



# CENTRAL TOOL ROOM & TRAINING CENTRE BHUBANESWAR

## Course Content Details (ADVES)

**Advanced Diploma in VLSI & Embedded System (ADVES):** Introduction of VLSI, semiconductor physics, analog / digital electronics, EDA tools, CMOS & lay out design using MICROWIND, VHDL & Verilog HDL programming & simulation using XILINX & ALTERA QUARTUS. Interfacing of PLDs (SPARTAN, VIRTEX, and CYCLONE) Configuring FPAA using ANADIGM. Introduction to embedded system. Assembly & embedded 'C' programming, addressing of 8051, PLC18, ARM7 using RIDE, PROTEUS, MPLAB, KEIL & CROSSWARE. HARDWARE interfacing of 8051, PLC18, ARM 7, interfacing of GSM & Bluetooth module, basis of PCB design & robotics, Automation (PLC Programming), communication skill & project work.