



## ASIC, FPGA Design & Verification– 40 Hours

### Overview

Chips are installed in every system surrounding us in every aspect of our lives. From personal computers, cell phones, cars, airplanes, medical systems, financial systems and more. Understanding the way chips are designed and their operation is important for those interested in being a part of these industries

During the course we will learn the process of planning, designing, verifying and manufacturing of chips, from the idea phase to a working product

### Target Audience

This course is intended for audience with technology background

### Topics

VLSI Chip Design

- \* Technology development, Moore's law, Chip development phase
- \*Chip Structure, Design Methodologies
- \*Principles of CMOS transistors, Building logic gates from transistors
- \*Synthesis
- \*Layout

- \* Transistor electrical characteristics, Design consideration: power, area, timing, technology, price

- \*Memory elements

- \*Timing methodologies, considerations, and analysis

- \*Clocking methodologies

- \*Chip fabrication

- \*Full custom (VLSI), Semi custom (ASIC), FPGA

### **Verification Methodology**

- \*Verification Methodology Overview

- \*Traditional verification approaches

- \*Introduction to SystemVerilog verification methodology

## מבין לקוחותינו:

J.P.Morgan



AT&T **Cal.**



**דיסקונט**



**waze**



CYBERARK®



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