	SAYYAPUREDDY SUSHMA	✓	✓	✓	✓	✓	✓
62	14811A0462	KARANAM SAI VENKATA SANDEEP	✓	✓	✓	✓	✓	✓
63	14811A0463	SHAIK INTYAZ BASHA	✓	✓	✓	✓	✓	✓
64	14811A0464	SIRAM ROHINI PRIYANKA	✓	✓	✓	✓	✓	✓
65	14811A0465	SREEMATH T P V R SAI KRISHNA SRINIVAS	✓	✓	✓	✓	✓	✓
66	14811A0466	SUNKARA SANTHOSH	✓	✓	✓	✓	✓	✓
67	14811A0467	TETAKALLI SHIVA KUMAR	✓	✓	✓	✓	✓	✓

68	14811A0468	THAMIRI MALLIKARJUN	✓	✓	✓	✓	✓	✓
69	14811A0469	TUMMALAPALLI SWAMINADH	✓	✓	✓	✓	✓	✓
70	14811A0470	TWINKLA UPADHYAY	✓	✓	✓	✓	✓	✓
71	14811A0471	UGGINA HARISH	✓	✓	✓	✓	✓	✓
72	14811A0472	VADDI RAVI KUMAR	✓	✓	✓	✓	✓	✓
73	14811A0473	VADDI SHYAM VENKATA KUMAR	✓	✓	✓	✓	✓	✓
74	14811A0474	VALLURI VENKATA SAI GOUTHAM	✓	✓	✓	✓	✓	✓
75	14811A0475	VASANTHAVADA SAI KRISHNA	✓	✓	✓	✓	✓	✓
76	14811A0476	VIYYAPU VARAHA ANIL KUMAR	✓	✓	✓	✓	✓	✓
77	14811A0477	Y BIMBADHAR	✓	✓	✓	✓	✓	✓
78	14811A0478	YERRA PREM KUMAR	✓	✓	✓	✓	✓	✓
79	14811A0479	YERUBOLU RAMYA	✓	✓	✓	✓	✓	✓
80	14811A0480	LAGUDU ROHINI	✓	✓	✓	✓	✓	✓
81	15815A0401	ALLU CHANDRA SEK HAR	✓	✓	✓	✓	✓	✓
82	15815A0402	ALLUGOLU HARI KRISHNA	✓	✓	✓	✓	✓	✓
83	15815A0403	BANDARUPALLI BALAJI	✓	✓	✓	✓	✓	✓
84	15815A0404	CHITIKILA GOVINDA	✓	✓	✓	✓	✓	✓
85	15815A0405	DODDI SYAM	✓	✓	✓	✓	✓	✓
86	15815A0406	DUVVADA PREM KUMAR	✓	✓	✓	✓	✓	✓
87	15815A0407	EKAMBERAN RAKESH	X	✓	✓	✓	✓	✓
88	15815A0408	GATREDDI RAJU	✓	✓	✓	✓	✓	✓
89	15815A0409	JALLI LAKSHMI	✓	✓	✓	✓	✓	✓
90	15815A0410	JAMMULA SANTHOSHKUMAR	✓	✓	✓	✓	✓	✓
91	15815A0411	KOMMANA RAJESH	✓	✓	✓	✓	✓	✓
92	15815A0412	KOPPOJU VARAPRASAD	✓	✓	✓	✓	✓	✓
93	15815A0413	MADANADAPU ANANDU	✓	✓	✓	✓	✓	✓
94	15815A0414	MALLA SAI NAIDAMMA	✓	✓	✓	✓	✓	✓
95	15815A0415	MATRU SRINIVAS	✓	✓	✓	✓	✓	✓
96	15815A0416	NAKKINA BHAVYA	✓	✓	✓	✓	✓	✓

K. Santosh Kumar
Coordinator

HOD

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Avanthi Institute of Engg. & Tech.
Machavaram, Visakhapatnam Dist. 5



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

A Course on

VLSI Design Engineering - Beginner to Intermediate Journey

Dated :-11/09/2017



K. Sathish Kumar
Coordinator

[Signature]
HOD

HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
Avanthi Institute of Engg.&Tech.
Makavarapalem, Visakhapatnam Dist-53 113.



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Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Dt: 18/11/2017.

BRIEF REPORT

Avanthi Institute of Engineering and Technology had conducted a certification course on "vlsi design engineering -Beginner to intermediate journey" From 11th Sep 2017 to 16th Sep 2017 in the Department of Electronics and Communication Engineering.

We had **I r.M.Rajan Babu, Professor, Department of ECE, Lendi institute of engineering and technology, Vizianagaram** as a speaker to explain each and every detail about vlsi design. His presentation reveals that present scaling of the CMOS technology to nano dimensions will have to limit at some point.

Dr.PA.N: geswara Rao Associate Professor, Department of ECE, Gayatri vidya Parishad college, Rushikonda, Visakhapatnam shared the detail explanation of vlsi front end and back end design, also explained how to draw a layout diagram with measurements.

K. Santosh Kumar
Coordinator


Head of the Department

HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
Avanthi Institute of Engg. & Tech.
Makavarapalem, Visakhapatnam Dist-52



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Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531111

Certificate of Participation

This is to certify that Mr./Ms. _____ of _____ has
Participated in the Certificate Course entitled on **VLSI Design Engineering - Beginner to Intermediate Journey** Conducted
from 11-09-2017 to 16-09-2017 was organized by the Department of ELECTRONICS AND COMMUNICATION
ENGINEERING at Avanathi Institute of Engineering and Technology.

Coordinator

HOD

Principal