# Title: Implementation of AutoCAD Courses in TICI.

#### 1. Problem Identification:

- > Engineering drawing by hand is time consuming.
- > Precision in manual drawing is highly tough.
- 3D modeling is so difficult by pencil, board drawing.
- > Simulation & analysis cannot be done in conventional drawing.

### 2. Methodology:

- ➤ Benchmark –TICl is the center of excellence for making skilled manpower by proper training in verities of training branches. Mechanical Engineering Department gives training on complex and very essential training modules. Mechanical Engineering Drawing is one of them needs training.
- > By Installing AutoCAD software in the modern computer lab in Academic building-3, we will be capable to make facilities for the participants.
- > Proper training to the trainer will be given by suitable institutions or by hiring AutoCAD experts.
- Finally by offering courses titled "Basic Mechanical Design by AutoCAD 2D & 3D" for up-gradation courses & including Mechanical Engineering Drawing by CAD for university courses.
- Further research will be started for CAD & CAM section under MED in TICI.

## 3. Expected Results

- > All technical persons of BCIC & other organization in Bangladesh can avail the courses in AutoCAD in TICI.
- Mistake & time in drawing will be reduced and precision will be achieved in drawing.
- > Participants will be skill & efficient in their engineering design & drawing work.
- > 3D modeling, simulation & analysis of designed mechanical parts will be possible.
- > Training courses on AutoCAD by other departments or trades will be possible.
- University students can have the opportunity to practices the CAD session at their special training courses taken at TICI.
- > Tk 6,24,000.00 per year income is possible by AutoCAD courses upto three years at estimated prices in TICI. [ 40 seats per courses & 2 courses per year (a) 7800/= ]

#### Work Schedule:

Work Schedule:			Month										
SN	Description	01	02	03	04	05	06	07	08	09	10	11	12
01	AutoCAD Software purchase & installation												
02	TOT												
03	Training Courses Arrange												
04	Evaluation & reporting												

## 5. Cost break-up:

SN	Description	Man-day	Rate	Cost
1	AutoCAD Purchase & Installation	-	3,52,800	3,52,800.00
2	TOT Arrangement	50	3,000	1,50,000.00
3	Explorer fellow (Out sourcing)	160	400	64,000.00
4	Exploring officers (TICI personnel)	100	2,000	2,00,000.00
5	Chief Explorer	50	2,000	1,00,000.00
6	Custos & Reviewer	25	2,000	50,000.00
7	Consumables	Lump-sum		30,000.00
8	Transport, Communication, Others etc.	Lump-sum	<b>-</b> -	20,000.00
		Subtotal		9,66,800.00
9	Overhead (20%) & Service charge (10%)			2,90,040.00
		Grand total		12,56,840.00