# Workshops

Name of the capability enhancement program	Date of implementati on	Numbe r of student s enrolle d	Name of the agencies/consultants involved with contact details (if any)
Workshop on CNC programming and operations	27 April – 2 May 2023	26	Mr. Arun Singh Kushwah 9827599648
Workshop on Advanced Surveying	28 - 29 Nov 2022	24	Mr. Farhan Ul Rahman 9754022130

### **Workshop on CNC programming and operations:**

Department of Civil Engineering arranged 5 day workshop on CNC programming and operations for Civil engineering students. Now a day's use of CNC Machine in all industries is increase day by day so this training introduces the concepts and capabilities of computer numerical control machine tools. Topics include Introduction about CNC technologies. Part Programming, Geometric dimensioning and Tolerances, setup CNC machine for operation and basic practice on CNC machine in context with industrial applications gives real industrial knowledge to the attendees. With completion of this course students should be able to operate CNC machine as well as able to program any industrial component.





Photo 2.2.1:1 Workshop on CNC Programming and Operations: for Civil students-Resource person- Mr. Arun Singh Kushwah: Date of event: 27 April – 2 May 2023

## Workshop on Advanced Surveying

### **Instruments practiced for workshop**

- 1. Chain
- 2. Plane Table
- 3. Dumpy Level
- 4. Auto Level
- 5. Contouring





Img. 2: Plane Table

Img. 1: Chain



Img. 3: Dumpy Level

Img. 4: Auto Level

#### **Functions of Instruments**

 Topographical maps showing hills, rivers, towns, villages, forests etc. are prepared by surveying.

- For planning and estimating new engineering projects like water supply and irrigation schemes, mines, railroads, bridges, transmission lines, buildings etc. surveying is required.
- Cadastral Map showing the boundaries a field houses and other properties are prepared by surveying.
- Engineering map showing the position of engineering works like roads, railways, buildings, dams, canals etc. are prepared through surveying.
- To set out a work and transfer details from map to ground knowledge of surveying is used.
- For planning navigation routes and harbors, marine and hydro-graphic surveying are
- To help military strategic planning, military maps are prepared by surveying.
- For exploring mineral wealth, mine survey is necessary
- To determining different strata in the earth crust, geological surveys are required
- Archaeological surveys are used to unearth relics of antiquity.

#### Objective of the workshop.

- 1. Relatively quick collection of information
- 2. Multiple surveys can be performed at one set-uplocation.
- 3. Easy to perform distance and horizontal measurements
- 4. Layout of construction site quickly and efficiently.

#### **Advantages of Workshop**

- Students understood the use of many instruments for Surveying.
- Adjustments can be made as per the requirement on any type of ground by the students.
- Students were able to take Level readings.
- Students understood the concept of Surveying and its practical applications



## **List of Students Participated**

Sr. NO	ROLL NO	STUDENT NAME	CONTACT NO.
1	BETN1CE20001	Neeraj Kumar	8874823757
2	BETN1CE20002	Piyush Sharma	9893027937
3	BETN1CE20003	Shivam Dandotiya	7974177192
4	BETN1CE20004	Tarun Singh	9340348152
5	BETN1CE20005	Tatenda Jarawaza	7880027831
6	BETN1CE20006	Shariq Jamal War	
7	BETN1CE20007	Amit Dhakar	
8	BETN1CE20008	Rishabh Jain	6261718033
9	BETN1CE20009	Rajdev Lodhi	7067579173
10	BETN1CE20011	Santosh Yadav	8797530034
11	BETN1CE20012	Niranjan Ray Yadav	6203961529
12	BETN1CE20013	Sushant Majhi	8965704974
13	BETN1CE20014	Subhash Chaudhary	8965932744
14	BETN1CE20016	Subodh Chaudhary	9779811780091
15	BETN1CE20017	Dipesh Kumar Das	8965865739
16	BETN1CE20018	Arpan Kumar Chaudhary	9779819792068
17	BETN1CE20019	Anish Chaudhary	7974676997
18	BETN1CE20020	Rabindra Chaudhary	9779807723755
19	BETN1CE20021	Niraj Kumar Sah	9264147427/+9779827789801
20	BETN1CE20022	Nitesh Kumar Shah	9881255059
21	BETN1CE20023	Krishna Kumar Bhagat	9.77982E+12
22	BETN1CE20024	Krishna Kumar Mandal	9805969334
23	BETN1CE20025	Jibachh Prasad Sah	9827762141
24	BETN1CE20026	Aashish Kumar Majhi	7580869009