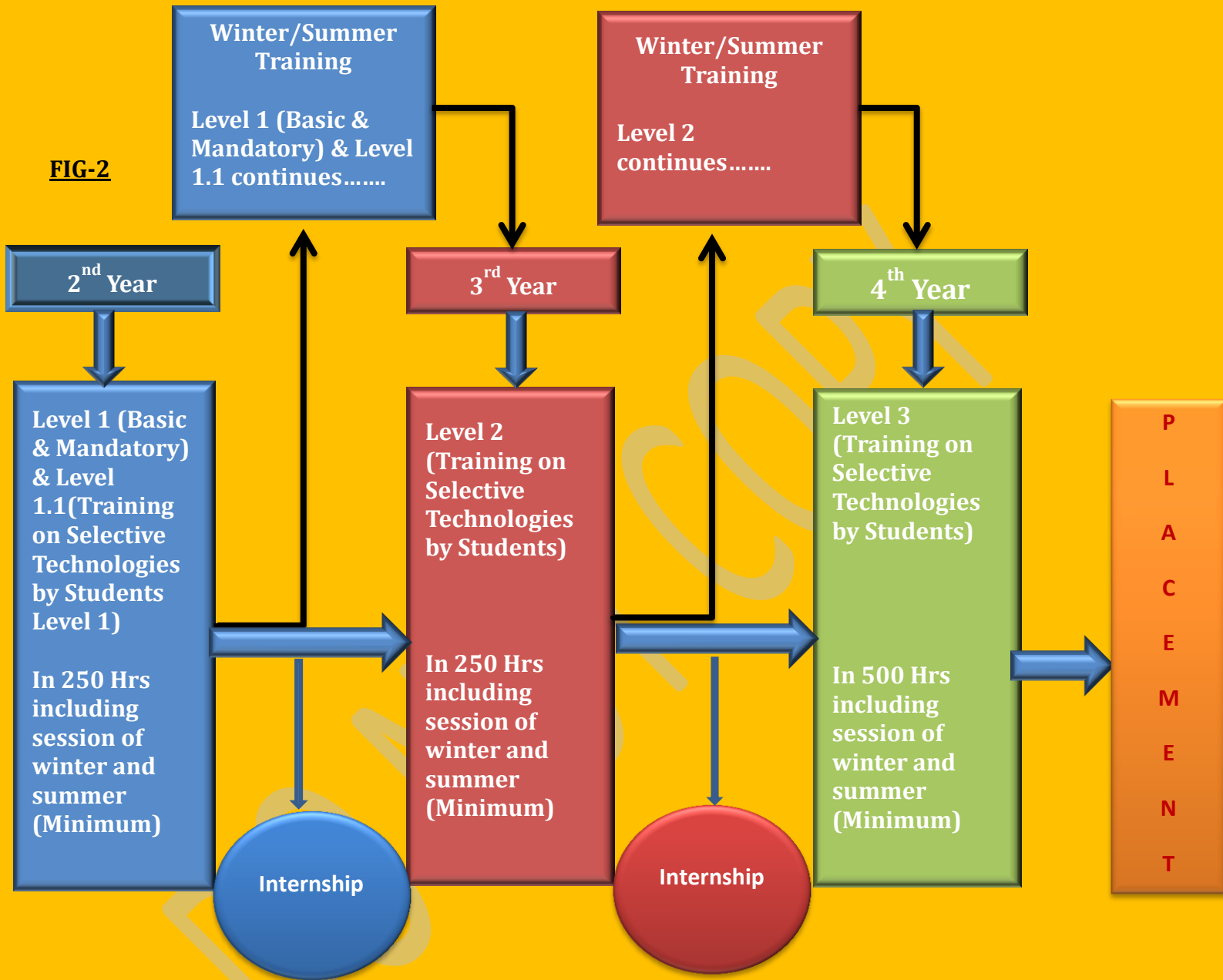


Method We follow- How to Get Entry Pass in SEMICODUCTOR Industries for 2nd year engineering students

FIG-2



PCB (Board) Design

Course Structure for 2nd year only

BASIC ANALOG – Module 1	BASIC DIGITAL- Module-2	CIRCUIT SIMULATION- Module-3	BASIC OF PCB DESIGN- Module -4
<ul style="list-style-type: none"> ➤ Resister. ➤ Capacitor. ➤ Inductor ➤ Diode. ➤ Led. ➤ Basics of circuit design. 	<ul style="list-style-type: none"> ➤ Transformer. ➤ 7805. ➤ 7812 ➤ Lm317. ➤ All logic gates and their IC. 	<ul style="list-style-type: none"> ➤ Circuit simulation on bread board. ➤ Circuit simulation on proteus. ➤ Introduction of PCB designing. 	<ul style="list-style-type: none"> ➤ Introduction of EAGLE (tool for PCB designing.) ➤ Introduction of schematic design. ➤ Introduction to selecting component from library. ➤ Introduction to board design.

PCB System Design

Course Structure for 3rd year only

USED IN CIRCUIT DESIGNING -Module -5	SCHEMATIC- Module -6	LAYOUT- Module -7	LAB- Module-8
<p>Types of Resister.</p> <ul style="list-style-type: none"> ➤ Fixed. ➤ Adjustable/variable. ➤ Carbon composition type ➤ Wire wound. ➤ Metalized <p>Types of Capacitor.</p> <ul style="list-style-type: none"> ➤ Electrolytic. ➤ Ceramic. ➤ Axial lead type. ➤ Radial lead type. ➤ Variable. <p>Types of Inductor</p> <ul style="list-style-type: none"> ➤ Coupled. ➤ Multi-layer, Power, Rf. ➤ Surface mounted. <p>Types of diode.</p> <ul style="list-style-type: none"> ➤ Small/large signal. ➤ Zener. Constant current. ➤ Schottky ,Tunnel, Varactor <p>Transistor.</p> <ul style="list-style-type: none"> ➤ FET ,BJT,L293D ➤ MAX232, Atmel IC. 	<ul style="list-style-type: none"> ➤ Creating schematic file. ➤ Placing, editing, and connecting parts and electrical symbols. ➤ About library and part. ➤ Connection between electrical symbols. ➤ Name and value. ➤ Adding and editing graphical text. ➤ ERC checking 	<ul style="list-style-type: none"> ➤ Design mechanical structure. ➤ Placing of component. ➤ Concept of tracks width calculation. ➤ Routing single layer and multilayer. ➤ Vias and there types. ➤ Silks screen. ➤ Copper pour. ➤ DRC checking. ➤ Adding text. ➤ Gerber file generation. 	<ul style="list-style-type: none"> ➤ Taking print from Gerber on photo paper. ➤ Print circuit on FR4. ➤ Etching. ➤ Drilling. ➤ Checking connectivity. ➤ Component mounting. ➤ Soldering / de soldering. ➤ Testing.

PCB System Design

Course Structure for 4th year only

INTERFACES- Module-9	THEORY -Module 10	TYPE OF BOARD DESIGN- Module-11	PRACTICAL-Module12
<ul style="list-style-type: none"> ➤ RELAY ➤ KEYPAD ➤ LCD ➤ 7 SEGMENT ➤ SWITCHES ➤ LED MATRIX. ➤ ADC/DAC. ➤ SENCER. ➤ ETHHERNET. ➤ USB. ➤ MEMORYCARD. 	<p>High Speed Board Design.</p> <ul style="list-style-type: none"> ➤ Selection of stack-up for High Speed Board Design. ➤ Component Placement. ➤ Impedance Controlled Design of Traces. ➤ Estimating trace dimensions. ➤ Routing of High Speed Serial Signals. ➤ Correct Termination of Transmission Lines. ➤ Correct Termination of Transmission Lines. ➤ Board Level Filtering and Decoupling. <p>On-Board Noise Source.</p> <ul style="list-style-type: none"> ➤ Crosstalk. ➤ Signal Integrity. ➤ Power Noise Filtering. ➤ Power Distribution. ➤ Ground Bounce. ➤ Termination Schemes. 	<ul style="list-style-type: none"> ➤ ANALOG SIGNAL BOARD DESIGN. ➤ DIGITAL SIGNAL BOARD DESIGN. ➤ MIXED SIGNAL BOARD DESIGN. ➤ RF SIGNAL BOARD DESIGN. ➤ CRITICAL SHAPE BOARD DESIGN. ➤ HIGH DENCITY BOARD DESIGN. ➤ INTRODUCTION TO DAUGHTER BOARD DESIGN. ➤ INTRODUCTION TO MOTHER BOARD DESIGN. ➤ INTRODUCTION TO FPGA BOARD DESIGN. 	<ul style="list-style-type: none"> • BOARD LAYER. • SINGLE LAYER. • DOUBLE LAYER. • MULTI LAYER. • FINAL PROJECT WITH THESE MICROCONTROLLER. • ATMEL. • MICROCHIP. • INTEL. • TEXAS. • TOOL USED • EAGLE. • KICAD. • ALTIUM. • ORCAD. • LAB. • MAKING SMPS ON HARDWARE. • MAKING DEVELOPMENT BOARD ON HARDWARE. • PROJECT ON THE REQUIREMENT OF STUDENT.