

## Internship Opportunity

Date: 27/08/2025

Location: IIT Kanpur Incubation Center, IITK Campus, Kanpur.

Department: Civil / Geotechnical Engineering

Duration: 1 Year (Full-time / Part-time depending on academic schedule)

## About C-DISC Technologies Pvt Ltd

C-DISC Technologies Pvt Ltd, based at Calicut, Kerala, is a sustainable construction technology company incubated at IIT Kanpur and NIT Calicut. We specialize in integrated pre-engineered solutions such as:

- LGSF (Light Gauge Steel Frame) Structures
- Pre-Engineered Steel Built-up Sections
- EPS (Expanded Polystyrene) 3D Panel Systems
- Pre-cast Pre stressed Grillage Foundations
- PEN (Pre-Engineered Nail) Foundations (our patented innovation)
- Modular Net Zero Energy Homes

Our innovations have been recognized nationally and internationally, and we are proud winners of the SSMB 2024 National Award for excellence in steel and modular construction.

## Internship Role – Geotechnical Engineering Intern

Soil–Foundation Interaction & Validation of PEN Foundation

## Key Responsibilities

- Carry out soil-structure interaction studies, foundation load tests, and validation experiments in collaboration with IITK Civil/Geotechnical Engineering Department.
- Conduct geotechnical parametric studies (bearing capacity, lateral resistance, uplift capacity, cyclic loading, etc.) for PEN Foundations under different soil conditions.
- Assist in preparing geotechnical validation reports and data required for certification from BMTPC and BIS.
- Collaborate with SERC Chennai for long-term performance studies on durability, fatigue, and corrosion resistance.



- Provide geotechnical parameters and data modelling support for the development of design software for PEN Foundation.
- Draft detailed geotechnical investigation reports, research papers, and technical documentation for internal and external stakeholders.

## Desired Qualifications

- Pursuing M.Tech / PhD in Civil Engineering with specialisation in Geotechnical Engineering at IIT Kanpur.
- Strong foundation in soil mechanics, foundation engineering, ground improvement techniques, and IS codes (IS 2911, IS 6403, IS 8009, etc.).
- Familiarity with geotechnical software (PLAXIS, GeoStudio, FLAC, or equivalent) is desirable.
- Experience or interest in field testing (SPT, CPT, Plate Load Test, Pile Load Test, etc.) and laboratory soil testing.
- Analytical mindset with strong documentation and research skills.

## Expected Outcomes

- Geotechnical validation data for PEN Foundation across various soil conditions.
- Comprehensive soil–foundation interaction studies supporting certification processes.
- Reports and data for BMTPC & BIS certification.
- Technical validation from SERC Chennai on durability, fatigue, and corrosion resistance.
- Geotechnical module inputs for PEN Foundation design software.

## Benefits

- First-hand exposure to innovative foundation systems and sustainable construction technology.
- Opportunity to collaborate with IITK faculty, BIS/BMTPC experts, and national R&D labs.
- Certificate of Internship from CDISC Technologies Pvt Ltd (Incubated at IIT Kanpur).
- Opportunity to join CDISC Technologies' core team post-internship, if the candidate's vision, values, and frequency align with the organisation.

