# Winter Internship Programme





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

Block-FC, Sector-III, Salt Lake City Kolkata-700106, INDIA

## **About the Institute**

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 in-service 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.

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 Manufacturing Technology, Multimedia & Software Systems, Mechatronics Engineering and Structural Engineering. The NITTTR Kolkata is proudly introducing Winter Internship Programme from the current academic year, 2023-24 at the department of Civil Engineering, Computer Science & Engineering, Education & Management, Electrical Engineering and Mechanical Engineering.

## **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

From 1<sup>st</sup> week of Dec 2023 to 2<sup>nd</sup> week of Jan, 2024 for the winter session. Slight changes in dates may be possible. Even internship programme for eight weeks is also possible, based on the requirement of the students.

# **General Conditions & Instructions**

Fee: Rs. 4,000/- for four weeks and Rs. 7,000/- for eight weeks.

Accommodation: Hostel facility may be available to the selected students on payment basis at the NITTTR Kolkata's student hostels, subject to the availability. Hostel charge will be Rs. 1,000/- per month (excluding meal charge).

**How to apply:** Eligible UG/PG/Diploma students may apply by sending their application and other details to the Head of respective Department, National Institute of Technical Teachers' Training and Research (NITTTR) Kolkata, FC Block, Sector III, Salt Lake City, Kolkata 700106 along with supporting documents. The applicant will have to attach the following documents, while sending the application:

- 1. Signed application
- 2. Identity proof
- 3. Consolidated Grade Card (appropriate)
- 4. The letter of reference from the parent Institute

Submission of Fees: Selected candidate will be communicated by email only. Once confirmed, fees for four weeks internship, ₹4,000/- (Rupees Four thousand only) or eight weeks internship ₹7000/-(Rupees Seven thousand only) should be deposited in online payment through NEFT/RTGS in the following account:- Name of 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.

**Contact:** Head of respective Departments, National Institute of Technical Teachers' Training and Research (NITTTR), FC Block, Sector III, Salt Lake City, Kolkata 700106, West Bengal.

## **Civil Engineering Department**

**Eligibility**: Candidates completed in the  $2^{nd}$  Year of UG/Diploma programme <u>OR</u> completed  $1^{st}$  Year of the PG programme in Civil Engineering.

Areas of work: This programme will cover a variety of subjects, including the analysis and design of reinforced concrete and steel structures, earthquake engineering, vibration control, repair and rehabilitation of structures, finite element method, concrete technology, geotechnical engineering, environmental science & engineering, water & wastewater engineering and waste management. The programme also includes hands on experience in the application of software for analysis and design using the latest version of software such as STAAD PRO, ETABS, SAP2000, ANSYS, and ABAQUS.

Expertise of the departmental faculty: Design of Steel Structures using latest code (IS 800-2007), Advanced Structural analysis, Drawing using software, Lab oriented programme, High Performance Concrete, Reinforced Concrete Design, Earthquake Resistant Design, Software Application in Structural Engineering, Rural Development, Disaster Management, Rural Water Supply and Sanitation, Waste Management, Drinking Water Quality, Ambient Air Quality, Wastewater Treatment, Solid Waste Management, Applied Chemistry, Environmental Science & Engineering etc. For more details, kindly contact, Head of the Department, Prof. Sailendra Nath Mandal, Email: snmandal@nitttrkol.ac.in

#### Computer Science & Engineering Department

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

Areas of work: All areas of CSE discipline including Artificial Intelligence, Machine Learning, Computer Networking, Computational Geometry, Parallel Computing, Bioinformatics, DBMS, Software Engineering, Formal Languages and Automation, Fuzzy and Rough Systems etc.

**Expertise of the departmental faculty:** The CSE Dept. of NITTTR, Kolkata has highly qualified (all Ph. D degree holders) faculty members actively involved research in emerging areas of CSE discipline. For more details, kindly contact, Head of the Department, Prof. Ranjan Dasgupta, Email: ranjandasgupta@nitttrkol.ac.in

#### Education & Management Department

**Eligibility**: Candidates completed in 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 are eligible for Winter Internship program at the Department of Education and Management, NITTTR Kolkata.

**Areas of work:** Humanities and Social Sciences, Educational Psychologies, Digital Pedagogy, HRD and HRM, Students Assessment and Evaluation, Training and Development, Educational research, Soft skill development.

**Expertise of the departmental faculty:** Human resource development and Human resource management, Quality management and quality tools, Students Psychology, Students assessment and Evaluation, Soft skill development, Life skill development, Preparation of question bank. For more details, kindly contact, Head of the Department, Prof. Sukanta Kumar Naskar, Email: sknaskar@nitttrkol.ac.in

# **Electrical Engineering Department**

**Eligibility**: Candidates completed in the 2<sup>nd</sup> Year of UG/Diploma programme <u>OR</u> completed 1<sup>st</sup> Year of the PG programme in Electrical, Electronics and

Communication, Mechanical, Electronics & Instrumentation disciplines.

Areas of work: The department has well equipped laboratories viz. Mechatronics Laboratory, Process Control Laboratory, Measurement & Transducer Laboratory, Electrical Machine Laboratory, Microprocessor Laboratory, Advanced Control Laboratory, Power System Laboratory and Non-Conventional Energy Laboratory etc. These labs offer hands on experience and practical application oriented learning.

**Expertise of the departmental faculty:** The department has highly qualified faculty members having expertise in the broad areas of Electrical, Electronics, Instrumentation and Biomedical Engineering. For more details, kindly contact, Head of the Department, Prof. Subrata Chattopadhyay, Email: schattopadhyay@nitttrkol.ac.in

**Mechanical Engineering Department** 

**Eligibility**: Candidates completed in 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**: Manufacturing, Welding, Fluid power, EDM, ECM, Thermal engineering, CFD, Composites, Nanomaterials, CAD/CAM, NC/CNC, Microscopic analysis of products/materials.

Expertise of the departmental faculty: Welding Technology, Additive manufacturing, Advanced manufacturing, Automated Manufacturing Systems, CAD/CAM, NC/CNC, Turbomachinery, CFD, Power Plant Engineering, Alternative fuels, Nanocomposite and bio-composite, Smart materials, Powder metallurgy, Metal matrix composites/nanocomposites, Reliability Engineering, Fluid Power Engineering, Nonconventional Machining. For more details, kindly contact, Head of the Department, Prof. Subrata Mondal, Email: subratamondal@nitttrkol.ac.in



#### Department of ..... National Institute of Technical Teachers' Training and Research Kolkata FC Block, Sector III, Salt Lake City, Kolkata 700106, West Bengal

#### FORM OF APPLICATION FOR WINTER INTERNSHIP

(Please read carefully the general condition/instructions enclosed herewith before filling the form)

To be returned: To, The Head, Department of ....., National Institute of Technical Teachers' Training and Research (NITTTR), FC Block, Sector III, Salt Lake City, Kolkata 700106, West Bengal, India

Photograph

| 1. | Name in full<br>(Underline Sur  |           | letters}   |                      |  |
|----|---|-----------|------------|----------------------|--|
| 2. | Father's/Mother's Name  |           |            |                      |  |
| 3. | Gender  |           |            |                      |  |
| 4. | a) Permanent Address  |           | *b) Addres | s for Correspondence |  |
|    | Mobile No   |           |            | Email ID             |  |
|    | Emergency Co  | ntact No. |            | <u> </u>             |  |
| 5. | i) Name of the University/Institute   |           |            |                      |  |
|    | ii) Programme of Study  |           |            |                      |  |
|    | iii) Field of Specialization  |           |            |                      |  |
| İ  | iv) Year of Study<br>v) Percentage of Marks or GPA<br>vi) Area of Internship Required |           |            |                      |  |
|    |   |           |            |                      |  |
|    |   |           |            |                      |  |
|    | vii) Scholarly activities (if any)  |           |            |                      |  |

\*Any changes in the address should be communicated to the Head, Department of ....., NITTTR Kolkata 700106

I hereby declare that I have carefully read and understood the instructions and particulars supplied to me and that all entries in the form are true to the best of my knowledge and belief.

| Date: | Signature of the Candidate |
|-------|----------------------------|
|       |                            |

For office use only:

Above student is recommended for winter internship for period of ----- month(s) from ----- to ------ to ------

Date: .....

Date: .....

Date: .....

Name & Signature of the Coordinator

Name & Signature of the Head

Signature of the Director

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