

# National Institute of Technical **Teachers' Training and Research** (NITTTR) Kolkata

Deemed to be University Under Ministry of Education, Govt. of India

# SUMMER INTERNSHIP PROGRAMME



## About Us

National Institute of Technical Teachers' Training & Research (NITTTR), Kolkata started its journey in 1965 under the Ministry of Education, Government of India. Government of India, in 2003, accorded national status to this Institute (along with the 3 sister institutes) in recognition to the expert service rendered for overall improvement of quality of Technical Education System. The primary focus of the Institute is to provide inservice training to the teachers and staff of Degree and Diploma level technical institutions and conducting activities related to the quality improvement of the technical education system of the country.

As per Government of India notification No. 9-1/2021-U.3(A) dated 22<sup>nd</sup> February, 2024, in exercise of powers conferred under Section 3 of UGC Act, 1956, the Ministry of Education, on the advice of the UGC, has declared NITTTR Kolkata as an Institution Deemed to be University under distinct category

The Institute has excellent infrastructural support in the form of well-equipped laboratories and other resources. The focal activities of the Institute include Short-Term Training programmes, Learning Resources Development, Educational Research and Management as also Extension Services, Curriculum Development. Apart from these, the Institute is offering four M. Tech. Programmes in Green Manufacturing, Intelligent Control Systems, Artificial Intelligence and Machine Learning, Smart Structural Engineering and also offering Ph.D programme in five departments.

The NITTTR Kolkata is proudly introducing Summer Internship Programme in the academic year 2025-26 at the department of Civil Engineering, Computer Science & Engineering, Electrical Engineering, Mechanical Engineering and Technical Education & Management.

## **Objective of the Programme**

Students will gain practical knowledge in their respective areas and conduct reasonable work, aiming research & development of the system or device or component or unit /product development/ research paper publication/ solving realistic problems etc.

## **Duration**

Tentative starting date is 15<sup>th</sup> June to last week of July 2025. Exact date of commencement of the programme will be communicated through email on the later stage.

## **DEPARTMENTS**

## **Civil Engineering Dept.**

Eligibility: Candidates completed in the 2<sup>nd</sup> Year of UG/Diploma programme OR completed 1<sup>st</sup> Year of the PG programme in Civil Engineering.

#### Areas of work:

- Civil Engineering
- Design and analysis of structures (min B.Tech)
- Earthquake / wind analysis of structures (min B.Tech)
- Environmental
  - engineering
- and assessment

### **Computer Science & Engg. Dept.**

Eligibility: Candidates completed the 2<sup>nd</sup> Year of UG/Diploma programme OR completed 1<sup>st</sup> Year of the PG programme in CSE, IT OR completed 1st Year of MCA, from an AICTE / UGC recognized Institute.

#### Areas of work:

- Applications of Computational Geometry in Clustering
- Bio Medical Image Processing
- Data Science & Statistics
- Deep Learning
- Deep Learning

- Large Language Models
- Machine Learning
- Machine Learning
- Machine Learning and It's Applications
- Numerical Simulation
- Papyri analysis
- Parallel Computing

- FRP Composite Plate (min B.Tech)
- Landfill reclamation
- leachate contamination
- Material testing/nondestructive test/Shake table testing
- Pile Foundation
- Environmental monitoring Solid Waste Management

## Technical Education & Mgt. Dept.

**Eligibility**: Candidates completed the 2<sup>nd</sup> Year of UG <u>OR</u> completed 1<sup>st</sup> Year of the PG programme in Education, Management, Humanities and Social Sciences disciplines.

#### Areas of work:

- Assessment & evaluation
- Climate Change
- Curriculum Design
- Digital Pedagogy
- Disaster Risk Management
- Disaster Risk Reduction and Management.
- Ecosystem Resilience
- Education Technology
- Educational Psychologies
- Educational research
- Heat Mitigation
- Resilience Heat Vulnerability

- on HRD and HRM
  - Humanities and Social Sciences
  - Institutional Assessment
  - Micro/Nanoelectronics
  - Mitigation and Adaptation
  - Nanodevices and VLSI Design
  - Soft skill development
  - Students Assessment and Evaluation
  - Technology enabled learning, pedagogy & practice
  - Training & Development

# **Electrical Engineering Department**

**Eligibility**: Candidates completed the 2<sup>nd</sup> Year of UG/Diploma programme OR completed 1<sup>st</sup> Year of the PG programme in Electrical, Electronics and Communication, Mechanical, Electronics & Instrumentation disciplines.

#### Areas of work:

- Energy Management for Smart Microgrid
- Impact analysis of EV integration
- MATLAB and LABVIEW
   Applications
- PLC Programming and Applications
- Power Quality Analysis in Microgrid System
- Renewable energy Sources
   and Storage Devices
- Sensors and IoT Applications

## Mechanical Engineering Dept.

**Eligibility**: Candidates completed the 2<sup>nd</sup> Year of UG/Diploma programme <u>OR</u> completed 1<sup>st</sup> Year of the PG programme in Mechanical Engineering or allied or interdisciplinary fields.

#### Areas of work:

- Additive Manufacturing and Materials Processing
- AI, ML based data processing in Robotics and IOT based systems development
- Alternative fuels
- Biomaterials
- Digital Advanced Manufacturing for Smart Product Development
- Digital Supply Chain Management
- Green Composite Manufacturing

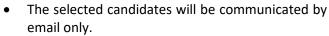
# **General Conditions & Instructions**

Fee: Rs. 2,000/- for 4 weeks and Rs.3,000/- for 6 weeks.

**Accommodation**: Efforts will be made to provide accommodation to the interns in the institute Hostel on payment basis. Hostel charge will be Rs. 1,000/- per month (excluding meal charge).

**Eligibility:** Candidates completed the 2<sup>nd</sup> Year of UG/Diploma programme OR completed 1<sup>st</sup> Year of the PG programme

#### How to apply:



Documents to be submitted: (1) Signed application
 (2) Identity proof (3) Consolidated Grade Card
 (appropriate) (4) The letter of reference from the parent Institute

Submission of Fees: Once confirmed, the internship fees (₹2,000 for four weeks / ₹3,000 for six weeks) are to be deposited through online payment (NEFT/RTGS) in the Account: National Institute of Technical Teachers' Training & Research, Kolkata; Bank Account No.: 08930200000263; Bank Name: Indian Overseas Bank; Bank Address: Salt Lake City, Block- EA, Sector-I, Kolkata-700064; IFSC Code: IOBA0000893. The fee once paid will not be refunded or re-adjusted under any circumstances.

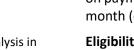
**Certificate:** Upon successful completion of the programme, certificates will be provided by NITTTR Kolkata authority to the students.

# **Important Dates**

Event	Tentative Timeline
Last Date for submission of Application form	May 08, 2025, Thursday
Dates for Interview through online	May 15, 2025, Thursday
Joining of Internship	Communicated through your email
Duration of Internship	4 weeks / 6 weeks

#### CONTACT:

PG Cell, National Institute of Technical Teachers' Training and Research, Kolkata, Block-FC, Sector-III, Salt Lake City, Kolkata-700106 pgcell@nitttrkol.ac.in 2 033-66251944 http://www.nitttrkol.ac.in





- Industrial Engineering
  Materials for Gas Turbine engine
- componentsMetal matrix composite
- Nanomaterials
- Power plant engineering,
- Robotics and IOT based systems development
- Super alloys
- Technical Education
- Thermal Engineering, Turbomachinery, CFD, Gas Turbines