

NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING & RESEARCH, KOLKATA
List of ICT Mode STTPs for the Month of December, 2020 to June, 2021

Application Form Link: <http://bit.do/NITTRK-STTP-APPLICATION-FORM>

Sl. No.	Prog. Code	Programme Title	Programme Co-ordinator	Date: From	Date: To	Duration (Week)	Target Participant / Group	Programme Objectives
1.	ICT205	Problem Based Learning	Arpan Kumar Mondal, Indrajit Saha, Sagarika Pal, Kinsuk Giri	07/12/2020	11/12/2020	1	Faculty of all disciplines	After attending the course the participants will be able to <ul style="list-style-type: none"> • Explain the basic problem solving strategies in classroom • Identify specific problems covering a particular area of learning • Solve problems in various branches of Engineering through PBL • Analyse the benefits associated with PBL compared to conventional learning
2.	ICT206	Research Methodology and its Data Analysis using SPSS	Chandan Chakraborty	07/12/2020	11/12/2020	1	Faculty of all disciplines	After completion of this course the participants will be competent enough to <ul style="list-style-type: none"> • Develop understanding of the research process, research design, and techniques, • Explore about how to write systematic literature review with meta-analysis along with various authenticate web-resources, • Explain ethical issues involved specially in applied research, • Expose data analytics using statistics and hands-on-training with Excel/SPSS. • Prepare a research project thesis report and paper publishing.
3.	ICT207	Application of MATLAB in Engineering	Prasanta Sarkar	07/12/2020	11/12/2020	1	Faculty and Technical Staff of all disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Familiarise with MATLAB commands • Use MATLAB Commands • Develop MATLAB script and function files • Solve Engineering Problems using MATLAB
4.	ICT208	NBA Accreditation	Rayapati Subbarao	07/12/2020	11/12/2020	1	Faculty of all disciplines	At the end of the programme, the participants will be to: <ul style="list-style-type: none"> • Identify the Impact of NBA Accreditation • Prepare Vision, Mission, Program Educational Objectives • Prepare Outcomes and Program Outcomes • Learn how to prepare SAR. • Practice Criteria i to x
5.	ICT209	Assessment and Evaluation of student's Performance	Samiran Mandal	07/12/2020	11/12/2020	1	Faculty members of Technical Institutions	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain assessment and evaluation • Develop different types of questions • Analyze items • Explain grading and scoring
6.	ICT210	Essentials of HRM	Sukanta Kumar Naskar	07/12/2020	11/12/2020	1	Faculty of all disciplines	After attending the programme the participants will be able to: <ul style="list-style-type: none"> • Explore the functions of HRM • Analyse the functions of HRM for applying respective
7.	ICT211	Research Methodology	Urmila Kar	07/12/2020	11/12/2020	1	Faculty members from all technical institutes,	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • explain the basic principles of Scientific and Technical Research • elaborate the basic skills necessary for planning and carrying out research • identify different sources of information and effective utilization of the same. • identify ethical issues involved • formulate scientific and technical arguments from unstructured textual data. • prepare a scientific communication from given material • demonstrate skills in statistical analysis and presentation of data

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8.	ICT212	Renewable Energy Sources and Emerging Technologies	Sheela Yadav Rai	07/12/2020	11/12/2020	1	All Discipline	After attending the programme the participants will be able to: <ul style="list-style-type: none"> • Understand Energy Sources and their utilization • Explain Environmental aspects of electric energies generation • Understand the scope of Solar Thermal Conversion and Solar Photovoltaic system • Describe about wind energy, Geothermal energy and Biomass • Apply Non-conventional energies through various agencies • viz.WBRED A
9.	ICT213	Hydraulics and Pneumatics	Dipankar Bose	14/12/2020	18/12/2020	1	Faculty of ME, Production and Automobile Engg.	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • know principle of hydraulics and pneumatics and their applications • describe various elements of fluid powered systems (hydraulics and pneumatics) • design and development of hydraulic and pneumatic circuits
10.	ICT214	Pedagogical Communication	Habiba Hussain	14/12/2020	18/12/2020	1	Faculty & Laboratory Instructors of all disciplines	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • Analyse the essential components of pedagogical communication • Provide constructive feedback to students • Develop rubrics for improving communication
11.	ICT215	An Introductory course on Soil Structure Interaction	Jagat Jyoti Mandal	14/12/2020	18/12/2020	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 importance of soil structure interaction and its application. • Explain the fundamental considerations of SSI and differences with conventional method of analysis of foundation • Apply SSI in analysing different types of foundation systems • Teach the related topics in more efficient manner
12.	ICT216	Optimization with MATLAB	Nirmal Kumar Mandal	14/12/2020	18/12/2020	1	All Disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Model a physical system • Optimise linear function using LPP • Optimise non-linear function using SA, GA, PSO
13.	ICT217	Process Control and Automation	Sagarika Pal	14/12/2020	18/12/2020	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 Conventional control techniques for industrial automation • Describe complex controls such as ratio, cascade, feed forward etc. • Develop programme on PLC and DCS for process automation • Explain SCADA systems for various process control systems
14.	ICT218	Wastewater Characterisation and Management	Sailendra Nath Mandal	14/12/2020	18/12/2020	1	Faculty and Staff of any disciplines	After attending the programme the participants will be able to acquire – <ul style="list-style-type: none"> • knowledge of basic concept of wastewater, sampling, preservation, analysis, standards, interpretation of result and management of wastewater, impact on human health , • skill of handling/demonstrating 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 wastewater analysis/ treatment laboratory, • attitude of hand-on working/demonstrating in the laboratory/field (Plant Visit)

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15.	ICT219	Course on Commentary for Code on Plain and Reinforced Concrete - IS:456-2000 with Amendments	Santanu Bhanja	14/12/2020	18/12/2020	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> Identify the steps to be taken for concrete production, quality control and testing Interpret some of the important clauses of the code in their true letter and spirit Implement the codal clauses in a better manner for design and construction of Civil Engineering Structures Understand the philosophy and principles of Limit State Method in a comprehensive manner Conceive that this code cannot be considered as a one package for the design of concrete structures and has to be mandatorily read in conjunction with other codes Identify the major design and detailing considerations Be introduced to the Amendments of this standard
16.	ICT220	Refresher course on Microprocessors & Microcontrollers	Soumitra Kumar Mandal	14/12/2020	18/12/2020	1	Faculty & Lab Tech. of EE, ECE, IE, EEE	After attending the programme, the participants will be able to <ul style="list-style-type: none"> Describe Architecture and programming of 8085 & 8051 Microcontroller Design interfacing circuits for Microprocessor & Microcontroller based systems Develop Microprocessor & Microcontroller based projects Write assembly language programs
17.	ICT221	Laboratory Safety Management	Subrata Mondal	14/12/2020	18/12/2020	1	Faculty of all disciplines and laboratory technicians	After attending this program, participants would be able to: <ul style="list-style-type: none"> demonstrate the safety management in the laboratory work areas; evaluate the risk assessment for the hazardous laboratory works; identify the emergency and safety equipment for laboratory works; demonstrate fire safety management in the laboratory work areas; describe the waste management for the laboratory etc.
18.	ICT222	HRD through Training and Development	Sukanta Kumar Naskar	14/12/2020	18/12/2020	1	Faculty of all discipline	After attending the programme the participants will be able to: <ul style="list-style-type: none"> Appreciate the importance the importance of training activity for employee development Identify the steps in conducting training Identify the parameters of effectiveness of a training Conduct Training Needs Analysis (TNA)
19.	ICT223	Disaster Management	Uday Chand Kumar	14/12/2020	18/12/2020	1	Faculty and technicians all branches	After attending the programme, participants are expected to be able to <ul style="list-style-type: none"> Define disaster Describe different types of Disaster Identify the cause of Disaster Describe types of safety required before disaster Take remedial action after the disaster Mitigate the area of disaster

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20.	ICT224	NBA accreditation issues	Arpan Kumar Mondal & Ranjan Dasgupta	14/12/2020	18/12/2020	1	Faculty of all discipline	After successful completion of the program, the participants will be able to <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
21.	ICT225	Network Infrastructure Management	Rajeev Chatterjee	21/12/2020	01/01/2021	2	Faculty of CSE, IT Computer Application, Electronics, Electrical discipline	After participating in this program the participants will be able to: <ul style="list-style-type: none"> • Explain the concept of Computer Network and Internetwork, • Identify the various components of Network and Internetwork, • Explain the various protocols in TCP/IP Suite, • Explain the concept of switching and routing, • Explain LAN and VLAN, • Demonstrate configuration of the devices such as routers, switches, etc., • Explain the concept of network security.
22.	ICT226	Thesis and Research paper writing	Rayapati Subbarao	28/12/2020	01/01/2021	1	Faculty of all discipline	At the end of the programme, the participants will be to: <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.
23.	ICT227	Concept Mapping in Teaching Learning	Samiran Mandal	28/12/2020	01/01/2021	1	Faculty members of Technical Institutions	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain discrimination and equivalence • Define generalization and concept • Analyze a concept • Use concept map in teaching learning
24.	ICT228	AutoCAD for Engineers	Mithu Dey	28/12/2020	01/01/2021	1	Faculty and technicians all branches	After attending the program, participants are expected to be able to <ul style="list-style-type: none"> • Know the different commands of the Software • Draw the 2D and 3D • Appreciate the use of AutoCAD in Engg. And Science Field
25.	ICT229	Utilization of Instructional Media and CAI in Effective Teaching	Subrata Chattopadhyay	28/12/2020	01/01/2021	1	Faculty of all Engineering and Humanities disciplines	After attending the course the participants will be able to <ul style="list-style-type: none"> • Understand the utility of instructional media • Know the types of instructional media and its advantages • Familiar with the computer to be used as instructional media and its advantages and limitations • Understand the courseware • Classify the Different types of courseware • Application of Computer assisted instruction • Know the feathers of CAI • Explanation of different types of CAI • A model class with CAI

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26.	ICT230	Induction Training	Sheela Yadav Rai	28/12/2020	01/01/2021	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
27.	ICT231	Technology Enable Learning	Indrajit Saha	04/01/2021	08/01/2021	1	Faculty of all disciplines	After attending the course the participants will be able to <ul style="list-style-type: none"> • describe the National policy regarding Technology in Education • apply the current Technology in online Education • explain the ethical issues in Technology Enable Learning
28.	ICT232	Outcome Based Curriculum – Design and Implementation	Urmila Kar	04/01/2021	08/01/2021	1	Faculty members and technicians from all technical institutes,	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • analyze features of Outcome Based Education(OBE) • illustrate the steps for designing Outcome Based Curriculum (OBC) • identify the features of OBC • identify learning-teaching needed for effective implementation of OBC • identify assessment process for effective implementation of OBC
29.	ICT233	Choice Based Credit System (CBCS) and Student's Performance Evaluation	Chandan Chakraborty	04/01/2021	08/01/2021	1	Faculty of all disciplines	On successful completion of the course the participant will be able to <ul style="list-style-type: none"> • Understand the basic philosophy and structure of CBCS as recommended by University Grant Commission (UGC) in Institutional framework, • Explore the meaning of core, discipline specific elective, skill and ability enhancement core courses and their implication in the future education, • Develop an understanding of various assessment & evaluation methods, • Design and practice of Rubrics for student's performance evaluation
30.	ICT234	Development of Laboratory Instruction Sheet	Dipankar Bose	04/01/2021	08/01/2021	1	Faculty members of all technical institutions	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • classify various skills involved in laboratory practices • know various categories of laboratory experiments • write laboratory instruction sheets • Know evaluation techniques
31.	ICT235	Effective Teaching	Habiba Hussain	04/01/2021	08/01/2021	1	Teachers from all disciplines	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • Identify components of effective teaching • explain paradigm change in Learning-Teaching system • Design instruction for active learning
32.	ICT236	Refresher Course in Strength of Material	Jagat Jyoti Mandal	04/01/2021	08/01/2021	1	Faculty of Civil, Mechanical & 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 Mechanics of Material • Apply these concepts to solve simple engineering problems • Teach the related topics in more efficient manner
33.	ICT237	Three Dimensional Modelling with AUTOCAD and SOLIWORKS	Nirmal Kumar Mandal	04/01/2021	08/01/2021	1	Mechanical, Production, &Industrial	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Use various drafting and editing tools • Model 3D parts using AUTOCAD and SOLIWORKS

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34.	ICT238	Control System analysis and Design with MATLAB	Prasanta Sarkar	04/01/2021	08/01/2021	1	Faculty of Engineering Disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Model physical systems • Analyze in time & frequency domain • Determine input – output stability • Design controller • Apply MATLAB Control System Toolbox
35.	ICT239	Analysis and Design of RC Structures using Software as per the latest Indian Standards	Santanu Bhanja	04/01/2021	08/01/2021	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Understand the role of software in structural analysis and design • Know the basic features of a universally accepted standard software- STAAD.Pro Connect - Latest version along with RCDC • Apply IS Codal provisions in analysis, design and detailing - IS 456, 1893, 875, 13920 etc. • Analyse, design and detail real-life multi- storeyed RCC buildings • Be introduced to the modifications incorporated in the latest version of the Software
36.	ICT240	Induction Training	Subrata Mondal	04/01/2021	08/01/2021	1	Faculty of all disciplines	After attending this programme, participants would be able to: <ul style="list-style-type: none"> • explore duties and responsibilities of a faculty; • explore instructional objectives and planning; • introduce concept of active learning; • explore various methods of teaching; • explore classroom management; • explore the importance of quality in education; • explore aims of laboratory in technical education; • explore question banking and assessment methods; • explore e-learning in teaching etc.
37.	ICT241	Rural Development	Uday Chand Kumar	04/01/2021	08/01/2021	1	Faculty and technicians all branches	After attending the programme, participants are expected to be able to <ul style="list-style-type: none"> • Describe comprehensive overview about the Rural Development • Explain the role of Panchayet • Identify the different scheme offered by Government (Central/State) • Prepare the action plan of the project areas
38.	ICT242	Measurement and Experimentation on Sensors, Transducers & Actuators	Sagarika Pal	04/01/2021	08/01/2021	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After completing the course the participants will be able to <ul style="list-style-type: none"> • Differentiate sensors, transducers and actuators • Define & classify different sensors, transducers and actuators in industry • Experiment with different types of sensors and actuators • Explain the concept of signal conditioning circuits • Apply transducers and actuators in process Control Systems
39.	ICT243	Digital Logic Design using VHDL and Verilog	Soumitra Kumar Mandal	04/01/2021	09/01/2021	1	Faculty & Lab Tech. of EE, ECE, IE, EEE	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Study the operations and characteristics of Digital devices • Design of Digital Logic circuits • Implement digital logic circuits using VHDL & Vrilog

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40.	ICT244	Discrete Mathematics	Kinsuk Giri	11/01/2021	15/01/2021	1	Faculty of all discipline	On successful completion of the programme the participants will be able to <ul style="list-style-type: none"> • understand the fundamentals of discrete mathematics • solve problems in various areas of discrete mathematics • apply tools to solve few discrete math problems
41.	ICT245	Introduction to Software-Defined Networking (SDN)	Rajeev Chatterjee	11/01/2021	15/01/2021	1	Faculty of CSE, IT Computer Application, Electronics, discipline	After successful completion of the program, the participants will be able to <ul style="list-style-type: none"> • Explain the concept of SDN, • Demonstrate controller management in SDN, • Exhibit the SD based WAN & Mobile Networks, and • Explain Security issues and Back-up Restoration in SDN.
42.	ICT246	Topics in Algorithms	Ranjan Dasgupta & Samir Roy	11/01/2021	15/01/2021	1	Faculty of CSE/IT discipline	After successful completion of the program, the participants will be able to <ul style="list-style-type: none"> • Explain the fundamental concepts of analysis of algorithms • Identify different approaches to deal with classical problems
43.	ICT247	Development of Mechanical Engineering Laboratory Experiments and Instruction Sheets	Samiran Mandal	11/01/2021	15/01/2021	1	Faculty of Mechanical , Automobile and Production Engg.	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Classify the laboratory experiments • Develop laboratory experiments • Plan laboratory instruction • Prepare laboratory instruction sheets • Evaluate laboratory skills
44.	ICT248	Power Generation from Energy Resources	Sheela Yadav Rai	11/01/2021	15/01/2021	1	Faculty of all discipline	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Understand potential sources of conventional energies for power generation • Describe potential sources of non-conventional energies for power generation • Understand environmental aspects of power generation • Appreciate about various power projects
45.	ICT249	Introduction to Welding Processes	Arpan Kumar Mondal	11/01/2021	15/01/2021	1	Faculty/Staff of ME/PE and related disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain the principles of various welding processes • Classify the welding processes • Describe the advanced welding processes • Study the defects in welding • Describe the welding symbols and positions
46.	ICT250	Applications of MATLAB in Control System, Image Processing, Fuzzy Logic and GUI	Sagarika Pal	18/01/2021	22/01/2021	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After completing the course the participant will be able to <ul style="list-style-type: none"> • Use MATLAB commands • Apply Control System Tool Box Commands • Illustrate Simulink Modelling techniques • Apply Image processing Tool Box Commands • Apply Fuzzy Logic Tool Box • Create GUI using GUIDE
47.	ICT251	Hydraulic Machines	Dipankar Bose	18/01/2021	22/01/2021	1	Faculty of Mechanical , Automobile and Production Engg.	After attending the programme the participants will be able to <ul style="list-style-type: none"> • know classification of hydraulic machines • understand working principles of different hydraulic machines • State performance characteristics of various hydraulic machines

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48.	ICT252	Engineering Thermodynamics	Rayapati Subbarao	18/01/2021	22/01/2021	1	Faculty of ME	At the end of the programme, the participants will be to: <ul style="list-style-type: none"> paraphrase the basics of thermodynamics. apply laws of thermodynamics in various problems. appreciate more about entropy and the processes of perfect gases. identify and analyze thermodynamic air cycles. familiarize the basics of fuels and combustion.
49.	ICT253	Theory, Operation and Experimentation on Sensors, Transducers & Actuators	Subrata Chattopadhyay	18/01/2021	22/01/2021	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After attending the course the participants will be able to <ul style="list-style-type: none"> Classify the Different types of Transducers & Actuators used in Industry. Familiar with the overview of measurement system and selection of instruments Understand fundamental of pressure, flow, temperature, level, velocity, acceleration, vibration, position, displacement measuring transducers used in process industries. Apply the Transducers Actuators in process Control Systems. Know the concept of Intrinsic safety instruments
50.	ICT254	Induction Training	Sukanta Kumar Naskar	18/01/2021	22/01/2021	1	Faculty of all discipline	After attending the programme participants will be able to: <ul style="list-style-type: none"> Develop concept of curriculum development Managege the classroom effectively Develop lesson plan Identify quality parameters of Technical Education Identify managerial roles of a tecaher
51.	ICT255	Occupational Health and Safety	Uday Chand Kumar	25/01/2021	29/01/2021	1	Faculty and technicians all branches	After attending the programme the participants will be able to <ul style="list-style-type: none"> explain that occupational health and safety is more than accident prevention — that it encompasses all aspects of working conditions; explain why management's commitment to health and safety is crucial; explain why training is a critical component of any health and safety programme; recognize a number of occupational hazards and some of the types of work generally associated with those hazards; discuss the range of hazards in their own workplaces
52.	ICT256	Designing Teaching under Outcome Based Education	Urmila Kar	25/01/2021	29/01/2021	1	Faculty members and technicians from all technical institutes	After attending the programme, participants will be able to: <ul style="list-style-type: none"> analyze features of Outcome Based Education(OBE) identify learning-teaching system for OBE identify teaching skill components select appropriate teaching strategies for OBE select appropriate teaching techniques for OBE prepare plan for specific instruction illustrate instructional delivery as per plan
53.	ICT257	Data Analysis using MATLAB	Indrajit Saha	25/01/2021	29/01/2021	1	CSE, IT, BCA, MCA ECE, EE, ME, CIVIL	After attending the program, the participants will be able to <ul style="list-style-type: none"> analyze the data using various statistical methods visualize the data for better understanding develop prediction model for real-life data driven problems

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54.	ICT258	Seismic Analysis of Structures as per latest code	Mithu Dey	25/01/2021	29/01/2021	1	Faculty from Civil and allied branches	After attending the program, participants are expected to be able to <ul style="list-style-type: none"> • Understand the earthquake effect on structures. • Know the different methods of analysis using software • Familiar with the code IS 18 93-2016
55.	ICT259	Role of Technical Institutions in Community Development	Sheela Yadav Rai	25/01/2021	29/01/2021	1	All Discipline	After attending the programme the participants will be able to : <ul style="list-style-type: none"> • Know various Community Development Schemes • Understand Feasibility Report • Prepare Planning Report • Make the Curricula • Estimate the Training cost
56.	ICT260	LABVIEW & MATLAB Applications in Electrical & Electronics Engineering	Soumitra Kumar Mandal	25/01/2021	29/01/2021	1	Faculty & Lab Tech. of EE, ECE, IE, EEE	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Understand fundamentals of LABVIEW • Implement LABVIEW Applications in Engineering • Explain the different aspect of MATLAB & Simulink • Solve simple problem using MATLAB programming • Develop simple model using Simulink • Use MATLAB in analysis, design and simulation of Engineering problems
57.	ICT261	Environmental Pollution Analysis and Health	Sailendra Nath Mandal	25/01/2021	05/02/2021	2	Faculty and Staff of any discipline	After attending the programme the participants will be able to gain and develop <ul style="list-style-type: none"> • 1knowledge of basic concept of Air pollution, Water pollution, Noise pollution, Light pollution and impact on human health, • skill of handling/demonstrating conventional and modern sophisticated equipment, preparation of laboratory instruction sheets, interpreting experimental results, providing laboratory instruction such as to develop in enquiring attitude among students, preparing related test reports, • attitude of hands-on-working/demonstrating in the laboratory/field(Plant Visit)
58.	ICT262	Introduction to Automobile Engineering	Samiran Mandal	01/02/2021	05/02/2020	1	Faculty members of Technical Institutions	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Classify the automobiles • Describe the construction of automobiles • Explain the working principle of different sub-systems of automobiles
59.	ICT263	Statistics and Data Mining with SPSS	Chandan Chakraborty	01/02/2021	05/02/2021	1	Faculty of Engineering & Science disciplines	After completion of this course the participants will be able to <ul style="list-style-type: none"> • Understand the overview of statistical techniques and SPSS software for quick data analysis, • Apply correlation and regression models for solving real-life problems, • Demonstrate Testing of Hypothesis using SPSS for real data sets, • Exhibit data mining techniques – like Classification and Clustering. • Explain neural network and decision trees etc. • Hands-on-training on SPSS and scientific interpretation as required for publication, thesis writing and report generation

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60.	ICT264	Geotechnical Aspects of Deep Foundations	Jagat Jyoti Mandal	01/02/2021	05/02/2021	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 difference between shallow and deep foundations • Explain basic design philosophy of deep foundations • Determine capacities of pile foundations in different types of strata as per Indian Standard's recommendations • Explain the basic features and design philosophy of well foundations • Teach the related topics in more efficient manner
61.	ICT265	Programming and Automation using PLC	Sagarika Pal	01/02/2021	05/02/2021	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
62.	ICT266	Problem Solving and Decision Making	Sukanta Kumar Naskar	01/02/2021	05/02/2021	1	Faculty of all discipline	After attending the programme the participants will be able to <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
63.	ICT267	Teaching Linear Control Systems	Urmila Kar	01/02/2021	05/02/2021	1	Faculty members with Electrical / Electrical related background	After attending this programme participants will be able to <ul style="list-style-type: none"> • explain fundamentals of control systems • explain the need for control system analysis • develop mathematical representation of linear control systems • identify approaches for linear control system analysis • select techniques for analyzing stability of linear control systems • simulate models for analysis of linear control systems using MATLAB programming / SIMULINK • use MATLAB control system tool box for designing experiments on linear control system
64.	ICT268	NBA Accreditation and SAR preparation	Rayapati Subbarao	08/02/2021	12/02/2021	1	Faculty of all discipline	At the end of the programme, the participants will be to: <ul style="list-style-type: none"> • Identify the Impact of NBA Accreditation • Prepare Vision, Mission, Program Educational Objectives • Prepare Outcomes and Program Outcomes • Learn how to prepare SAR. • Practice Criteria i to x
65.	ICT269	Advanced Welding Processes	Dipankar Bose	08/02/2021	12/02/2021	1	Faculty of ME, Production, Automobile Engg.	After attending the programme the participants will be able to <ul style="list-style-type: none"> • state the various types of advanced welding processes • explain principles of operation of different advanced welding techniques
66.	ICT270	Behavioural Aspects in Teaching-Learning	Habiba Hussain	08/02/2021	12/02/2021	1	Teachers from all disciplines	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • Categorise different behaviou patterns • Adress individual differences • Manage classroom effectively

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67.	ICT271	Computer Numerical Controlled Machines: Constructional Features and Programming	Nirmal Kumar Mandal	08/02/2021	12/02/2021	1	Faculty of Mechanical, Production, & Industrial Engg.	After attending the programme the participants will be able to <ul style="list-style-type: none"> Identify Machining Centre. Develop programs on CNC Vertical machining Centre.
68.	ICT272	Electricity Rules and Code of Practices	Prasanta Sarkar	08/02/2021	12/02/2021	1	Faculty and Technical Staff of all disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> Familiarize with Indian Electricity Act and National Electric Code Understand fundamental principles for electrical installation Design electrical installation Enforce safety in electrical work
69.	ICT273	Advanced Course on Analysis and Design of RC Buildings as per IS 1893 Part 1 2016 and IS 13920 2016 with application of Software	Santanu Bhanja	08/02/2021	12/02/2021	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> Understand the modifications suggested as per the revised (2016) Standards –IS: 1893 Part 1 and IS :13920 Appreciate the underlying principles of earthquake resistant design of R.C. buildings 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 Appreciate the effect of earthquake on structures
70.	ICT274	Estimating & Costing of Non-conventional Energies	Sheela Yadav Rai	08/02/2021	12/02/2021	1	Faculty of all discipline	After attending the programme the participants will be able to : <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
71.	ICT275	Induction Training	Subrata Chattopadhyay	08/02/2021	12/02/2021	1	Faculty of all discipline	After attending the course the participants will be able to understand the <ul style="list-style-type: none"> Concept of Teaching Learning Roll of a Teacher Instructional Objectives & Lesson Planning Classroom Motivation Measurement & Evaluation Instructional Media & Computer Assisted Instruction(CAI) Laboratory Development, Instruction & Evaluation Construction of Test ITEMS Design and Development of Projects for Students
72.	ICT276	Development of Laboratory Instruction and Manual	Subrata Mondal	08/02/2021	12/02/2021	1	Faculty of all disciplines and laboratory technicians	After attending this programme, participants would be able to: <ul style="list-style-type: none"> explore the role of laboratory in student learning; explore development of laboratory exercise; explore writing of laboratory report; explore standard operating procedure (SoP) in laboratory; explore safety management in laboratory etc.

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73.	ICT277	Technology Transfer to the Community through Polytechnic	Uday Chand Kumar	08/02/2021	12/02/2021	1	Faculty and technicians all branches	After attending the programme, participants are expected to be able to <ul style="list-style-type: none"> • Explain different low cost Technologies • Motivate the community regarding use of technology • Identify location specific technology • Identify communication need at Grass root level • Develop a methodology of Acceptance of Rural Technologies • Prepare the modalities of Technology Transfer
74.	ICT278	Introduction to Advanced Databases	Ranjan Dasgupta	08/02/2021	12/02/2021	1	Faculty of CSE/IT discipline	After participating in this program the participants will be able to: <ul style="list-style-type: none"> • Explain the concept of Distributed Database • Explain the concept of Spatial Database
75.	ICT279	Teaching Methodologies	Arpan Kumar Mondal	08/02/2021	12/02/2021	1	Faculty/Staff of all disciplines	After participating in this program the participants will be able to: <ul style="list-style-type: none"> • Explain the concept of various Teaching Methodologies • Apply various teaching methodologies
76.	ICT280	8086 Microprocessor & 8051 Microcontroller	Soumitra Kumar Mandal	15/02/2021	19/02/2021	1	Faculty & Lab Tech. of EE, ECE, IE, EEE	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Describe Architecture and programming of 8086 Microprocessor & 8051 Microcontroller • Design interfacing circuits for Microprocessor & Microcontroller based systems • Develop Microprocessor & Microcontroller based projects • Write assembly language programs
77.	ICT281	Quality Assurance through Accreditation (NBA Guidelines)	Urmila Kar	15/02/2021	19/02/2021	1	Faculty members and technicians from all technical institutes	
78.	ICT282	Pollution Testing	Sailendra Nath Mandal	15/02/2021	26/02/2021	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 testing and maintenance of different water, wastewater, solid waste, noise, air pollution testing equipment, and impact on human health, • skill of handling/demonstrating 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 water, wastewater, solid waste, air pollution testing laboratory, • attitude of hand-on working/demonstrating in the laboratory/field (Plant Visit)
79.	ICT283	NBA Accreditation Issues	Arpan Kumar Mondal & Ranjan Dasgupta	22/02/2021	26/02/2021	1	Faculty of all discipline	After successful completion of the program, the participants will be able to <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
80.	ICT284	Designing Question Papers	Habiba Hussain	22/02/2021	26/02/2021	1	Teachers from all disciplines	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • Analyse existing question papers • Classify different types of questions • Design a balanced question paper

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81.	ICT285	Image Processing using MATLAB	Indrajit Saha	22/02/2021	26/02/2021	1	CSE, IT, BCA, MCA ECE, EE, ME, CIVIL	After attending the program, the participants will be able to <ul style="list-style-type: none"> describe the fundamentals of image processing (IP) apply MATLAB commands to do IP explain image processing in classroom
82.	ICT286	Concept Teaching in Engineering Statics	Jagat Jyoti Mandal	22/02/2021	26/02/2021	1	Faculty of Civil, Mechanical & allied disciplines (Specially new recruits)	After attending the programme the participants will be able to <ul style="list-style-type: none"> Basic concept of Engineering Statics Application of vector in mechanics Concepts of Equilibrium Laws of Friction and its application Centroid and Centre of Gravity Moment of area and its application Teach the related topics in more efficient and effective manner through examples
83.	ICT287	Analysis and Design of Structures by Limit State Method using Software.	Mithu Dey	22/02/2021	26/02/2021	1	Faculty of Civil, Architecture & allied disciplines	After attending the program, participants are expected to be able to <ul style="list-style-type: none"> 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.
84.	ICT288	Automated Design and Manufacturing	Nirmal Kumar Mandal	22/02/2021	26/02/2021	1	Mechanical, Production, & Industrial	After attending the programme the participants will be able to <ul style="list-style-type: none"> Define automation. Classify automation. State the essential features of CAD/CAM
85.	ICT289	Skill Assessment in Laboratory and Guiding Students' Project	Sagarika Pal	22/02/2021	26/02/2021	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After completing the course the participants will be able to <ul style="list-style-type: none"> Select the laboratory experiments from curriculum Prepare laboratory manual Guide student to perform laboratory experiment Evaluate the laboratory performance of students Guide students' project work Evaluate students' project work
86.	ICT290	Instructional Planning	Samiran Mandal	22/02/2021	26/02/2021	1	Faculty members of Technical Institutions	After completion of the instruction learners will be able to <ul style="list-style-type: none"> Explain different stages of instruction in a class Explain the major steps in lesson planning Develop a lesson plan on a topic Construct test items to evaluate student's performance
87.	ICT291	Community Development through Technical Institutes	Sheela Yadav Rai	22/02/2021	26/02/2021	1	All Discipline	After attending the programme the participants will be able to : <ul style="list-style-type: none"> Know various Community Development Schemes Understand Feasibility Report Prepare Reports Make linkages with organisations

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88.	ICT292	Power Plant Instrumentation	Subrata Chattopadhyay	22/02/2021	26/02/2021	1		<p>After attending the course the participants will be able to</p> <ul style="list-style-type: none"> • Understand electrical equipment used in power system • Know instrument transformers [CT & PT] and their applications • Familiar with measurement and instrumentation in power system • Classify the Different types of transducers and fundamental of pressure, flow, temperature, level, velocity, acceleration, vibration, position, displacement measuring transducers used in power system. • Application of PLC & DCS in power system • Apply SCADA and power system automation • Design boiler, furnace instrumentation and control • Know hazardous area classification
89.	ICT293	Entrepreneurship Development	Subrata Mondal	22/02/2021	26/02/2021	1	Faculty of all disciplines	<p>After attending this programme, participants would be able to:</p> <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.
90.	ICT294	Effective Training	Sukanta Kumar Naskar	22/02/2021	26/02/2021	1	Faculty of all discipline	<p>After attending the programme, the participants will be able to:</p> <ul style="list-style-type: none"> • Appreciate importance of training activity as a part of HRD • Identify steps in conducting any training programme • Conduct training needs analysis • Apply parameters for designing training programme
91.	ICT295	Mathematical foundation of Computer Science	Samir Roy & Kinsuk Giri	22/02/2021	05/03/2021	2	Faculty of any discipline from engineering and science	<p>After successful completion of the program, the participants will be able to</p> <ul style="list-style-type: none"> • Explain the elements of Mathematical foundation of Computer Science • Apply the knowledge of Mathematical foundation of Computer Science to solve practical problems • Model computational tasks in terms of mathematical formalism
92.	ICT296	Networking Principles, Management and Administration	Rajeev Chatterjee	22/02/2021	05/03/2021	2	Faculty of CSE, IT Computer Application, Electronics, discipline	<p>After participating in this program the participants will be able to:</p> <ul style="list-style-type: none"> • Explain the concept of Computer Network and Internetwork, • Demonstrate Network Media and Topology • Identify the various components of Network and Internetwork, • Explain the various protocols in TCP/IP Suite, • Explain the concept of switching and routing, • Demonstrate configuration of the devices such as routers, switches, etc., • Design their own campus wide network and IT infrastructure,
93.	ICT297	Applied Thermodynamics	Rayapati Subbarao	01/03/2021	05/03/2021	1	Faculty of ME	<p>At the end of the programme, the participants will be to:</p> <ul style="list-style-type: none"> • interpret the working principle and features of steam engines, turbines and condensers. • explain the basics of I.C. Engines and analyze the performance. • identify the functions of gas turbines and power plants.

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94.	ICT298	Course on Commentary for Code on Ductility Design and Detailing of RC structures subjected to Seismic Forces - IS 13920 2016	Santanu Bhanja	01/03/2021	05/03/2021	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Interpret some of the important clauses of the code in their true letter and spirit • Implement the codal clauses in a better manner for design and detailing of Earthquake Resistant Structures • Understand the fundamentals of Limit State Method and need for ductility design • Identify the major design and detailing considerations • Apply a standard software for designing structures
95.	ICT299	Rural Engineering	Uday Chand Kumar	08/03/2021	12/03/2021	1	Faculty of Civil, Architecture & Allied Disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • identify the need of the village people. • describe the rain water harvesting. • describe the need of sanitation. • understand the different scheme of government.
96.	ICT300	Data Science with R programming	Chandan Chakraborty	08/03/2021	12/03/2021	1	Faculty of Engineering & Science, Allied disciplines	After attending the course, the participants would be able to <ul style="list-style-type: none"> • Develop an understanding of basic concepts of Data science. • Explore an ability to analyse data from a statistical perspective. • Explain and implement Data Visualization Techniques. • Demonstrate Classification and clustering processes. • Get an exposure on basics of R statistical Programming and R Studio. • Create data analytical pipelines and applications in R statistical programming. • Develop familiarity with the R data science ecosystem for class room teaching, practicing and project based learning.
97.	ICT301	Engineering Capstone Project	Prasanta Sarkar	08/03/2021	12/03/2021	1	Faculty and Technical Staff of all disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Form Capstone Project Team • Identify Capstone Project topic • Prepare Capstone Project proposal • Develop Capstone Project • Assess Capstone Project
98.	ICT302	Research Methodology	Samiran Mandal	08/03/2021	12/03/2021	1	Faculty members of Technical Institutions	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Differentiate between research method and research methodology • Explain the different stages for conducting research • Explain the the different parts of a thesis and research paper • Explain different aspects IPR
99.	ICT303	Renewable Energy Sources and Emerging Technologies	Sheela Yadav Rai	08/03/2021	12/03/2021	1	All Discipline	After attending the programme the participants will be able to: <ul style="list-style-type: none"> • Understand Energy Sources and their utilization • Explain Environmental aspects of electric energies generation • Understand the scope of Solar Thermal Conversion and Solar Photovoltaic system • Describe about wind energy, Geothermal energy and Biomass • Apply Non-conventional energies through various agencies • viz.WBREDA

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100.	ICT304	Photo Voltaic System: Operation & Control	Soumitra Kumar Mandal	08/03/2021	12/03/2021	1	Faculty & Lab Tech. of EE, ECE, IE, EEE	After attending the programme, the participants will be able to <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
101.	ICT305	Induction Training	Subrata Mondal	08/03/2021	12/03/2021	1	Faculty of all disciplines	After attending this programme, participants would be able to: <ul style="list-style-type: none"> explore duties and responsibilities of a faculty; explore instructional objectives and planning; introduce concept of active learning; explore various methods of teaching; explore classroom management; explore the importance of quality in education; explore aims of laboratory in technical education; explore question banking and assessment methods; explore e-learning in teaching etc.
102.	ICT306	Guiding Innovative Student Project Work	Dipankar Bose	15/03/2021	19/03/2021	1	Faculty members of all technical institutions	After attending the programme the participants will be able to <ul style="list-style-type: none"> know characteristics of innovative projects distinguish between creativity and innovation understand guiding principles of student projects
103.	ICT307	Effective Teaching	Habiba Hussain	15/03/2021	19/03/2021	1	Teachers from all disciplines	After attending the programme, participants will be able to: <ul style="list-style-type: none"> Identify components of effective teaching explain paradigm change in Learning-Teaching system Design instruction for active learning
104.	ICT308	Elements of Vibration Analysis	Jagat Jyoti Mandal	15/03/2021	19/03/2021	1	Faculty members of Civil, Mechanical & allied disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> Explain the meaning of different terms related to vibration analysis Explain the concepts in analysing single degree freedom system in free, forced vibration with and without damping Explain the concepts in analysing multiple degree freedom system in free, forced vibration Apply numerical integration technique in solving vibration problems Teach the related topics in more efficient and effective manner through examples
105.	ICT309	Advanced Process Control using PLC, DCS and SCADA	Sagarika Pal	15/03/2021	19/03/2021	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 Conventional control techniques for industrial automation Describe complex controls such as ratio, cascade, feed forward etc. Apply the control system in distillation column in industry Utilize the electrical instruments in hazardous area in process plant Develop programme on PLC for process automation Explain DCS and SCADA systems for various process control systems

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106.	ICT310	Assessment and Evaluation under Outcome Based Education	Urmila Kar	15/03/2021	19/03/2021	1	Faculty members and technicians from all technical institutes	After attending this programme, the participants will be able to <ul style="list-style-type: none"> • identify features of Outcome Based Education (OBE) • distinguish between assessment and evaluation • explain the importance of assessment and evaluation under OBE • plan assessment under OBE • design assessment tools under OBE
107.	ICT311	NBA Accreditation and SAR preparation	Rayapati Subbarao	22/03/2021	26/03/2021	1	Faculty of all disciplines	At the end of the programme, the participants will be to: <ul style="list-style-type: none"> • Identify the Impact of NBA Accreditation • Prepare Vision, Mission, Program Educational Objectives • Prepare Outcomes and Program Outcomes • Learn how to prepare SAR. • Practice Criteria i to x
108.	ICT312	Technology Enabled Learning	Indrajit Saha	22/03/2021	26/03/2021	1	Faculty of all disciplines	After attending the course the participants will be able to <ul style="list-style-type: none"> • describe the National policy regarding Technology in Education • apply the current Technology in online Education • explain the ethical issues in Technology Enable Learning
109.	ICT313	Experimental Data Analysis	Nirmal Kumar Mandal	22/03/2021	26/03/2021	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
110.	ICT314	Introduction to Robotics	Samiran Mandal	22/03/2021	26/03/2021	1	Faculty of Mechanical, Automobile and Production Engineering	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Describe the construction of industrial robots • Explain the applications of industrial robots • Explain kinematics of industrial robots
111.	ICT315	Analysis and Design of structures using latest version of a Structural Engineering Software	Santanu Bhanja	22/03/2021	26/03/2021	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Understand the role of software in structural analysis and design • Know the basic features of a universally accepted software-STAAD.Pro Connect- latest version along with RCDC • Apply IS Codal provisions in analysis, design and detailing - IS 456, 1893, 875, 13920 etc. • Analyse, design and detail real-life multi- storeyed buildings, civil engineering structures • Analyse and design foundations
112.	ICT316	Role of Technical Institutions in Community Development	Sheela Yadav Rai	22/03/2021	26/03/2021	1	Faculty of all disciplines	After attending the programme the participants will be able to : <ul style="list-style-type: none"> • Know various Community Development Schemes • Understand Feasibility Report • Prepare Planning Report • Make the Curricula • Estimate the Training cost

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113.	ICT317	Waste Water Treatment: Pollution Control and Reuse	Subrata Mondal	22/03/2021	26/03/2021	1	Faculty of Chemical Engg. Environmental Engg., Science, Textiles Engg., and allied disciplines	After attending this program, participants would be able to: <ul style="list-style-type: none"> • explain the characterizations of wastewater; • explore the characteristics of various industrial wastewaters; • describe the wastewater treatment using low cost adsorbents and nano sized adsorbents; • describe the wastewater treatment using membrane technology etc.
114.	ICT318	Ecology and Environmental Studies	Uday Chand Kumar	22/03/2021	26/03/2021	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Describe different natural resources • Define different type of waste • Explain different cause of pollution • Describe solid waste management
115.	ICT319	Complex Engineering Problems (CEP) and Life Long Learning (LLL): Role in NBA accreditation process	Arpan Kumar Mondal & Ranjan Dasgupta	22/03/2021	26/03/2021	1	Faculty of all discipline	After participating in this program the participants will be able to: <ul style="list-style-type: none"> • Explain the fundamental issues of accreditation as per Washington Accord & NBA guidelines • Explain the need of understanding of CEP • Explain the role of CO, PO with CEP • Explain the need of Lifelong Learning
116.	ICT320	Advanced Structural Analysis and Introduction to FEM	Mithu Dey	29/03/2021	02/04/2021	1	Faculty from Civil and allied branches	After attending the program, participants are expected to be able to <ul style="list-style-type: none"> • Understand the different methods of structural analysis • Solve the problems • Apply the knowledge of FEM in structural analysis
117.	ICT321	Advanced Process Control using PLC, DCS and SCADA	Subrata Chattopadhyay & Sagarika Pal	29/03/2021	02/04/2021	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After attending the course the participants will be able to <ul style="list-style-type: none"> • Familiar with closed loop control system • Understand the pressure, Temperature, Flow & Level Measurement system • Know hazardous area classification • Utilize the electrical instruments in hazardous area in process plant • Design the conventional complex control system like ratio, cascade, feed forward, selective, override etc • Apply the control system in distillation column in industry • Know the fundamental of PLC, DCS and SCADA
118.	ICT322	Instructional Development	Sukanta Kumar Naskar	29/03/2021	02/04/2021	1	Faculty of all discipline	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
119.	ICT323	National Education Policy (NEP) 2020 – Reforms in Higher Education	Urmila Kar	05/04/2021	09/04/2021	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.

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120.	ICT324	Structural Analysis and Design of Foundations with Application of Different Software	Santanu Bhanja	05/04/2021	09/04/2021	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Be acquainted with the basic methodology of design of foundations • Identify the role of foundations or substructures in structures • 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 multistoried buildings using the basic features of different software
121.	ICT325	Hybrid Machining	Dipankar Bose	05/04/2021	09/04/2021	1	Faculty of ME, Production, Automobile Engineering	After attending the programme the participants will be able <ul style="list-style-type: none"> • know different types of hybrid machining processes • understand working principles of various hybrid machining processes • state characteristics of different hybrid machining processes
122.	ICT326	Outcome Based Assessment	Habiba Hussain	05/04/2021	09/04/2021	1	Teachers from all disciplines	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • Classify assessment • Explain the parameters for OBA • Develop tools for OBA
123.	ICT327	An Introductory Course on Finite Element Method in Engineering	Jagat Jyoti Mandal	05/04/2021	09/04/2021	1	Faculty members of Civil, Mechanical, & allied disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain basic concept of finite element method • Develop formulation for simple structural elements by using finite element • Solve simple problems by using FEM • Use standard software for solving simple structural problems
124.	ICT328	Induction Training	Sagarika Pal	05/04/2021	09/04/2021	1	Faculty of all disciplines	After completing the course the participants will be able to <ul style="list-style-type: none"> • Identify the role of a teacher • Identify Instructional Objectives • Prepare Lesson Plan • Assess the learning performance of students • Design question paper
125.	ICT329	Power Generation from Energy Resources	Sheela Yadav Rai	05/04/2021	09/04/2021	1	Faculty of all disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Understand potential sources of conventional energies for power generation • Describe potential sources of non-conventional energies for power generation • Understand environmental aspects of power generation • Appreciate about various power projects
126.	ICT330	Polymer Composites and Nanocomposites	Subrata Mondal	05/04/2021	09/04/2021	1	Faculty of Chemical Engg. Mechanical Engg., Science, Textiles Engg., Materials Sci. & Engg., Polymer Engg. and allied disciplines	After attending this program, participants would be able to: <ul style="list-style-type: none"> • explain the fundamental concept of nanotechnology; • differentiate the microfillers and nanofillers; • explore the fundamental of polymeric composites and nanocomposites; • describe the properties of polymeric composites and nanocomposites; • explain the applications of polymeric composites and nanocomposites etc.

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127.	ICT331	Topics on DBMS	Ranjan Dasgupta	05/04/2021	09/04/2021	1	Faculty of CSE/IT 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
128.	ICT332	Advance Programming in C	Rajeev Chatterjee	05/04/2021	09/04/2021	1	Faculty of all disciplines	After going through this program the participants will be able to: <ul style="list-style-type: none"> • demonstrate the various operation on single and multi –dimensional arrays and structures, • demonstrate programs related to functions and pointers, and • demonstrate programing skills on dynamic allocation of memory using linked list.
129.	ICT333	Application of MATLAB in Engineering	Prasanta Sarkar	05/04/2021	09/04/2021	1	Faculty and Technical Staff of Engineering Disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Familiarise with MATLAB commands • Use MATLAB Commands • Develop MATLAB script and function files • Solve Engineering Problems using MATLAB
130.	ICT334	Advanced Welding Processes	Arpan Kumar Mondal	05/04/2021	09/04/2021	1	Faculty/Staff of ME/PE and related discipline	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain the principles of advanced welding processes. • Perform independently various advanced welding processes. • Understand the physics of welding
131.	ICT335	Water Analysis and Test Method	Sailendra Nath Mandal	05/04/2021	16/04/2021	2	Faculty and Staff of any disciplines	After attending the programme the participants will be able to acquire – <ol style="list-style-type: none"> 1. knowledge of basic concept of drinking water, sampling, preservation, analysis, test method, interpretation of result, national and international standards, Common water pollutants – analysis and impacts on health, 2.skill of handling/ demonstrating 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 water analysis/treatment laboratory, 3.attitude of hand-on working /demonstrating in the laboratory/field (Plant Visit)
132.	ICT336	Numerical and Statistical Methods with PYTHON	Kinsuk Giri	12/04/2021	16/04/2020	1	Faculty of all disciplines	On successful completion of the programme the participants will be <ul style="list-style-type: none"> • able to get an overview on different numerical and statistical methods • get an overview on solution techniques • solve problems using PYTHON
133.	ICT337	How to write Thesis and Research paper	Rayapati Subbarao	12/04/2021	16/04/2021	1	Faculty of all disciplines	At the end of the programme, the participants will be to: <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.

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134.	ICT338	Image Processing for Healthcare Applications	Chandan Chakraborty	12/04/2021	16/04/2021	1	Faculty of IT, CSE, ECE, EE, Biomedical, BCA, MCA Electrical & Computational Sciences	The participants will get an exposure to <ul style="list-style-type: none"> • Overview of various types of biomedical images [X-ray, CT, MRI, Microscope etc.] • Image pre-processing for noise reduction and contrast enhancement • Explore various image segmentation techniques for identification of abnormality • Discuss on some open projects for collaborative research under my mentorship towards proposal writing and paper publication.
135.	ICT339	Theory of CNC Machining Centre	Nirmal Kumar Mandal	12/04/2021	16/04/2021	1	Mechanical, Production, & Industrial	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain CNC Technology. • State the constructional features of CNC Machines
136.	ICT340	Strategic Management Issues in Technical Education	Sukanta Kumar Naskar	12/04/2021	16/04/2021	1	Faculty members of technical institutes	After attending the programme participants will be able to: <ul style="list-style-type: none"> • Understand the concept of strategic management • Apply the concept of strategic planning • Identify steps of strategic planning • Apply different tools of management
137.	ICT341	Panchayat Polytechnic Interaction in Rural Development	Uday Chand Kumar	12/04/2021	16/04/2021	1	Faculty and technicians all branches	After attending the course the participants will be able to <ul style="list-style-type: none"> • Describe the function of PRI • Describe the various scheme currently under operation. • discuss the existing structure of Panchayat in different states. • Describe the role of polytechnic in rural development
138.	ICT342	Instructional Planning	Samiran Mandal	19/04/2021	23/04/2021	1	Faculty members of Technical Institutions	After completion of the instruction learners will be able to <ul style="list-style-type: none"> • Explain different stages of instruction in a class • Explain the major steps in lesson planning • Develop a lesson plan on a topic • Construct test items to evaluate student's performance
139.	ICT343	Induction Training	Sheela Yadav Rai	19/04/2021	23/04/2021	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
140.	ICT344	PLC Applications in Engineering	Soumitra Kumar Mandal	19/04/2021	23/04/2021	1	Faculty & Lab Tech. of EE, ECE, IE, EEE	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 • Design PLC based projects
141.	ICT345	Introduction to Coding Theory	Rajeev Chatterjee	19/04/2021	23/04/2021	1	Faculty of Engineering discipline	After going through this program the participants will be able to: <ul style="list-style-type: none"> • explain Information, quality of Information, information entropy, • demonstrate the Working principles and design of AES and DES, and • demonstrate various encoding algorithm like Arithmetic Huffman, Hamming, Gray.

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142.	ICT346	Arc Welding Processes	Dipankar Bose	26/04/2021	30/04/2021	1	Faculty of ME, Production, Automobile Engg.	After attending the programme the participants will be able <ul style="list-style-type: none"> • explain various types arc welding processes • understand working principles of different welding processes • state characteristics of various arc welding processes
143.	ICT347	Introduction to Soil Dynamics and Earthquake Engineering	Jagat Jyoti Mandal	26/04/2021	30/04/2021	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 meaning of different terms related to soil dynamics and determine dynamic soil parameters • Explain the principles on which dynamically loaded foundations are analysed and designed • Explain the response of structure during Earthquake • Liquefaction and determine liquefaction susceptibility • Teach the related topics in more efficient and effective manner through examples
144.	ICT348	Application of Software in Engineering Drawing	Mithu Dey	26/04/2021	30/04/2021	1	Faculty technicians and all branches	After attending the program, participants are expected to be able to <ul style="list-style-type: none"> • Know the different commands of the Software • Draw the 2D and 3D • Appreciate the use of AutoCAD in Engg. And Science Field
145.	ICT349	Strength, Serviceability and Ductility Design as per IS 456 2000 and IS 13920 2016	Santanu Bhanja	26/04/2021	30/04/2021	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Interpret some of the important clauses of the standards in their true letter and spirit • Implement the codal clauses in a better manner for design and detailing of Structures • Understand the philosophy and principles of Limit State Method in a comprehensive manner • Identify the steps to be taken for Strength, Serviceability and Ductility design • Identify the major design and detailing considerations • Identify the limitations of the Standards
146.	ICT350	Complex Engineering Problems (CEP): Role in NBA Accreditation Process	Arpan Kumar Mondal & Ranjan Dasgupta	26/04/2021	30/04/2021	1	Faculty of all discipline	After participating in this program the participants will be able to: <ul style="list-style-type: none"> • Explain the fundamental issues of accreditation as per Washington Accord & NBA guidelines • Explain the need of understanding of CEP • Explain the role of CO, PO with CEP • Measure the CO PO attainment by using Rubrics
147.	ICT351	Thermodynamics	Rayapati Subbarao	26/04/2021	30/04/2021	1	Faculty of ME	At the end of the programme, the participants will be to: <ul style="list-style-type: none"> • paraphrase the basics of thermodynamics. • apply laws of thermodynamics in various problems. • appreciate more about entropy and the processes of perfect gases. • identify and analyze thermodynamic air cycles. • familiarize the basics of fuels and combustion.

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148.	ICT352	Introduction to Data Security	Indrajit Saha	26/04/2021	30/05/2021	1	CSE, IT, BCA, MCA ECE, EE, ME, CIVIL	After attending the program, the participants will be able to <ul style="list-style-type: none"> describe the fundamentals of Data Security demonstrate how to maintain the privacy of computer data explain network security in classroom
149.	ICT353	Modern Control	Prasanta Sarkar	03/05/2021	07/05/2021	1	Faculty of Engineering Disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> Model physical systems in state space Realise state space model from Transfer function Determine Controllability and observability Design controller and observer Apply MATLAB Control System Toolbox
150.	ICT354	Applications of MATLAB in Engineering	Sagarika Pal	03/05/2021	07/05/2021	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After completing the course the participant will be able to <ul style="list-style-type: none"> Use MATLAB commands Apply Control System Tool Box Commands Illustrate Simulink Modelling techniques Apply Image processing Tool Box Commands Apply Fuzzy Logic Tool Box Create GUI using GUIDE
151.	ICT355	Water Pollution and Human Health	Sailendra Nath Mandal	03/05/2021	07/05/2021	1	Faculty and Staff of any disciplines	After attending the programme the participants will be able to acquire – <ol style="list-style-type: none"> knowledge of basic concept of water pollution, causes of water pollution, different water pollution parameters, and impact of each water pollution parameter on human health, skill of handling/demonstrating conventional & modern sophisticated equipment, performing related experiments in the laboratory, interpreting experimental results, preparing related test-reports with remarks/comments (if any), attitude of hand-on working /demonstrating the water pollution analysis equipment.
152.	ICT356	Community Development through Technical Institutes	Sheela Yadav Rai	03/05/2021	07/05/2021	1	Faculty of all disciplines	After attending the programme the participants will be able to : <ul style="list-style-type: none"> Know various Community Development Schemes Understand Feasibility Report Prepare Reports Make linkages with organisations
153.	ICT357	Issues of HRM in Technical Institutions	Sukanta Kumar Naskar	03/05/2021	07/05/2021	1	Faculty members of technical institutes	After attending the programme participants will be able to: <ul style="list-style-type: none"> Identify different functions of HRM in Technical Institutions Apply various functions of HRM Apply different tools of Management Identify managerial roles of teachers
154.	ICT358	Testing of Brick, Cement, Aggregates, Concrete including Destructive and Semi Destructive Test	Uday Chand Kumar	03/05/2021	07/05/2021	1	Faculty of Civil, Architecture & Allied Disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> Explain basic concepts on laboratory tests of Bricks, cement, Aggregates Guide students in conducting different laboratory experiments for determination of various parameters. Demonstrate different tests on cement, aggregates and concrete. Familiar with the use of NDT Equipment

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155.	ICT359	Introduction to Optimization	Nirmal Kumar Mandal	10/05/2021	14/05/2021	1	Faculty of all disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Model a physical system • Explain linear and nonlinear regression • Optimise a function using GA, PSO
156.	ICT360	Introduction to Automobile Engineering	Samiran Mandal	10/05/2021	14/05/2021	1	Faculty of Mechanical , Automobile and Production Engineering	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Classify the automobiles • Describe the construction of automobiles • Explain the working principle of different sub-systems of automobiles
157.	ICT361	Modelling, Analysis and Design of Buildings with Software	Santanu Bhanja	10/05/2021	14/05/2021	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Be acquainted with the basic methodology of software application in structural analysis and design of RC buildings • Apply latest IS codal provisions in analysis, design and detailing like IS 456, 1893, 875, 13920 etc. • Know the basic features of a universally accepted standard software-ETABS • Analyse, Design and Detail real life multi-storeyed buildings
158.	ICT362	IP Networking	Rajeev Chatterjee	10/05/2021	21/05/2021	2	Faculty of CSE, IT Computer Application, Electronics, discipline	After going through this program the participants will be able to: <ul style="list-style-type: none"> • explain the concept of networking and internetworking, • explain the working of Internet, • explain the role of RIR and other regulatory bodies, • explain the various protocols in Routing, Switching, • design campus wide network, • configure switches and routers, • explain the concept and working principles of firewall, • explain the various technologies related to Wi. Fi. networks, • explain the working of Mobile IP networks, and • explain the concept of identity management & access management
159.	ICT363	NBA Accreditation	Rayapati Subbarao	17/05/2021	21/05/2021	1	Faculty of all disciplines	At the end of the programme, the participants will be to: <ul style="list-style-type: none"> • Identify the Impact of NBA Accreditation • Prepare Vision, Mission, Program Educational Objectives • Prepare Outcomes and Program Outcomes • Learn how to prepare SAR. • Practice Criteria i to x
160.	ICT364	Machine Learning with Python	Chandan Chakraborty & Kinsuk Giri	17/05/2021	21/05/2021	1	Faculty of IT, CSE, ECE, EE, Biomedical, BCA, MCA Electrical & Computational Sciences	After attending this course, the participants will be accomplished with <ul style="list-style-type: none"> • The notion of Machine Learning and its impact on future employment • Overview of Python programming • Exposure of supervised and unsupervised ML techniques • Hands-on-practice of ML algorithms implementation using Python • Explore for problem solving.

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161.	ICT365	Management Issues of Laboratory and Workshop Classes	Dipankar Bose	17/05/2021	21/05/2021	1	Faculty members of all technical institutions	After attending the programme the participants will be able <ul style="list-style-type: none"> • know various management issues of conducting laboratory and workshop classes • understand the effective techniques of management of classroom , machines/equipment and manpower • state different safety aspects
162.	ICT366	Ground Improvement and Soil Stabilisation techniques	Jagat Jyoti Mandal	17/05/2021	21/05/2021	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 importance and application of different ground improvement and soil stabilisation techniques in the context of present day infrastructure development • Teach the related topics in more efficient and effective manner through examples
163.	ICT367	Measurement and Experimentation using Sensors, Transducers & Actuators	Sagarika Pal	17/05/2021	21/05/2021	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After completing the course the participants will be able to <ul style="list-style-type: none"> • Differentiate sensors, transducers and actuators • Define & classify different sensors, transducers and actuators in industry • Experiment with different types of sensors and actuators • Explain the concept of signal conditioning circuits • Apply transducers and actuators in process Control Systems
164.	ICT368	Formal Languages and Automata	Samir Roy	17/05/2021	21/05/2021	1	Faculty of any engineering discipline	After successful completion of the program, the participants will be able to <ul style="list-style-type: none"> • Explain Formal Languages and Automata • Apply Formal Languages and Automata to solve problems
165.	ICT369	Estimating and Costing of Non-conventional Energies	Sheela Yadav Rai	17/05/2021	21/05/2021	1	All Discipline	After attending the programme the participants will be able to : <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
166.	ICT370	MATLAB & LABVIEW Applications in Engineering	Soumitra Kumar Mandal	17/05/2021	21/05/2021	1	Faculty & Lab Tech. of EE, ECE, IE, EEE	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Explain the different aspect of MATLAB & Simulink • Solve simple problem using MATLAB programming • Develop simple model using Simulink • Design and simulation of Engineering problems • Understand fundamentals of LABVIEW • Implement LABVIEW Applications in Engineering
167.	ICT371	Development of Laboratory Instruction and Manual	Subrata Mondal	17/05/2021	21/05/2021	1	Faculty of all disciplines and laboratory technicians	After attending this programme, participants would be able to: <ul style="list-style-type: none"> • explore the role of laboratory in student learning; • explore development of laboratory exercise; • explore writing of laboratory report; • explore standard operating procedure (SoP) in laboratory; • explore safety management in laboratory etc.

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168.	ICT372	Student Friendly Methods of Instruction	Uday Chand Kumar	17/05/2021	21/05/2021	1	Faculty and technicians all branches	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Identify attributes of student friendly instruction • Design instruction • Plan student friendly activities • Demonstrate student friendly instruction
169.	ICT373	Induction Training programme for Technical Teachers	Urmila Kar	17/05/2021	28/05/2021	2	Newly recruited faculty members of Technical Institutes	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • Explain the quality issues in Technical Education and Role of Teachers • Illustrate the process involved in Curriculum Development, Implementation and Reforms • Decide learning outcomes of specific course • Identify teaching strategy, methods and skills • Plan instruction • Assess performance of learners • Identify quality parameters in institutional development • Illustrate the process of accreditation for technical institutes • Explain professional values and ethics of teachers • Promote Technology Enable Learning (TEL) • Identify Learning Style of students • Identify style of teaching • Explain the need for active learning for 21st century learners • Plan instruction for active learning Decide assessment tools for active learning
170.	ICT374	Seismic Analysis of Structures using Software	Mithu Dey	24/05/2021	28/04/2021	1	Faculty from Civil and allied branches	After attending the program, participants are expected to be able to <ul style="list-style-type: none"> • Understand the earthquake effect on structures. • Know the different methods of analysis using software • Familiar with advanced technology to resist the earthquake forces.
171.	ICT375	Image Processing using MATLAB	Indrajit Saha	24/05/2021	28/05/2021	1	CSE, IT, BCA, MCA ECE, EE, ME, CIVIL	After attending the program, the participants will be able to <ul style="list-style-type: none"> • describe the fundamentals of image processing (IP) • apply MATLAB commands to do IP • explain image processing in classroom
172.	ICT376	Concepts of Software Engineering	Ranjan Dasgupta	24/05/2021	28/05/2021	1	Faculty of CSE & IT discipline	After going through this program the participants will be able to: <ul style="list-style-type: none"> • explain different quality aspects of a software • critically analyse different software development models • explain design theory
173.	ICT377	ICT Tools for Teaching and Learning 1	Arpan Kumar Mondal	24/05/2021	28/05/2021	1	Faculty of all disciplines	After going through this program the participants will be able to: <ul style="list-style-type: none"> • Explain the concept of ICT Mode of teaching-learning, • Understand the use of various ICT tools, • Apply different ICT tools for e-learning
174.	ICT378	Soft Skills for Teachers	Habiba Hussain	31/05/2021	04/06/2021	1	Teachers from all disciplines	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • Identify soft skills required for effective teaching • Characterise different soft skills identified • Demonstrate few skills

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175.	ICT379	Introduction to Manufacturing Systems	Nirmal Kumar Mandal	31/05/2021	04/06/2021	1	Mechanical, Production, & Industrial	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain manufacturing systems • Analyse the performance of Automated Manufacturing System
176.	ICT380	Philosophy of RC Design – From Prescriptive as per Codes of Practice to Performance Based	Santanu Bhanja	31/05/2021	04/06/2021	1	Faculty of Civil, Architecture & allied disciplines	After attending the course, the participants will be able to <ul style="list-style-type: none"> • Understand the philosophy of Limit State Method in a comprehensive manner as per IS:456-2000 • Understand the importance of ductility in R.C. Design as per IS:13920-2016 • Identify the major design and detailing considerations • Differentiate between load and capacity design • Identify the limitations of Limit State Method • Understand Performance based design
177.	ICT381	Advanced Materials Science and Engineering	Subrata Mondal	31/05/2021	04/06/2021	1	Faculty of Chemical Engg. Mechanical Engg., Science, Textiles Engg., Materials Sci. & Engg., Polymer Engg. and allied disciplines	After attending this program, participants would be able to: <ul style="list-style-type: none"> • explain the structure sensitive properties of polymers, metals and alloys; • explain the fundamental of nanomaterials, types of nanomaterials, principle methods of nanomaterials preparation, properties and applications; • explain types, manufacturing process, properties and applications of metal matrix, ceramic matrix and polymer matrix composites/nanocomposites; • explain biocompatible and biodegradable materials, characteristics and applications for various biomaterials etc.
178.	ICT382	Applied Machine Learning in Engineering	Nirmal Kumar Mandal	07/06/2021	11/06/2021	1	All Disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain supervised and unsupervised learning • Apply Multinomial Logistic Regressions, Monte Carlo Simulation (MCS), Markov Chains in engineering problems
179.	ICT383	NBA Accreditation and SAR Preparation	Rayapati Subbarao	07/06/2021	11/06/2021	1	Any faculty	At the end of the programme, the participants will be to: <ul style="list-style-type: none"> • Identify the Impact of NBA Accreditation • Prepare Vision, Mission, Program Educational Objectives • Prepare Outcomes and Program Outcomes • Learn how to prepare SAR. • Practice Criteria i to x
180.	ICT384	Skill Assessment in Laboratory and Workshop Classes	Dipankar Bose	07/06/2021	11/06/2021	1	Faculty members of all technical institutions	After attending the programme the participants will be able to <ul style="list-style-type: none"> • define different types of skills • distinguish between product and process in evaluating students performance in laboratory and workshop classes • know various assesment techniques of skills in the laboratory and workshop classes
181.	ICT385	Engineering Capstone Project	Prasanta Sarkar	07/06/2021	11/06/2021	1	Faculty and Technical Staff of all disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Form Capstone Project Team • Identify Capstone Project topic • Prepare Capstone Project proposal • Develop Capstone Project • Assess Capstone Project

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List of ICT Mode STTPs for the Month of December, 2020 to June, 2021

Application Form Link: <http://bit.do/NITTRK-STTP-APPLICATION-FORM>

Sl. No.	Prog. Code	Programme Title	Programme Co-ordinator	Date: From	Date: To	Duration (Week)	Target Participant / Group	Programme Objectives
182.	ICT386	Development of Mechanical Engineering Laboratory Experiments and Instruction Sheets	Samiran Mandal	07/06/2021	11/06/2021	1	Faculty members of Mechanical , Automobile and Production Engineering	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Classify the laboratory experiments • Develop laboratory experiments • Plan laboratory instruction • Prepare laboratory instruction sheets • Evaluate laboratory skills
183.	ICT387	Renewable Energy Sources and Emerging Technologies	Sheela Yadav Rai	07/06/2021	11/06/2021	1	All Discipline	After attending the programme the participants will be able to: <ul style="list-style-type: none"> • Understand Energy Sources and their utilization • Explain Environmental aspects of electric energies generation • Understand the scope of Solar Thermal Conversion and Solar Photovoltaic system • Describe about wind energy, Geothermal energy and Biomass • Apply Non-conventional energies through various agencies viz.WBREDA
184.	ICT388	Induction Training	Sukanta Kumar Naskar	07/06/2021	11/06/2021	1	Faculty members of technical institutes	After attending the programme participants will be able to: <ul style="list-style-type: none"> • Develop concept of curriculum development • Managege the classroom effectively • Develop lesson plan • Identify quality parameters of Technical Education • Identify managerial roles of a tecaher
185.	ICT389	Fundamental of Surveying	Uday Chand Kumar	07/06/2021	11/06/2021	1	Faculty/Instructor/ Technician of Civil Engineering and allied brahcnes	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
186.	ICT390	Capstone Project	Urmila Kar	14/06/2021	18/06/2021	1	Faculty members from all technical institutes,	
187.	ICT391	Machine Learning with R Programming	Chandan Chakraborty	14/06/2021	18/06/2021	1	Faculty of Engineering & Science, Allied disciplines	On successful completion of the course the participants will be able to <ul style="list-style-type: none"> • Develop knowledge and understanding of the most common types of machine learning problems for Engineering applications, • Explore the overview and learning skill with R Studio, • Expose with the design and development of Supervised Machine Learning Algorithms with R programming • Also Develop Unsupervised machine learning models with R programming • Deploy ML algorithms for engineering problem solution through project based learning.
188.	ICT392	Analysis & Design of Earth Retaining Structures	Jagat Jyoti Mandal	14/06/2021	18/06/2021	1	Faculty members of Civil & allied disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain basic concepts of Analysis of Earth Retaining Structures • Apply these concepts to Analyse & Design Various types of Earth Retaining Structures • Impart acquired knowledge to students in a systematic manner

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189.	ICT393	Programming and Automation using PLC	Sagarika Pal	14/06/2021	18/06/2021	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
190.	ICT394	Fuzzy and Rough Set Theory	Samir Roy	14/06/2021	18/06/2021	1	Faculty of any engineering discipline	After successful completion of the program, the participants will be able to <ul style="list-style-type: none"> • Explain Fuzzy and rough set theory • Design systems applying Fuzzy and rough set theory
191.	ICT395	Solar Photo Voltic System	Soumitra Kumar Mandal	14/06/2021	18/06/2021	1	Faculty & Lab Tech. of EE, ECE, IE, EEE	After attending the programme, the participants will be able to <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 using MATLAB • Operation and Control of Solar PV system • Understand fundamentals of Smart grid
192.	ICT396	Fundamental and Applications of Nanomaterials	Subrata Mondal	14/06/2021	18/06/2021	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.
193.	ICT397	ICT Tools for Teaching and Learning 2	Arpan Kumar Mondal	14/06/2021	18/06/2021	1	Faculty of all disciplines	After going through this program the participants will be able to: <ul style="list-style-type: none"> • Explain the concept of ICT Mode of teaching-learning, • Understand the use of various ICT tools, • Apply different ICT tools for e-learning
194.	ICT398	Municipal Water and Wastewater Treatment	Sailendra Nath Mandal	14/06/2021	25/06/2021	2	Faculty and Staff of any disciplines	After attending the programme the participants will be able to acquire – <ol style="list-style-type: none"> 1. knowledge of basic concept of drinking water, wastewater, sampling, preservation, analysis, standards, interpretation of result and management of wastewater, impact on human health , 2. skill of handling/demonstrating 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 analysis, wastewater analysis/ treatment laboratory, 3. attitude of hand-on working/demonstrating in the laboratory/field (Plant Visit)

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195.	ICT399	Design and Development of content for e-Learning	Rajeev Chatterjee & Ranjan Dasgupta	14/06/2021	25/06/2021	2	Faculty of all disciplines	After going through this program the participants will be able to: <ul style="list-style-type: none"> • explain the concept of e-learning, • explain synchronous and asynchronous e-learning models, • explain the various standards available for e-learning, • explain the basis terminologies such as Learning Objects, sharable Content Objects, SCO, • explain and demonstrate ADDIE Model of ISD • develop e-content chunks / learning object in their own subject domain, and • exhibit and demonstrate the process of e-content creation for MOOCs based e-content.
196.	ICT400	Numerical and Statistical Methods with SCILAB	Kinsuk Giri	21/06/2021	25/06/2020	1	Faculty of any Engg. and Science disciplines	On successful completion of the programme the participants will be <ul style="list-style-type: none"> • able to get an overview on different numerical and statistical methods • get an overview on solution techniques • solve problems using SCILAB
197.	ICT401	Fluid Powered Systems	Dipankar Bose	21/06/2021	25/06/2021	1	Faculty of ME, Production, Automobile Engg.	After attending the programme the participants will be able to <ul style="list-style-type: none"> • know principles and applications of fluid powered systems • understand the working principles of various fluid powered systems • state characteristics of different fluid powered systems
198.	ICT402	Machine Learning and it's Applications	Indrajit Saha	21/06/2021	25/06/2021	1	CSE, IT, BCA, MCA ECE, EE, ME, CIVIL	After attending the program, the participants will be able to <ul style="list-style-type: none"> • describe the fundamentals of Machine Learning (ML) • apply ML for clustering, classification and regression • explain machine learning in classroom
199.	ICT403	Advanced Structural Analysis and Introduction to FEM	Mithu Dey	21/06/2021	25/06/2021	1	Faculty and technicians of civil and allied branches	After attending the program, participants are expected to be able to <ul style="list-style-type: none"> • Understand the different methods of structural analysis • Solve the problems • Apply the knowledge of FEM in structural analysis • Enable a good understanding how software operate
200.	ICT404	Course on Ancient Engineering, Science and Technology	Nirmal Kumar Mandal & Santanu Bhanja	21/06/2021	25/06/2021	1	Faculty of Engineering with preference to Mechanical, Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Explore ancient Indian Science, Technology and, Engineering with special emphasis on Civil and Mechanical Engineering • Explain the ancient Indian knowledge system • Introduce the basic features of ancient Science and Technology • Explain how the basic Science and Technology with limited knowledge may result in wonders.
201.	ICT405	Induction Training	Sheela Yadav Rai	21/06/2021	25/06/2021	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

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202.	ICT406	Online Pedagogy	Habiba Hussain	28/06/2021	02/07/2021	1	Teachers from all disciplines	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • Explain the need for online pedagogy • Plan online instruction • Incorporate different principles for effective online delivery
203.	ICT407	Digital Electronics using VHDL	Soumitra Kumar Mandal	28/06/2021	02/07/2021	1	Faculty & Lab Tech. of EE, ECE, IE, EEE	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Study the operations and characteristics of Digital devices • Design of Digital Electronics circuits • Implement digital logic circuits using VHDL
204.	ICT408	Entrepreneurship Development	Subrata Mondal	28/06/2021	02/07/2021	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.
205.	ICT409	Fundamentals of Modern Office Management	Sukanta Kumar Naskar	28/06/2021	02/07/2021	1	Faculty members & staff of technical institutes	After attending the programme participants will be able to: <ul style="list-style-type: none"> • Develop fundamental knowledge of management • Apply the purchase procedure effectively • Develop concept of CCS (CCA) rules • Apply basic tools by using computer