

National Institute of Technical Teachers' Training & Research, Kolkata

List of ICT Mode STTP for the Month of November, 2020

Application Form Link: <http://bit.do/NITTRK-APPLICATION-NOVEMBER-2020>

Sl. No.	Prog. Code	Programme Title	Programme Co-ordinator	Date: From	Date: To	Duration (Week)	Target Participant / Group	Programme Objectives
1.	ICT164	Hybrid Pedagogy	Arpan Kr. Mondal, Indrajit Saha, Sagarika Pal, Kinsuk Giri	02/11/2020	06/11/2020	1	Faculty of all disciplines	After attending the course the participants will be able to <ul style="list-style-type: none"> • Understand the fundamental strategies of hybrid pedagogy • Explain different Hybrid Pedagogy Approaches • Understand the principles of Blended Learning approaches • Apply Technology Enable Learning techniques • Study Flipped Teaching and Learning • Analyse Design Thinking in Pedagogy • Understand Education 4.0 • Develop Rubrics for Assessment in Hybrid Pedagogy
2.	ICT165	Analysis and Design of Reinforced Concrete Combined footings	Jagat Jyoti Mandal	02/11/2020	06/11/2020	1	Faculty members of Civil & allied disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain the basic design philosophy of designing different types of RCC Combined footing • Design various types of combined, such as <ul style="list-style-type: none"> ◦ Pad Types ◦ Beam and slab types • Trapezoidal footing • Strap footing • Teach the related topics in more efficient manner
3.	ICT166	Development of Laboratory Instruction and Manual	Nirmal Kumar Mandal	02/11/2020	06/11/2020	1	Faculty of all disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Prepare laboratory sheets • Acquire different types of laboratory/workshop skills • Assess the performance of the learner
4.	ICT167	Student Mentorship	Habiba Hussain	02/11/2020	06/11/2020	1	Faculty & Laboratory Instructors of all disciplines	After attending he programme the participant will be able to <ul style="list-style-type: none"> • Characterise their role as a mentor • Analyse mentoring skills • Classify styles of mentoring
5.	ICT168	Institutional Development	Sukanta Kumar Naskar	02/11/2020	06/11/2020	1	Faculty of all disciplines	After attending the programme, the participants will be able to: <ul style="list-style-type: none"> • Explore management issues for developing an Institutes • Identify the dimensions of institutional development for Technical Institute • Apply management tools for managing institutional activities
6.	ICT169	Induction Training	Uday Chand Kumar	02/11/2020	06/11/2020	1	Faculty of all disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Formulate the lesson plan • Prepare the instructional objectives • Identify the principles of evaluation • Distinguish between types of evaluation
7.	ICT170	Introduction to Automobile Engineering	Samiran Mandal	02/11/2020	06/11/2020	1	Faculty of Mech. Engg., Auto. Engg. & Prod. Engg.	After attending this programme, participants would be able to: <ul style="list-style-type: none"> • Describe the main sub-systems of automobiles • Compare the alternate fuels for automobiles • Explain emission control measures for automobiles • Explain the recent developments of automobiles

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8.	ICT171	Testing of Drinking Water and Ambient Air	Sailendra Nath Mandal	02/11/2020	13/11/2020	2	Faculty and Staff of any discipline	After attending the programme the participants will be able to acquire – <ul style="list-style-type: none"> • knowledge of different parameter of drinking water, ambient air testing equipment, methods of testing , different standards and impact on human health, • skill of handling different equipment, performing experiments, interpreting results, preparing test report, providing laboratory instructions to develop inquiring attitude among the student and evaluation of laboratory performance in related to drinking water, air pollution testing laboratory, • attitude of hand-on working in the laboratory/field (Plant Visit)
9.	ICT172	Structural Design of Lateral Load Resisting Elements and their Foundations	Santanu Bhanja	09/11/2020	13/11/2020	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Differentiate between beams and columns in RC Design • Be acquainted with the basic methodology of design of lateral load resisting elements below the floors • Identify the role of foundations or substructures • Apply latest IS codal provisions in analysis, design and detailing like IS 456, 1904, 1893, 2911, 13920 etc. • Analyze, Design and Detail foundations for real life multi-storeyed buildings using the basic features of a universally accepted standard software
10.	ICT173	Creative Problem Solving, Innovation and Meaningful R & D	Chandan Chakraborty	09/11/2020	13/11/2020	1	Faculty of all disciplines	At the end of this course, the participants will be able to <ul style="list-style-type: none"> • Develop an understanding of creative problem-solving processes, • Innovate the process, services and products etc. in work life, • Build effective teams for R & D, • Understand and apply research methodologies, • Design action research proposal for innovative study as well as grant application for enhancing R&D strength towards institute building, • Develop an understanding of data analytics methods and its context based implementation, • Undertake research to improve the various sub-components of technical education system.
11.	ICT174	Control System Analysis and Design with MATLAB	Prasanta Sarkar	09/11/2020	13/11/2020	1	Faculty of Engineering disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Model physical systems • Perform Time domain analysis • Perform Frequency domain analysis • Perform Controller Design • Apply MATLAB Control System Toolbox
12.	ICT175	Mobile and Wireless Network	Rajeev Chatterjee	09/11/2020	13/11/2020	1	Faculty of Engineering discipline	After going through this program the participants will be able to: <ul style="list-style-type: none"> • Setting of a PAN • Configuration of WIFI system and security parameters • Mobile network and security • Identity and access management
13.	ICT176	Topics on DBMS	Ranjan Dasgupta	09/11/2020	13/11/2020	1	Faculty of Engineering discipline	After going through this program the participants will be able to: <ul style="list-style-type: none"> • explain transaction management • explain concurrency control • explain design theory • explain query processing
14.	ICT177	Programming and Automation using PLC	Sagarika Pal	09/11/2020	13/11/2020	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After completing the course the participant will be able to <ul style="list-style-type: none"> • Explain working principle of PLC • Describe architecture of PLC system • Develop PLC programmes • Apply PLC in various system automation

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15.	ICT178	Community Development through Technical Institutes	Sheela Yadav Rai	09/11/2020	13/11/2020	1	Faculty of all disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • explain about the various community Development programme • understand the various Schemes • identify the need • conduct the need Analysis Survey • form self-help group
16.	ICT179	Instructional Planning	Dipankar Bose	09/11/2020	13/11/2020	1	Faculty of all disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • know instructional methods and Strategies • use of instructional media • prepare of Instructional plan • understand Instructional delivery techniques
17.	ICT180	PLC & LABVIEW Applications in Engineering	Soumitra Kumar Mandal	09/11/2020	13/11/2020	1	Faculty of Electrical, Instrumentation, Electronics & allied disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Describe the architecture of PLC • Develop PLC Programs • Apply PLC in Industrial Automation • Understand fundamentals of LABVIEW • Implement LABVIEW Applications
18.	ICT181	Fundamental and Applications of Nanomaterials	Subrata Mondal	09/11/2020	13/11/2020	1	Faculty of all disciplines	After attending this program, participants would be able to: <ul style="list-style-type: none"> • explore the concept of nanotechnology; • describe the fundamental of nanoscale materials' properties; • identify various carbon based nanomaterials; • describe applications of nanomaterials in various fields; • explain the nano toxicology and nano safety etc.
19.	ICT182	Advanced structural analysis and introduction to FEM	Mithu Dey	16/11/2020	20/11/2020	1	Faculty from Civil and allied branches	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain the different analytical methods of structural analysis • Acquire the knowledge about FEM • Apply the FEM in solving the problem
20.	ICT184	Introduction to PYTHON Programming	Kinsuk Giri	16/11/2020	20/11/2020	1	Faculty of all disciplines	On successful completion of the programme the participants will be able to <ul style="list-style-type: none"> • understand and explain the different aspects of PYTHON • apply PYTHON to solve problems • use PYTHON for visualizations
21.	ICT185	Engineering System Modelling	Nirmal Kumar Mandal	16/11/2020	20/11/2020	1	Faculty of all disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Model a system. • Analyse the physical system
22.	ICT186	Artificial Intelligence	Samir Roy	16/11/2020	20/11/2020	1	Faculty of CSE, IT, BCA, MCA ECE, EE, ME, Civil disciplines	After successful completion of the programme, the participants will be able to <ul style="list-style-type: none"> • Explain the concepts of Artificial Intelligence in classroom. • Apply Artificial Intelligence techniques to solve complex problems. • Develop intelligent computational systems.
23.	ICT187	Non-conventional Machining Processes	Dipankar Bose	23/11/2020	27/11/2020	1	Faculty of Mechanical and allied disciplines	After attending the course the participants will be able to <ul style="list-style-type: none"> • Explain the utility of non-conventional machining processes • State working principles of different non-conventional machining processes • Explain working principle of hybrid machines • Practice on non-conventional machining process
24.	ICT188	Machine Learning and It's Applications	Indrajit Saha	23/11/2020	27/11/2020	1	CSE, IT, BCA, MCA ECE, EE, ME, CIVIL	After attending the program, the participants will be able to <ol style="list-style-type: none"> (1) describe the fundamentals of Machine Learning (ML) (2) apply ML for clustering, classification and regression (3) explain machine learning in classroom
25.	ICT189	An Introductory Course on Geotechnical Engineering	Jagat Jyoti Mandal	23/11/2020	27/11/2020	1	Faculty members of Civil & allied disciplines (Specially new recruits)	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain basic concepts of Geotechnical Engineering and its applicability in Civil engineering • Apply these concepts to solve practical problems • Impart acquired knowledge to students in a systematic manner

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26.	ICT190	Structural Analysis using Software	Mithu Dey	23/11/2020	27/11/2020	1	Faculty of Civil and Allied Branch	<ul style="list-style-type: none"> After attending the program, participants are expected to be able to Appreciate the importance of the Limit State Method. Compare with Working Stress Method. Understand the different methods of structural analysis Design the different structural elements (RCC & Steels structures) by Limit State Method. Use of software to drawing analysis and design the different Structural elements.
27.	ICT191	Problem Solving and Decision Making	Nimal Kumar Mandal & Sukanta Kumar Naskar	23/11/2020	27/11/2020	1	Faculty of all discipline	<p>After attending the programme the participants will be able to</p> <ul style="list-style-type: none"> Explore the steps and process of problem-solving and decision making Apply appropriate conflict management style to resolve it Identify and apply popular management tools for solving management problem
28.	ICT192	NBA Accreditation Issues	Ranjan Dasgupta and Arpan Kr. Mondal	23/11/2020	27/11/2020	1	Faculty of all discipline	<p>After successful completion of the program, the participants will be able to</p> <ul style="list-style-type: none"> Explain the role of Washington Accord (WA) in Indian context Explain the accreditation process as per NBA guideline Get exposure on mission, vision, PSO, PO, CO Fill up SAR as per requirement
29.	ICT193	How to Write Thesis and Research Paper	Rayapati Subbarao	23/11/2020	27/11/2020	1	Faculty of all disciplines	<p>At the end of the programme, the participants will be to:</p> <ul style="list-style-type: none"> describe the steps involved in writing a thesis. identify the scope of a thesis. construe the results in a better way. derive conclusions from the plots and contours made. discover the ways of writing a research paper. Communicate a paper in their area of research.
30.	ICT194	Induction Training	Sagarika Pal	23/11/2020	27/11/2020	1	Faculty of all disciplines	<p>After completing the course the participants will be able to</p> <ul style="list-style-type: none"> Identify the roll of a teacher Identify Instructional Objectives Prepare Lesson Plan Assess the learning performance of students Design question paper
31.	ICT195	Estimating & Costing of Non-conventional Energies	Sheela Yadav Rai	23/11/2020	27/11/2020	1	Faculty of all disciplines	<p>After attending the programme the participants will be able to :</p> <ul style="list-style-type: none"> Describe various type of Non-conventional Energies Sources Understand the scope of Solar energy, Solar Thermal Conversion, Solar Collector, Wind Energy Estimating & costing of various energies
32.	ICT196	Solar PV System: Operation & Control	Soumitra Kumar Mandal	23/11/2020	27/11/2020	1	Faculty of Electrical, Instrumentation, Electronics & allied disciplines	<p>After attending the programme, the participants will be able to</p> <ul style="list-style-type: none"> Describe the principles of Solar Cell Identify the various parameters of Solar PV system Develop an in-depth knowledge about Solar PV Module by performing basic experiments & through field visit Modelling of Solar PV system Operation and Control of Solar PV system Understand fundamentals of Smart grid
33.	ICT197	Power Plant Instrumentation	Subrata Chattopadhyay	23/11/2020	27/11/2020	1	Faculty of Electrical, Instrumentation, Electronics & allied disciplines	<p>After attending the course the participants will be able to</p> <ul style="list-style-type: none"> Understand Cells, Digestive System, Excretory System, Endocrinology Describe Origins of electro-physiological signal and their characteristics Design practical clinical sensors and transducers Understand the ECG, EEG, EMG and their Electrodes Understand the operation of X-ray, Fluoroscopy and Radiography, Pacemaker, Magnetic Resonance Imaging etc. Explain Electric shock hazards and safety devices

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34.	ICT198	Problem Solving and Decision Making	Sukanta Kumar Naskar	23/11/2020	27/11/2020	1	Faculty of all discipline	After attending the course the participants will be able to: <ul style="list-style-type: none"> • Explore the steps and steps process of problem-solving and decision making • Apply appropriate conflict management style to resolve it • Identify and apply management tools for solving management problem
35.	ICT199	National Education Policy (NEP) 2020 – Reforms in Higher Education	Urmila Kar	23/11/2020	27/11/2020	1	Faculty members and technicians from all technical institutes,	After attending the programme, participants will be able to <ul style="list-style-type: none"> • Explain the guiding principles of NEP 2020 • Explain new vision for India's higher education system • Explain the major reforms identified in NEP 2020 • Identify the role of teachers of Higher Education Institutes (HEIs) as revealed in NEP 2020.
36.	ICT200	Statistics and Data Analysis using SPSS	Chandan Chakraborty	23/11/2020	27/11/2020	1	Faculty of all disciplines	After completion of this course the participants will be competent enough to <ul style="list-style-type: none"> • Develop an exposure to SPSS (a completely user friendly) software and its applications. • Explore useful learning of statistical computing tools and techniques for project and research data. • Explore Machine Learning techniques like Decision Trees and Neural Network models with SPSS. • Provide hands-on-training of SPSS to with real data sets. • Research Methodology using SPSS
37.	ICT201	Entrepreneurship Development	Subrata Mondal	23/11/2020	27/11/2020	1	Faculty of all disciplines	After attending this programme, participants would be able to: <ul style="list-style-type: none"> • explore concept of entrepreneurship; • identify internal and external factors for entrepreneurship; • explore characteristics of an entrepreneur; • explore entrepreneurial motivation and barrier; • explore stages in entrepreneur process; • explore research commercialization; • explore technology business incubation Centre etc.
38.	ICT202	Fundamentals of Surveying	Uday Chand Kumar	23/11/2020	27/11/2020	1	Faculty/Instructor/ Technician of Civil Engineering and allied brahncnes	After attending this programme, participants would be able to: <ul style="list-style-type: none"> • Describe Surveying • Practice different types of Surveying (Chain, Plain Table, Compus, Leveling, Theodolote) • Solve the different type of problems
39.	ICT203	Design of Earthquake Resistant RC Buildings as per IS:1893 Part 1–2016 and IS:13920-2016	Santanu Bhanja	30/11/2020	04/12/2020	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Appreciate the underlying principles of earthquake resistant design of R.C. buildings • Understand the modifications suggested as per the revised (2016) Standards –IS: 1893 Part 1 and IS :13920 • Differentiate between Static and Dynamic analysis and know the domain of their application • Design RC elements for earthquake resistance and investigate their behaviour up to the failure levels • Apply software for analysis & design of seismic resistant RC Buildings
40.	ICT204	Object Oriented Design & Programming in C++	Rajeev Chatterjee & Samir Roy	30/11/2020	11/12/2020	2	Faculty of CSE, IT Computer Application, Electronics, Electrical, Mathematics disciplines	After successful completion of the program, the participants will be able to <ul style="list-style-type: none"> • Create an Object Oriented Model of a software, • Write a Program in C++ to solve a computational problem • Compile, debug and execute a program in C++ • Apply objects, classes, inheritance, polymorphism etc. to implement object oriented programming