

**ELECTRONICS SERVICE & TRAINING CENTRE  
(TECHNICAL SERVICE CHARGES)**

Equipment / Machine / Process description	Technical Service charges per hour for equipment & Machines only (Rs.)	Operator charges per hour per operator (Rs.) <b>Note-</b> Operator charges will be nil where ever Entrepreneurs operator is allowed to work on ESTC machine/ equipment.
<b>MECHANICAL WORKSHOP</b>		
1. Turning & Threading operation	20 to 88 ✓	15
2. Machining of flat surface & gear cutting	40 to 72 ✓	15
3. Precision internal & external Grinding	40 to 96 ✓	15
4. Drilling & boring of big jobs	2 to 380	15
5. Engraving	60	15
6. Micro Drilling :-		
(a) EDM	260	20
(b) NC Milling	224	20
7. Tool Sharpening	44	17
8. Shearing	16	15
9. Coining, blanking piercing & bending	32 to 88 ✗	15
10. CNC Injection Moulding Machine	172 ✓	20
11. ECONO CNC Lathe	144 ✓	20
12. CNC train master lathe	56 ✓	20
13. CNC vertical Machining Centre	72	20
<b>WOUND COMPONENT LAB</b>		
1. Vacuum impregnation	48	20
2. Testing Facility	56	30
3. Manufacturing Facility	48	15
<b>PCB DESIGN &amp; MANUFACTURING LAB</b>		
1. CNC Drilling	212	20
2. Screen Printing Facility	20	20
3. Photography Facility	20	20

4.PCB Design Facilities	120	30
<b>PCB ASSEMBLY FACILITY</b>	180	15
<b>DESIGN &amp; DEVELOPMENT</b>	60	-
<b>TESTING CALIBRATION LAB</b>		
1. Oscillator	20	30
2. Oscilloscope	20 to 200	30
3. LCR Meter	4 to 100	30
4. Electronic Counter	100	30
5. Colour Pattern Generator	4 to 8	30
6. Multimeter	2 to 4	30
7. High Voltage Probe	4	30
8. Function Signal Generator	4 to 8	30
9. R.F. output meter	4	30
10. Power Supply	4	30
11. Distortion & level meter	1	30
<b>AUDIO VISUAL FACILITIES</b>		
1. Overhead Projector	80	-
2. TV-VCR for training purpose	160	-

**ELECTRONICS SERVICE & TRAINING CENTRE  
KANIYA, RAMNAGAR, DISTT. NAINITAL (UTTARANCHAL)**

PCB MANUFACTURING	Rates per square centimeter (Rs.)			
	Min. charge in Rs.	Qty. 1-10 Rs. P.	Qty. 11-50 Rs.P.	Qty. above 51, Rs.P.
<b>GLASS EPOXY (FR-4) 1.6MM THICK</b>				
1. S/S ROLLER TIN	160	0.70	0.60	0.50
2. S/S ELEC. TIN	160	0.90	0.80	0.70
3. PTH ELEC. TIN	480	2.30	1.90	1.60
<b>GLASS EPOXY (FR-4) 2.4MM THICK</b>				
1. S/S ELEC. TIN	400	1.00	0.90	0.80
2. PTH ELECT. TIN	800	2.80	2.40	2.00
<b>PAPER PHENOLIC / COMPOSITE</b>				
1. FR1 1.5mm (Commercial grade)	160	0.40	0.30	0.20
2. FR2 1.6mm	160	0.50	0.40	0.30
3. FR3 1.6mm	320	0.70	0.60	0.50
4. Roller Tinning	160	0.30	0.20	0.10
<b>MASKING</b>				
1. SOLDER MASKING (LSM)	320	0.10	0.06	0.04
2. SILK SCREEN / LEGEND PRINTING	160	0.10	0.06	0.04
3. SOLDER MASKING (PISM)	320	0.12	0.08	0.06
<b>GLASS EPOXY (FR-4) 3.2MM THICK</b>				
1. PTH ELEC. TIN	720	3.00	2.40	2.00
1. One time CNC Setup charges per design	2000	-	-	-
2. Gold Plating (per finger)	3.00	-	-	-
PCB Design – Rs.6/- per sq. cm. Per plot. ( Minimum 4 plots for Double side & 3 plots for single side)				
<b>OTHER FACILITIES:</b>				
1. Scanning - Rs.40/- per scan per image (1/4 Size) Rs.80/- per scan per image (1/2 size) Rs.120/- per scan per image (A4 size)				
2. Laser Print Rs.10/- per page.				

	Rates per Sqr. Cm			
	Pin hole Density = (Sqr. cm/ pin hole)			
	1.00 sqr cm or more	1.00 to .75	.75 to 0.5	0.5 to.25
<b>For Single Side PCB</b>				
a) Card Copy	Rs. 18	Rs. 36	Rs. 54	Rs. 72
✓ b) Schematic to PCB Layout	Rs. 24	Rs. 48	Rs. 72	Rs. 96 ✓
<b>Double Side PCB</b>				
a) Schematic to PCB	Rs. 24	Rs. 48	R.s 72	Rs. 96
b) Card Copy	Rs. 36	Rs. 72	Rs.108	Rs.144