



ATAL AICTE ONLINE FACULTY DEVELOPMENT PROGRAMME

ON

WASTE TECHNOLOGY (ONLINE)



25th to 29th October 2021



Organized by:

Department of Civil Engineering

National Institute of Technical Teachers' Training and Research, Kolkata

(Ministry of Education, Government of India)

Block – FC, Sector – III, Salt Lake City

Kolkata - 700106

www.nittrkol.ac.in

In association with



AICTE TRAINING AND LEARNING (ATAL) ACADEMY
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION (AICTE)
MINISTRY OF EDUCATION
GOVERNMENT OF INDIA

Registration Link: <https://www.aicte-india.org/atal>

ABOUT THE INSTITUTE

National Institute of Technical Teachers' Training & Research (NITTTR), Kolkata was established in 1965 as Technical Teachers' Training Institute (TTTI), Calcutta. This was the first among four such institutes (other three being at Chandigarh, Bhopal & Chennai) established by the Ministry of Education, Govt. of India as fully centrally funded autonomous institutions for providing pre & in-service training to the teachers and staff of Degree and Diploma level training institutions and also for conducting various activities related to quality improvement of the technical education system of the country. The Govt of India, in 2003, accorded national status to this institute, (along with the three sister institutes) in recognition of the contribution of these institutes for the expert service rendered for overall improvement of quality of Technical Education System.

The focal activities of the institute are (i) Education & Short-term Training, (ii) Curriculum Development, (iii) Learning Resources Development, (iv) Research & Development and (v) Extension Services & Consultancy. AICTE has recognized the Short-term training programmes conducted by the Institute for consideration for the purpose of movement to higher grades under the Career Advancement Scheme (CAS). The Institute is also offering four (4), AICTE approved, two year (four semester) Post Graduate Degree Programmes in Manufacturing Technology, Multimedia & Software Systems, Mechatronics Engineering and Structural Engineering leading to M.Tech Degree of Maulana Abul Kalam Azad University of Technology (MAKAUT, formally West Bengal University of Technology (WBUT)).

Some of the notable national level projects in which the Institute is associated are serving as Nodal agency to centrally sponsored Community Polytechnic Scheme; designing & conducting AICTE sponsored "Induction training Programme" for fresh teachers of engineering colleges and polytechnics; facilitating implementation of Centrally sponsored scheme for Integrating Persons with Disabilities (PWD) in the Mainstream of Technical & Vocational Education etc. The Institute has highly qualified & experienced faculty members and excellent infrastructural support in the form of well-equipped laboratories and other resources. The institute has established extension centers at Guwahati and Bhubaneswar for reaching out to its clients. The new mandate of the Institute has extended its clientele catchment area outside the country encompassing the Technical & Vocational Institutions of particularly SAARC & ASEAN countries.

ABOUT THE DEPARTMENT

Civil Engineering Department is functioning from the inception of the Institute (1965) and involved in academic activities pertaining to the development of technical education system in the Eastern Region of the country.

Major departmental activities include, conducting short term training programme (STTP), regular M. Tech programme, Research, QIP-Ph.D and others (curriculum development, workshop, seminar etc.). Department has offered nearly 200 short term training programme in last two and current academic years in various areas of Civil Engineering, Earthquake Engineering, Civil Engineering Lab, Environmental Science & Engineering and Education Technology. Department also engaged with Curriculum Development of Polytechnic institutes for Eastern and North Eastern region of the country and had organized seminars and workshop in the national level. Department was actively involved in Tech Ed I and Tech Ed II of World Bank project. Department has organized number of workshops on specialized areas of civil engineering for academic and practicing engineers. In recent past, department was actively engaged with 1st National Innovation Talent Contest for Polytechnics (NITCP) in 2015-17. Apart from these, department also offers M. Tech in Structural Engineering approved by AICTE and affiliated by Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal. Total sanctioned intake for the M Tech programme is 9. Since it's inception of M. Tech programme (i.e. 2011-12) till date, total number of M. Tech students pass out is 33. After attaining higher degrees, some of the M. Tech pass out from the department are working as research scholar at IITs, some of them are working as a faculty members at reputed educational institutes, some of them are absorbed in organizations like Indian Railways, PWD, Bentley Systems India etc.

Faculty members in the department are actively engaged in research in core and interdisciplinary areas of Civil Engineering, Environmental Science and Engineering as well as in Education Technology. Currently, department has more than 100 reputed national and international journal papers. The department has well equipped Geotechnical Engineering, Transportation Engineering, Structural Engineering, Concrete Technology Earthquake Engineering, Departmental Computer Laboratory and Environmental Pollution Monitoring Laboratories and undertakes research and consultancy activities in the specialized areas. The major equipment of Civil engineering lab include Electro-dynamic Shake Table, Universal testing machine,

compressive testing machine, and different non-destructive and semi-destructive testing instruments like USPV tester, Rebound Hammer, core cutter, CAPOTEST etc.

Some of the major equipment in Environmental Pollution Monitoring Laboratory are Atomic Absorption Spectrophotometer, UV-VIS Spectrophotometer, Flame Photometer, EZ-Fluo Rapid Microbial Detection System, Colilert 18 Microbial Analyzer, Auto Titrator, Digital Titrator, pH, Conductivity, Turbidity, Ion Selective Electrode, DO Meter, TSS Portable Hand-held Turbidity, Suspended Solids, and Sludge Level System, BOD Reactor, COD Digester, Programmable Jar Tester, Bio-safety Cabinet, BOD Incubator, Bacteriological Incubator, Ultrapure Water Generator, Colony Counter, Field Kits, Microscope, Autoclave, Membrane Filtration Assembly, Air Oven, Muffle Furnace, Fume Chamber, Motorized Sieve Shaker, Multi-gas Analyzer, Indoor Air Purifier, Temperature and Humidity Meter, Stack Monitoring Kit, PM10/2.5 Analyzer, MAS 100 NT, Sound level meter, LUX Meter, Safety Shower, etc.

The department has sophisticated computer laboratory with number of renowned and widely used software to perform modeling, analysis and design of civil engineering structures such as AUTOCAD, STAADPRO, ANSYS with Civil FEM, ETABS etc.

CONTENTS OF THE COURSE

The topics will include

- Solid Waste Characterization and Management
- Waste Minimization Practices
- Bio-medical Waste Management
- Energy from Waste
- Hazardous Waste Management
- Wealth from Waste
- Liquid Waste Characterization and Treatment
- Microbiology of Wastewater Treatment
- Liquid Waste Characterization Lab (Online Demonstration)
- Biodegradable Plastics in favour of Solid Waste Management
- E- Waste Management
- Fit India Movement: Holistic Health and Happiness
- Construction and Demolition Waste Management

TENTATIVE PROGRAM SCHEDULE FOR ONLINE FDP

Date	Session-I		Session-II		Session-III
	10:00 - 11:30		12:00 - 1:30		2:30 - 4:00
25.10.2021	‘Inaugural Ceremony’ of ATAL FDPs (11:00 -11:30)	B	Solid Waste Characterization and Management KMA	L	Hazardous Waste Management AKB
26.10.2021	Bio-medical Waste Management KM	R	Liquid Waste Characterization and Treatment AKB	U	Microbiology of Wastewater Treatment SD
27.10.2021	Energy from Waste DPM	E	Liquid Waste Characterization Lab (Online Demonstration) SNM	N	Biodegradable Plastics in favour of Solid Waste Management SD
28.10.2021	Construction and Demolition Waste Management SM*	A	Fit India Movement: Holistic Health and Happiness DB	C	E-Waste Management SC
29.10.2021	Waste Minimization Practices DK	K	Wealth from Waste SM	H	Online Test, Feedback and Valediction SNM

RESOURCE PERSONS

Sl No	Name	Email	Mobile	Specialization	State	City	Organization/Institute Name
1.	Prof (Dr.) Sailendra Nath Mandal (SNM)	snmandal@nittrkol.ac.in	8902292816	Chemical & Environmental Engineering	West Bengal	Kolkata	Professor, National Institute of Technical Teachers Training and Research, Kolkata
2.	Prof (Dr.) Debi Prasad Mishra (DPM)	director@nittrkol.ac.in	9451873857	Mechanical Engineering	West Bengal	Kolkata	Director, National Institute of Technical Teachers Training and Research, Kolkata
3.	Dr. Santanu Das (SD)	santanurecently@yahoo.co.in	9836080226	Microbiology	West Bengal	Kolkata	Microbiologist, West Bengal Health & Family Welfare Samiti, Govt. of West Bengal
4.	Dr. Kaushik Mitra (KM)	drkmitra@ymail.com	9831304898	Community Medicine	West Bengal	Kolkata	Associate Professor, Dept. of Community Medicine Burdwan Medical College Purba Barddhaman
5.	Dr. Ashim Kr Bhattacharya (AKB)	ashimk.bhattacharya@gmail.com	9831542372	Liquid Waste & Environment	West Bengal	Kolkata	Executive Director, Academy of Water Technology
6.	Prof (Dr.) Subrata Chottopadhyay (SC)	schattopadhyay@nittrkol.ac.in	8910263865	Electrical Engineering	West Bengal	Kolkata	Professor, National Institute of Technical Teachers Training and Research, Kolkata
7.	Mr. Diptarup Kahali (DK)	diptarupk@gmail.com	9051022223	Waste Management	West Bengal	Kolkata	Team Leader –KEIIP- ADB Funded Program, Formerly Tech Dir-GKW
8.	Prof (Dr) Sarbani Mitra (SM)	sarbani_iiswbm@yahoo.co.in	9874646208	Env and Waste Management	West Bengal	Kolkata	Prof – Env and Safety-IISWBM; Kolkata
9.	Prof (Dr) K M Agarwal (KMA)	kmaiiswbm@gmail.com	9748384385	Env and Waste Management	West Bengal	Kolkata	Prof and Former Dean –Env Mgmt; IISWBM; Kolkata; Expert Consul- World Bank, PCB
10	Prof (Dr). Saroj Mandal (SM*)	smandal@civil.jdvu.ac.in	9432236510	Civil Engineering	West Bengal	Kolkata	Professor, Department of Civil Engineering, Jadavpur University, Kolkata-700032
11	Dr. Debasis Bakshi (DB)	drdebasis56@gmail.com	9831111317	Holistic Health	West Bengal	Howrah	Director, Principal and Head Indian Research Institute for Integrated Medicine (IRIIM)

TARGET AUDIENCE

The faculty members of the AICTE approved institutions, Research scholars, PG Scholars, participants from Government, Industry (Bureaucrats/Technicians/Participants from Industry etc.)/School Teachers and staff of host institutions.

HOW TO APPLY

The interested participants are requested to complete the online registration formalities <https://www.aicte-india.org/atal>

GENERAL INFORMATION

There is no registration fee for participants.

COURSE COORDINATOR

Dr. S. N. Mandal, Professor

Department of Civil Engineering,
National Institute of Technical Teachers' Training and Research,
Kolkata

Block – FC, Sector – III, Salt Lake City

Kolkata – 700106

Email: snmandal@nitttrkol.ac.in

Mobile: 8902292816