

**ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES: RAJAMPET  
(AUTONOMOUS)**

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**Value added Course on  
Basics of VLSI Concepts  
(In coordination with ANTRIX ECE)**

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**Convener: Dr. CH. Nagaraju, HOD, Dept.of ECE**

**Co-ordinator: Mr. G. Sudha Kiran**

**Organizing Committee: Miss. G. V. Padmaja**

**Resource Persons:**

- 1) Dr. B. Abdul Rahim**
- 2)Mr. N.Bala Dastagiri**
- 3)Mr. G. Sudha Kiran**
- 4) Mr. S.Nazeer Hussain**

**And**  
**Resource person(s) from Industry**

**Target Students: III Year ECE students**

**Date and Time: 26/01/2017 to 09/02/2017 from 5:00PM onwards for a  
Minimum duration of one hour.**

## **Course Structure:**

Course	Class	No. of students	Duration
<ol style="list-style-type: none"><li>1. Impact of VLSI on Modern Technology</li><li>2. VLSI Back end and front end design flows</li><li>3. Importance of VLSI -EDA tools</li><li>4. Designing of basic Digital Circuits using GDK components and their programming through VHDL</li><li>5. Importance of VLSI in Medical electronics</li><li>6. Lab sessions on Tanner tools and Xilinx tools</li></ol>	III ECE	80	6 hrs/week (Maximum of 12 hours)

## **Prerequisite:**

This course has no specific prerequisites. However some familiarities with the following are especially helpful.

- VHDL Programming
- HDL Simulation using EDA tools
- Digital Design Concepts

## **Course Objectives:**

The goal of this course is to familiarize students with the concepts and practical skills required to successfully program and Verify digital systems using HDLs. After finishing the course, students should feel comfortable in building their own digital systems and verifying those.

## **Course outcome:**

After completion of this course, the student can able to implement different digital design circuits using GDK files and EDA tools.