

National Institute of Technical Teachers' Training & Research, Kolkata

List of ICT Mode STTPs 2021-22

Application Form Link: <http://www.nitttrkol.ac.in/download/Application%20Form.pdf>

<https://forms.gle/13Sa5pp49Aui1EQ5A>

Sl. No.	Prog. Code	Programme Title	Programme Co-ordinator	Date: From	Date: To	Duration (Week)	Target Participant / Group	Programme Objectives
1.	ICT173	NBA Accreditation for engineering colleges	Rayapati Subbarao	04/10/2021	08/10/2021	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 Course Outcomes and map with Program Outcomes Learn how to prepare pre-qualifier and SAR. Practice Criteria i to x.
2.	ICT174	Fluid Machines	Dipankar Bose	04/10/2021	08/10/2021	1	Faculty of Mech., Production & Automobile Engg.	After attending the programme the participants will be able to <ul style="list-style-type: none"> know classification of fluid machines understand working principles of different fluid machines State performance characteristics of various fluid machines
3.	ICT175	Student Mentorship	Habiba Hussain	04/10/2021	08/10/2021	1	Technical teachers from all disciplines	<ul style="list-style-type: none"> Identify the roles of coach & mentor Explain mentorship styles Distinguish between different mindsets as a mentor
4.	ICT176	Problem Solving with SCILAB	Kinsuk Giri	04/10/2021	08/10/2021	1	Faculty of all disciplines	<ul style="list-style-type: none"> understand and explain the different aspects of SCILAB apply SCILAB to solve problems use SCILAB for visualizations
5.	ICT177	Earthquake Resistant Structure	Mithu Dey	04/10/2021	08/10/2021	1	Faculty of Civil, Architecture & allied discipline	After completing the course, the participant will be able to <ul style="list-style-type: none"> know the design philosophy of EQ resistant structures know the different technic to resist EQ get an overview on different codal provision
6.	ICT178	Artificial Intelligence	Samir Roy	04/10/2021	08/10/2021	1	Faculty of CSE, IT, MCA disciplines	After successful completion of the program, the participants will be able to <ul style="list-style-type: none"> Explain the principles and techniques of AI Apply the techniques of AI to solve complex problems Develop AI applications for real-life problems
7.	ICT179	Power Generation from Energy Resources	Sheela Yadav Rai	04/10/2021	08/10/2021	1	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
8.	ICT180	Waste Water Treatment: Pollution Control and Reuse	Subrata Mondal	04/10/2021	08/10/2021	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 wastewater; describe the wastewater treatment using low cost adsorbents and nano sized adsorbents; describe the wastewater treatment using membrane technology etc.
9.	ICT181	Induction Training	Sukanta Kumar Naskar	04/10/2021	08/10/2021	1	Faculty of technical institutes	After attending the programme participants will be able to: <ul style="list-style-type: none"> Develop concept of curriculum development Manage the classroom effectively Identify instructional objectives Develop lesson plan Identify quality parameters of Technical Education Identify managerial roles of a teacher

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10.	ICT182	Laboratory Practice on Civil Engineering Materials – Coarse Aggregate and Fine Aggregate	Uday Chand Kumar	04/10/2021	08/10/2021	1	Civil, Architecture and related discipline	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain basic concepts on laboratory tests of Coarse Aggregate and Fine Aggregate • Guide students in conducting different laboratory experiments for determination of various parameters. • Demonstrate different tests on Coarse Aggregate and Fine Aggregate
11.	ICT183	Vibration Analysis using MATLAB	Nirmal Kumar Mandal	04/10/2021	08/10/2021	1	Mechanical and relevant disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain vibration of an engineering system • Analyse vibration with Fourier Transform using MATLAB
12.	ICT185	Introduction to Solid Mechanics	Jagat Jyoti Mandal	25/10/2021	29/10/2021	1	Faculty members of Civil, Mechanical & allied disciplines (Specially new recruits)	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Describe the concepts and principles related to strength and stability of structural components • Explain the concept of combined stresses by applying Mohr's circle of stresses • Explain the concepts of indeterminacy • Calculate Deflection of statically determinate beams subjected to combination of loads • Solve torsional problems in bars and thin walled members • Teach the related topics in more efficient manner
13.	ICT186	Seismic Analysis and Design of RC Structure	Mithu Dey	25/10/2021	29/10/2021	1	Faculty of Civil, Architecture & allied discipline	After attending the program, participants will be able to <ul style="list-style-type: none"> • understand the earthquake effect on RC structures. • use of relevant codes for design and detailing of RC structures
14.	ICT187	Engineering Capstone Project	Prasanta Sarkar	25/10/2021	29/10/2021	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
15.	ICT188	Mobile and Wireless Network	Rajeev Chatterjee	25/10/2021	29/10/2021	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 basic concept of mobile and wireless network • Design of Enterprise Wireless LAN • Explain Mobile IP Network • Explain IdAM system
16.	ICT190	Induction Training	Sagarika Pal	25/10/2021	29/10/2021	1	Faculty of all disciplines	After completing the course the participants will be able to <ul style="list-style-type: none"> • Identify the roll of a teacher • Identify Instructional Objectives • Prepare Lesson Plan • Assess the learning performance of students • Design question paper

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17.	ICT191	Analysis and Design of structures using latest version of a Structural Engineering Software	Santanu Bhanja	25/10/2021	29/10/2021	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
18.	ICT192	MATLAB Applications in Engineering	Soumitra Kumar Mandal	25/10/2021	29/10/2021	1	Faculty and Lab Tech, of Electrical, ECE, EEE, Instrumentation Engineering	After attending the programme, the participants will be able to <ul style="list-style-type: none"> Understand fundamentals of MATLAB Implement MATLAB 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
19.	ICT193	Essentials of Strategic Management	Sukanta Kumar Naskar	25/10/2021	29/10/2021	1	Faculty and support staff of any technical institutes	After attending the programme the 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
20.	ICT184	Introduction to Data Security	Indrajit Saha	08/11/2021	12/11/2021	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
21.	ICT189	How to Write Thesis and Research paper	Rayapati Subbarao	08/11/2021	12/11/2021	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.
22.	ICT194	Fluid Power with Applications	Dipankar Bose	08/11/2021	12/11/2021	1	Faculty of Mech., Production & Automobile Engg.	After attending the programme, the participants will be able to <ul style="list-style-type: none"> know principle of fluid pwered systems and their applications describe various elements of fluid powered systems (hydraulics and pneumatics) design and development of fluid pwered circuits
23.	ICT195	Application of MATLAB, Control System, Image Processing and Fuzzy Logic Tool box	Sagarika Pal	08/11/2021	12/11/2021	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 Modeling techniques Apply Image processing Tool Box Commands Apply Fuzzy Logic Tool Box Commands

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24.	ICT196	Analysis of Drinking Water Quality Parameters	Sailendra Nath Mandal	08/11/2021	12/11/2021	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 drinking water, sampling, preservation, analysis, test method, interpretation of result, national and international standards, Drinking water quality parameters – analysis and impacts on health, • skill of handling/ online demonstration of conventional and modern sophisticated 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, • attitude of hand-on working in the laboratory/field (Plant Visit)/online live demonstration
25.	ICT197	Induction Training	Sheela Yadav Rai	08/11/2021	12/11/2021	1	All Discipline	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
26.	ICT198	Microprocessor: 8085 & 8086	Soumitra Kumar Mandal	08/11/2021	12/11/2021	1	Faculty and Lab Tech, of Electrical, ECE, EEE, Instrumentation Engineering	After attending the programme, the participants will be able to <ul style="list-style-type: none"> • Describe Architecture and programming of 8085 and 8086 Microprocessor • Design interfacing circuits for Microprocessor based systems • Develop Microprocessor based projects • Write assembly language programs
27.	ICT199	Polymer Composites and Nanocomposites	Subrata Mondal	08/11/2021	12/11/2021	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.
28.	ICT200	Discrete Mathematics	Kinsuk Giri	15/11/2021	19/11/2021	1	CSE and Mathematics	<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
29.	ICT201	Design of steel structures	Mithu Dey	15/11/2021	19/11/2021	1	Faculty of Civil, Architecture & allied discipline	After attending the program, participants will be able to <ul style="list-style-type: none"> • Familiar with the IS 800 -2007 • Learn the basic elements of a steel structure • Learn the fundamentals of structural steel fasteners • Able to design basic elements of steel structure like tension members, compression members, beams and beam-columns etc.
30.	ICT202	Advance Programming in C	Rajeev Chatterjee	15/11/2021	19/11/2021	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.

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31.	ICT203	Earthquake Resistant Design of RC Buildings as per latest Indian Standards with an Introduction to Shake Table	Santanu Bhanja	15/11/2021	19/11/2021	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 Know the basic features and use of a high end Shake Table Apply software for analysis & design of seismic resistant structures
32.	ICT204	Training and Development	Sukanta Kumar Naskar	15/11/2021	20/11/2021	1	Faculty and support staff of any technical institutes	After attending the programme, participants will be able to: <ul style="list-style-type: none"> Identify the stages for conducting a training programme Design a training programme Apply different techniques for conducting a training programme Evaluate effectively outcome of a training programme
33.	ICT205	Constructional Features and Programming on CNC Machines	Nirmal Kumar Mandal	15/11/2021	26/11/2021	2	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 Turning centre, VMC Program on CNC Machines
34.	ICT206	NBA Accreditation Issues	Arpan Kumar Mondal & Ranjan Dasgupta	22/11/2021	26/11/2021	1	Faculty of all disciplines	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
35.	ICT207	Teaching Skill Development	Habiba Hussain	22/11/2021	26/11/2021	1	Technical teachers from all disciplines	<ul style="list-style-type: none"> Categorise teaching skills Relate skill components to teaching Incorporate different skill components in teaching
36.	ICT208	Fundamentals of Image Processing	Indrajit Saha	22/11/2021	26/11/2021	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) in MATLAB apply MATLAB commands to do IP explain image processing in classroom
37.	ICT209	Design & detailing of Reinforced Concrete Flexure Members	Jagat Jyoti Mandal	22/11/2021	26/11/2021	1	Faculty members of Civil & allied disciplines	After attending the programme the participants will be able to explain the design procedures and design various basic reinforced concrete flexural members elements, such as <ul style="list-style-type: none"> ✓ Beams ✓ Slabs ✓ Staircases Teach the related topics in more efficient manner
38.	ICT210	Innovation and Startup in higher Education Institutions	Prasanta Sarkar	22/11/2021	26/11/2021	1	Faculty of all Disciplines	After attending the programme, the participants will be able to <ul style="list-style-type: none"> Create awareness on Entrepreneurship development among students and faculty Promote entrepreneurship Provide support service for incubation and startup

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39.	ICT211	NBA Accreditation for polytechnics	Rayapati Subbarao	22/11/2021	26/11/2021	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 Course Outcomes and map with Program Outcomes Learn how to prepare pre-qualifier and SAR. Practice Criteria i to ix.
40.	ICT212	Industrial automation using PLC, DCS & SCADA	Sagarika Pal	22/11/2021	26/11/2021	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. Develop programme on PLC and DCS for process automation Explain SCADA systems for various process control systems
41.	ICT213	Community Development through Technical Institutes	Sheela Yadav Rai	22/11/2021	26/11/2021	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
42.	ICT214	Solar Photovoltaic System	Soumitra Kumar Mandal	22/11/2021	26/11/2021	1	Faculty and Lab Tech, of Electrical, ECE, EEE, Instrumentation Engineering	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
43.	ICT215	Medical Instrumentation	Subrata Chattopadhyay	22/11/2021	26/11/2021	1	Electrical, Electronics, Instrumentation And Allied Disciplines	After attending the course the participants will be able to <ul style="list-style-type: none"> Understand Cells, Digestive System, Excretory System, Endocrinology Describe Origins of electro-physiological signal and their characteristics Design practical clinical sensors and transducers Understand the ECG, EEG, EMG and their Electrodes Understand the operation of X-ray, Fluoroscopy and Radiography, Pacemaker, Magnetic Resonance Imaging etc. Explain Electric shock hazards and safety devices
44.	ICT216	Rural Development through CDTF / PWD / UBA Scheme	Uday Chand Kumar	22/11/2021	26/11/2021	1	All discipline	After attending the programme the participants will be able to <ul style="list-style-type: none"> understand the activities of the various scheme. aware the role of polytechnic in implementing the various scheme. prepare project report. prepare action plan of the scheme. involve PRI /NGO in implementing the scheme.

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45.	ICT217	Introduction to Technology Enabled Learning	Rajeev Chatterjee, Samir Roy & Ranjan Dasgupta	29/11/2021	03/12/2021	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 e-learning, TEL 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, Demonstrate the various concepts related to pedagogy, Explain the importance of assessment and item development, exhibit and demonstrate the process of e-content creation for MOOCs based e-content. develop e-content chunks / learning object in their own subject domain, and exhibit and demonstrate e-learning tools and technology.
46.	ICT218	Designing Direct and Indirect Assessment Tools	Urmila Kar	29/11/2021	03/12/2021	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 need for assessment of learning distinguish between measurement, assessment and evaluation of student learning decide assessment strategies based on types and purposes of Assessment and Evaluation differentiate between direct and indirect assessment tools decide techniques for assessment of learning outcomes in different domains design appropriate tools for learning assessment designing question paper designing tools for skill assessment designing rubrics for assessment designing tools for indirect assessment Validate assessment tools
47.	ICT219	ICT Tools for Teaching and Learning	Arpan Kumar Mondal	06/12/2021	10/12/2021	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
48.	ICT220	Thesis and Research paper writing	Rayapati Subbarao	06/12/2021	10/12/2021	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.
49.	ICT221	Estimating and Costing of Non-conventional Energies	Sheela Yadav Rai	06/12/2021	10/12/2021	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

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50.	ICT222	PLC and LABVIEW Programming	Soumitra Kumar Mandal	06/12/2021	10/12/2021	1	Faculty and Lab Tech, of Electrical, ECE, EEE, Instrumentation Engineering	After attending the programme, the participants will be able to <ul style="list-style-type: none"> Describe the architecture of PLC Develop PLC Programs Apply PLC in Industrial Automation Understand fundamentals of LABVIEW Implement LABVIEW Applications
51.	ICT223	Sensors Transducers And Signal Conditioning	Subrata Chattopadhyay	06/12/2021	10/12/2021	1	Electrical, Electronics, Instrumentation And Allied Disciplines	After attending 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 Use of signal conditioning Explain the concept of Intrinsic safety instruments Apply transducers and actuators in process Control Systems
52.	ICT224	Managerial Skills for Technical Teachers	Sukanta Kumar Naskar	06/12/2021	10/12/2021	1	Faculty of technical institutes	After attending the training programme participants will be able to: <ul style="list-style-type: none"> Demonstrate the managerial skill effectively Identify managerial skills of a teacher
53.	ICT225	Hands-on-Training on Arc Welding / Gas Welding / TIG / MIG/Plasma and Resistance Welding Processes	Arpan Kumar Mondal	13/12/2021	17/12/2021	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 welding processes Perform various welding processes
54.	ICT226	Data Analytics with R	Chandan Chakraborty	13/12/2021	17/12/2021	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.
55.	ICT227	Designing Question Papers	Habiba Hussain	13/12/2021	17/12/2021	1	Technical teachers from all disciplines	<ul style="list-style-type: none"> Identify different tools of evaluation Prepare TOS Develop questions based on TOS
56.	ICT228	Word Processing with LaTeX	Kinsuk Giri	13/12/2021	17/12/2021	1	Faculty of all disciplines	<ul style="list-style-type: none"> get an overview on different word processors get details on LaTeX for Writing Hands-on with LaTeX
57.	ICT229	Theory, Operation and Experimentation on Sensors, Transducers & Actuators	Sagarika Pal	13/12/2021	17/12/2021	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 different types of sensors and actuators Explain the concept of Intrinsic safety instruments Apply transducers and actuators in process Control Systems

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58.	ICT230	Laboratory Experimentation in Engineering Chemistry	Sailendra Nath Mandal	13/12/2021	17/12/2021	1	Faculty and Staff of Science discipline	After attending the programme the participants will be able to acquire – <ul style="list-style-type: none"> • knowledge of basic concept of different engineering chemistry laboratory experiments, equipment, analytical techniques, • skill of handling/ online demonstration of conventional and modern sophisticated 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, • attitude of hand-on working in the laboratory/field (Plant Visit)/ online live demonstration
59.	ICT231	Philosophy of Limit State Method of RC Design as per Indian Standards and its Limitations	Santanu Bhanja	13/12/2021	17/12/2021	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 fundamentals of Limit State Method of Design as per Indian Standards IS 456-2000 and IS 13920-2016 highlighting the design philosophy of prescriptive method of design • Be introduced to Performance based seismic design • Be acquainted with the shortcomings of the standards in dealing with high grades of concrete and identify the grades of steel that are suitable for seismic design • Be introduced to overall design philosophy rather than mechanically using some design aids or charts • Analyze, Design and Detail foundations for real life multistoried buildings using the basic features of different software
60.	ICT232	Laboratory Practice on Civil Engineering Materials – Concrete	Uday Chand Kumar	13/12/2021	17/12/2021	1	Civil, Architecture and related discipline	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
61.	ICT233	Active Learning under Engineering Education	Urmila Kar	13/12/2021	17/12/2021	1	Faculty members and technicians from all technical institutes	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • identify features of learning-teaching system under engineering education • explain the need for active learning • analyse the learning styles of engineering students • identify innovative approaches for active learning • illustrate the features of Problem Based Learning and Project Based Learning • identify the way to incorporate active learning and life-long learning into engineering curricula
62.	ICT234	Optimization with MATLAB Applications	Nirmal Kumar Mandal	13/12/2021	17/12/2021	1	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

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Sl. No.	Prog. Code	Programme Title	Programme Co-ordinator	Date: From	Date: To	Duration (Week)	Target Participant / Group	Programme Objectives
63.	ICT235	Renewable Energy Sources and Emerging Technologies	Sheela Yadav Rai	20/12/2021	24/12/2021	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
64.	ICT236	Refresher course on Design of Analog & Digital Electronics	Soumitra Kumar Mandal	20/12/2021	24/12/2021	1	Faculty and Lab Tech, of Electrical, ECE, EEE, Instrumentation Engineering	After attending the programme, the participants will be able to <ul style="list-style-type: none"> Study the operations and characteristics of Analog and Digital devices Design of Analog and Digital circuits Implement Analog and Digital electronics circuits using Software
65.	ICT237	Laboratory Testing of Soil [Laboratory Based]	Jagat Jyoti Mandal	20/12/2021	24/12/2021	1	Faculty members of Civil & allied disciplines and lab Technicians	After attending the programme the participants will be able to <ul style="list-style-type: none"> Explain basic concepts of soil investigation and testing Guide students in conducting different laboratory experiments for determination of different soil parameters Demonstrate and conduct different laboratory and insitu tests on soil for determination of strength and compressibility parameter of soil
66.	ICT238	Machine Learning and It's Applications	Indrajit Saha	27/12/2021	31/12/2021	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
67.	ICT239	MATLAB and its Applications	Prasanta Sarkar	27/12/2021	31/12/2021	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
68.	ICT240	Application of MATLAB, Control System, Image Processing and Fuzzy Logic Tool box	Sagarika Pal	27/12/2021	31/12/2021	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 Modeling techniques Apply Image processing Tool Box Commands Apply Fuzzy Logic Tool Box Commands
69.	ICT241	Data Structures and Algorithms	Samir Roy	27/12/2021	31/12/2021	1	Faculty of CSE, IT, MCA disciplines	After successful completion of the program, the participants will be able to <ul style="list-style-type: none"> Explain Data Structures and Algorithms in the classroom Design data structures and algorithms for computation Implement data structures and algorithms for problem solving

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70.	ICT242	Design of RC Beams, Columns and Shear Walls as per fundamentals of Limit State Method	Santanu Bhanja	27/12/2021	31/12/2021	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 beam and column design Identify the basic principle of Shear Wall design Differentiate between column and Shear Wall design
71.	ICT243	Advanced Materials Science and Engineering	Subrata Mondal	27/12/2021	31/12/2021	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.
72.	ICT244	Online Pedagogy	Habiba Hussain	03/01/2022	07/01/2022	1	Techical teachers from all disciplines	<ul style="list-style-type: none"> Explain the need for online pedagogy Plan online instruction Incorporate different principles for effective online delivery
73.	ICT245	Introduction to Coding Theory	Rajeev Chatterjee	03/01/2022	07/01/2022	1	Faculty of all disciplines	After participating in this program the participants will be able to: <ul style="list-style-type: none"> Explain information, quality of Information, and Information entropy, Demonstrate the working principles and design of AES, DES, Demonstrate various encoding techniques like Arithmetic Encoding, Huffman Encoding, Hamming Code, Gray code, JPEG Encoding Standard, etc., and Demonstrate the applications of coding techniques in the area of Networking and Communication
74.	ICT246	Induction Training	Sagarika Pal	03/01/2022	07/01/2022	1	Faculty of all disciplines	After completing the course the participants will be able to <ul style="list-style-type: none"> Identify the roll of a teacher Identify Instructional Objectives Prepare Lesson Plan Assess the learning performance of students Design question paper
75.	ICT247	LABVIEW & MATLAB Applications in Engineering	Soumitra Kumar Mandal	03/01/2022	07/01/2022	1	Faculty and Lab Tech, of Electrical, ECE, EEE, Instrumentation Engineering	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

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76.	ICT248	Sensor Transducer And Signal Conditioning	Subrata Chattopadhyay	03/01/2022	07/01/2022	1	Electrical, Electronics, Instrumentation And Allied Disciplines	After attending 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 • Use of signal conditioning • Explain the concept of Intrinsic safety instruments • Apply transducers and actuators in process Control Systems
77.	ICT249	Rural Engineering	Uday Chand Kumar	03/01/2022	07/01/2022	1	All discipline	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.
78.	ICT250	Fusion Welding Processes	Dipankar Bose	10/01/2022	14/01/2022	1	Faculty and Technical Staff of Mech., Production and Automobile Engineering	After attending the programme the participants will be able <ul style="list-style-type: none"> • explain various types of fusion welding processes • understand working principles of different fusionwelding proceses • state characteristics of vairous fusion welding processes • Hands on practices on varoius fusion welding proceses
79.	ICT251	Induction Training	Sheela Yadav Rai	10/01/2022	14/01/2022	1	All Discipline	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
80.	ICT252	National Education Policy (NEP) 2020 – Reforms in Higher Education	Urmila Kar	10/01/2022	14/01/2022	1	Faculty members and technicians from all AICTE approved 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.
81.	ICT253	Mathematical Foundation of Computer Science	Kinsuk Giri & Samir Roy	10/01/2022	21/01/2022	2	Faculty of all disciplines	<ul style="list-style-type: none"> • able to explain mathematical/logical foundation of computations • model computational tasks in terms of mathematical formalism • apply appropriate mathematical tools to solve computational problem
82.	ICT254	Complex Engineering Problems (CEP) and Life Long Learning (LLL): Role in NBA accreditation process	Arpan Kumar Mondal & Ranjan Dasgupta	17/01/2022	21/01/2021	1	Faculty of all disciplines	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

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83.	ICT255	Concept Teaching in Geotechnical Engineering	Jagat Jyoti Mandal	17/01/2022	21/01/2021	1	Faculty members of Civil & allied disciplines (Specially new recruits)	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain origin of soil and basics of clay mineralogy • Explain the consistency and determine index properties, consistency limits and particle size distribution of soil • Classify soil as per Indian standards specifications • Explain the flow through soil and concepts of flownets • Explain the concept of compaction determine the compaction characteristics of soil • Explain the concept of consolidation of soil and determine the consolidation characteristics of soil • Explain and define strength characteristics of soil and determine the strength characteristics of soil • Impart acquired knowledge to students in a systematic manner
84.	ICT256	Control System analysis and Design with MATLAB	Prasanta Sarkar	17/01/2022	21/01/2022	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
85.	ICT257	How to write Thesis and Research paper	Rayapati Subbarao	17/01/2022	21/01/2022	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.
86.	ICT258	Course on Commentary for Code on Ductility Design and Detailing of RC structures subjected to Seismic Forces - IS 13920 2016	Santanu Bhanja	17/01/2022	21/01/2022	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
87.	ICT259	Induction Training	Sukanta Kumar Naskar	17/01/2022	21/01/2022	1	Faculty 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 • Identify instructional objectives • Develop lesson plan • Identify quality parameters of Technical Education • Identify managerial roles of a tecaher

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88.	ICT260	Probability and Statistics	Chandan Chakraborty	17/01/2022	28/01/2022	2	Faculty of Engineering & Science, Allied disciplines	At the end of this course the participants will be able to <ul style="list-style-type: none"> • Develop in-depth understanding of concept of probability and probability theory for uncertainty analysis in decision making, • Explore various standard Probability distributions with its applications, • Demonstrate descriptive statistics for data visualization and analysis, • Analyse the multivariate data using Correlation and Regression analysis for problem solving, • Explain an overview of Inferential Statistics and related issues in class room teaching, • Explain the various statistical tables for decision making, • Explore their applications in Engineering problems specially in AI/ML/Data Science etc.
89.	ICT261	Machine Learning in Engineering	Nirmal Kumar Mandal	17/01/2022	21/01/2022	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
90.	ICT262	Technology Enabled Learning	Indrajit Saha	24/01/2022	28/01/2022	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
91.	ICT263	Engineering Drawing using Software	Mithu Dey	24/01/2022	28/01/2022	1	Faculty from all disciplines	After attending the program, participants will 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
92.	ICT264	Power Generation from Energy Resources	Sheela Yadav Rai	24/01/2022	28/01/2022	1	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
93.	ICT265	Modelling, Analysis and Design of Buildings with Software	Santanu Bhanja	31/01/2022	04/02/2022	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
94.	ICT266	NBA Accreditation and SAR preparation	Rayapati Subbarao	07/02/2022	11/02/2022	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 Course Outcomes and map with Program Outcomes • Learn how to prepare pre-qualifier and SAR. • Practice Criteria i to x.

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95.	ICT267	Non Traditional Machining Processes	Dipankar Bose	07/02/2022	11/02/2022	1	Faculty and Technical Staff of Mech., Production and Automobile Engineering	After attending the programme the participants will be able <ul style="list-style-type: none"> • explain various types of non traditional machining processes • understand working principles of different non traditional machining processes • Hands on practices on various fusion welding processes
96.	ICT268	Pedagogical Communication	Habiba Hussain	07/02/2022	11/02/2022	1	Technical teachers from all disciplines	<ul style="list-style-type: none"> • Interpret functions of the different elements in communication cycle • Categorise the patterns in classroom communication • Minimise barriers in communication • Relate feedback & assessment
97.	ICT269	Introduction to PYTHON Programming	Kinsuk Giri	07/02/2022	11/02/2022	1	Faculty of all disciplines	<ul style="list-style-type: none"> • understand and explain the different aspects of PYTHON • apply PYTHON to solve problems • use PYTHON for visualizations
98.	ICT270	Control & Automation	Sagarika Pal	07/02/2022	11/02/2022	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 and complex control techniques for industrial automation • Develop PLC programmes for automation • Explain SCADA systems for various process control systems • Apply PLC and DCS for various control systems
99.	ICT271	Major Environmental Pollutants and Human Health	Sailendra Nath Mandal	07/02/2022	11/02/2022	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 major pollutants of drinking water, Ambient Air, techniques of sampling, preservation, analysis, standards, interpretation of result and management of Environment, impact on human health , • skill of handling/ online demonstration of conventional and modern sophisticated 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, • attitude of hand-on working in the laboratory/field (Plant Visit)/ online live demonstration
100.	ICT272	Role of Technical Institutions in Community Development	Sheela Yadav Rai	07/02/2022	11/02/2022	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
101.	ICT273	Sensor Transducer And Signal Conditioning	Subrata Chattopadhyay	07/02/2022	11/02/2022	1	Electrical, Electronics, Instrumentation And Allied Disciplines	After attending 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 • Use of signal conditioning • Explain the concept of Intrinsic safety instruments • Apply transducers and actuators in process Control Systems

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102.	ICT274	Fundamental of Surveying	Uday Chand Kumar	07/02/2022	11/02/2022	1	Civil, Architecture related branch	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
103.	ICT275	Introduction to Finite Element method in Engineering	Jagat Jyoti Mandal	07/02/2022	18/02/2022	2	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 (one dimensional, two dimensional and beam elements) by using finite element Explain the concept of shape functions and numerical integration techniques in FEM Solve simple problems by using FEM Use standard software for solving simple structural problems
104.	ICT276	Complex Engineering Problems (CEP): Role in NBA accreditation process	Arpan Kumar Mondal & Ranjan Dasgupta	14/02/2022	18/02/2022	1	Faculty of all disciplines	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
105.	ICT277	Management Aspects of Laboratory Classes	Dipankar Bose	14/02/2022	18/02/2022	1	Faculty of all disciplines	After attending the programme the participants will be able <ul style="list-style-type: none"> know varoius management issues of conducting laboratory and workshop classes understand the effective techniques of management of classroom , macines/equipment and manpower state different safety aspects
106.	ICT278	Electricity Rules and Code of Practices	Prasanta Sarkar	14/02/2022	18/02/2022	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
107.	ICT279	Artificial Intelligence	Samir Roy	14/02/2022	18/02/2022	1	Faculty of CSE, IT, MCA disciplines	After successful completion of the program, the participants will be able to <ul style="list-style-type: none"> Explain the principles and techniques of AI Apply the techniques of AI to solve complex problems Develop AI applications for real-life problems
108.	ICT280	Machine Learning with Python	Chandan Chakraborty & Kinsuk Giri	21/02/2022	25/02/2022	1	Faculty of IT, CSE, ECE, EE, Biomedical, BCA, MCA Electrical Engg.	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.
109.	ICT281	Fundamentals to Data Security	Indrajit Saha	21/02/2022	25/02/2022	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

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110.	ICT282	Preview of Science and Technology in Ancient India	Nirmal Kumar Mandal & Santanu Bhanja	21/02/2022	25/02/2022	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 ancient Indian knowledge system • Introduce the basic features of ancient technology • Explain how even with limited knowledge the application of basic science in technology resulted in wonders
111.	ICT283	Estimating & Costing of Non-conventional Energies	Sheela Yadav Rai	21/02/2022	25/02/2022	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
112.	ICT284	Assessment and Evaluation under Outcome Based Education	Urmila Kar	21/02/2022	25/02/2022	1	Faculty members and technicians from all technical institutes	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • Identify the features of Outcome Based Education (OBE) • identify features of learning-teaching and assessment system under OBE • decide assessment strategies, methods and tools based on types and purposes of Assessment and Evaluation • design direct and indirect assessment tools under OBE.
113.	ICT285	Effective Teaching	Habiba Hussain	28/02/2022	04/03/2022	1	Techical teachers from all disciplines	<ul style="list-style-type: none"> • Characterise effective teaching • Identify essential parameters for effective teaching • Practise few active learning strategies • Develop scoring scale for teaching effectiveness
114.	ICT286	NBA Accreditation for polytechnics and engineering colleges	Rayapati Subbarao	07/03/2022	11/03/2022	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 Course Outcomes and map with Program Outcomes • Learn how to prepare pre-qualifier and SAR. • Practice Criteria i to x.
115.	ICT287	Advanced Welding Processes	Arpan Kumar Mondal	07/03/2022	11/03/2022	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
116.	ICT288	Managing Aspects of Laboratory Classes	Dipankar Bose	07/03/2022	11/03/2022	1	Faculty of all disciplines	After attending the programme the participants will be able <ul style="list-style-type: none"> • know varoius management issues of conducting laboratory and workshop classes • understand the effective techniques of management of classroom, macines/equipment and manpower • state different safety aspects
117.	ICT289	Course on Vibration Analysis and its Application in Engineering Design	Nirmal Kumar Mandal & Santanu Bhanja	07/03/2022	11/03/2022	1	Faculty of Engineering with preference to Mechanical, Civil, Architecture & allied disciplines	After attending the course, the participants will be able to <ul style="list-style-type: none"> • Understand different types of vibrations • Understand the importance of vibration analysis in Mechanical and Civil Engineering • Understand the application of vibration analysis in design of machines • Identify the major design and detailing considerations of structures subjected to vibrations

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118.	ICT290	Community Development through Technical Institutes	Sheela Yadav Rai	07/03/2022	11/03/2022	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
119.	ICT291	Computer Aided Instruction In Teaching Learning Process	Subrata Chattopadhyay	07/03/2022	11/03/2022	1	Electrical, Electronics, Instrumentation And Allied 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 features of CAI • Explanation of different types of CAI • A model class with CAI
120.	ICT292	Laboratory Practice on Civil Engineering Materials – NDT / SDT	Uday Chand Kumar	07/03/2022	11/03/2022	1	Civil, Architecture and related discipline	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain basic concepts on laboratory tests of NDT / SDT • Guide students in conducting different laboratory experiments for determination of various parameters. • Demonstrate different tests on NDT / SDT.
121.	ICT293	Quality Assurance through Accreditation (NBA Guidelines)	Urmila Kar	07/03/2022	11/03/2022	1	Faculty members and technicians from all technical institutes	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • identify quality issues of Technical Education System • explain the need for and features of Outcome Based Education (OBE) • justify the requirement of Outcome Based Accreditation (OBA) • identify parameters for OBA • explain the process of preparing self-assessment report (SAR) for Accreditation by NBA
122.	ICT294	Professional Values and Ethics	Mithu Dey	14/03/2022	18.03.2022	1	Faculty from all disciplines	After attending the program, participants will be able to <ul style="list-style-type: none"> • To understand the moral values that ought to guide the engineering profession • To create an awareness on professional Ethics and Human Values. • Resolve the moral issues in the profession • develop a set of beliefs, attitudes, and habits that professional should display regarding morality.
123.	ICT295	Engineering Capstone Project	Prasanta Sarkar	14/03/2022	18/03/2022	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
124.	ICT296	HPC and Cloud Computing	Ranjan Dasgupta & Kinsuk Giri	14/03/2022	18/03/2022	1	Faculty of CSE/ IT discipline	<ul style="list-style-type: none"> • get exposure in different hardware components of modern computer • get exposure in the limitation of modern computer in context of high performance • get exposure in HPC and Cloud Computing

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125.	ICT297	Object Oriented Design & Programming in C++	Rajeev Chatterjee & Samir Roy	14/03/2022	18/03/2022	1	Faculty of CSE, IT Computer Application, Electronics, Electrical, Mathematics disciplines	After successful completion of the program, the participants will be able to <ul style="list-style-type: none"> • Create an Object Oriented Model of a software, • Write a Program in C++ to solve a computational problem • Compile, debug and execute a program in C++ • Apply objects, classes, inheritance, polymorphism etc. to implement object oriented programming.
126.	ICT298	Environmental Pollution and Protective Measures	Sailendra Nath Mandal	14/03/2022	18/03/2022	1	Faculty and Staff of any disciplines	After attending the programme the participants will be able to gain and develop <ul style="list-style-type: none"> • knowledge of basic concept of Air pollution, Water pollution, Noise pollution, Light pollution and impact on human health, protective measures • skill of handling/ online demonstration of 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 in the laboratory/field(Plant Visit)/ online live demonstration
127.	ICT299	MATLAB in Mechanical Engineering Applications	Nirmal Kumar Mandal	21/03/2022	25/03/2022	1	Mechanical and relevant disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Use graphics with MATLAB • Apply MATLAB in statics and dynamic
128.	ICT300	Pattern Recognition: Theory & Applications	Chandan Chakraborty	21/03/2022	25/03/2022	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 pattern recognition system with examples • Explain feature space, feature selection and dimensionality reduction • Demonstrate supervised pattern classification (Bayesian, SVM, FLDA etc.) methods and its applications in class room teaching / practicing • Explain unsupervised pattern classification tools (Clustering) • Design relevant projects for hands on experience towards problem solving
129.	ICT301	Leadership in Academia	Habiba Hussain	21/03/2022	25/03/2022	1	Technical teachers from all disciplines	<ul style="list-style-type: none"> • Explain academic leadership • Classify leadership styles • Build learning teams
130.	ICT302	Renewable Energy Sources and Emerging Technologies	Sheela Yadav Rai	21/03/2022	25/03/2022	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
131.	ICT303	Fundamental and Applications of Nanomaterials	Subrata Mondal	21/03/2022	25/03/2022	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.

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132.	ICT304	HRD through Training and Development	Sukanta Kumar Naskar	21/03/2022	25/03/2022	1	Faculty and support staff of any technical institutes	After attending the programme, participants will be able to: <ul style="list-style-type: none"> • Understand the components of HRD • Identify the stages for conducting a training programme • Design a training programme • Apply different techniques for conducting a training programme • Evaluate effectively outcome of a training programme
133.	ICT305	Hybrid Machining	Dipankar Bose	21/03/2022	25/03/2022	1	Faculty of CE, ME, Production & Automobile Engg.	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
134.	ICT306	Geotechnical Aspects of Pile Foundations	Jagat Jyoti Mandal	21/03/2022	25/03/2022	1	Faculty members of Civil & allied disciplines	After attending the programme the participants will be able to <ul style="list-style-type: none"> • Explain the basic principles of determination of pile capacity & settlement of single piles in different types of soil deposits • Determine lateral load capacity of piles in different types of soil deposits • Determine group capacity of piles • Determine settlement of pile groups in different types of soil deposits • Use the recommendations of Indian standard for design of pile foundations Teach the related topics in more efficient manner
135.	ICT307	NBA Accreditation Issues	Arpan Kumar Mondal & Ranjan Dasgupta	28/03/2022	01/04/2022	1	Faculty of all disciplines	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