

# Motilal Nehru National Institute of Technology Allahabad

Allahabad -211004

## Electrical Engineering Department

Schedule Plan for Short Term Course on

Online Short Term Course *PERICA-2020, September 16<sup>th</sup> to 20<sup>th</sup>, 2020*

|  |   |  |
|--|---|--|
|  | 09-30 AM to 10-00 AM  | Introduction among participants with coordinators and convener   |
| <b><u>Ist day</u></b><br><br><b>16/09/2020</b><br><b>Wednesday</b>           | 10-00 AM to 11-00 AM  | Inauguration of the course   |
|  | 11-00 AM to 12-30 PM  | <b>Lecture-1</b> : Renewable Energy Grid Integration Technology and Smart Energy Market Management<br>Prof. Rajendra Kumar Pandey, Indian Institute of Technology(BHU) Varanasi, India                             |
|  | <i>Lunch break 01-00 PM to 02-00 PM</i>   |  |
|  | 02-00 PM to 03-30 PM  | <b>Lecture-2</b> Application of Electrical Network Frequency of Digital Recordings for Location-Stamp Verification<br>Prof. Celia Shahnaz , Bangladesh University of Engineering and Technology, Dhaka, Bangladesh |
|  | <i>Break 0330 pm to 04-00 pm</i>  |  |
|  | 04-00 PM to 05-30 PM  | <b>Lecture-3</b> Switched Mode Rectifiers and High PFC Converters<br>Prof. R. K. Tripathi, M.N. National Institute of Technology Allahabad, India  |
|  | 05-30 PM to 06-00 PM  | Discussion with the participants to share their views on the Ist day lectures  |
| <i>I st Day of the Course Ends</i>   |   |  |
| <b><u>2<sup>nd</sup> Day</u></b><br><br><b>17/09/2020</b><br><b>Thursday</b> | 09-30 AM to 11-00 AM  | <b>Lecture-4</b> Efficient Power Management Techniques<br>Dr. N. Laxminarasamma, Indian Institute of Technology Madras, India.   |
|  | <i>Break 1100 am - 1130 am</i>  |  |
|  | 11-30 AM to 01-00 PM  | <b>Lecture-5</b> MATLAB Simulation based Analysis of High Voltage Converters for Charging Applications-<br>Dr. Vaishnavi Ravi, Ph.D Scholar, Indian Institute of Technology Madras, India                          |
|  | <i>Lunch break 0100pm -0200 pm</i>  |  |
|  | 02-00 PM to 03-30 PM  | <b>Lecture-6</b> Active Filter Design, Control and Applications in DG System<br>Dr.Sabha Raj Arya, S.V. National Institute of Technology Surat, India.   |
|  | <i>Break 0330 pm – 04-00 pm</i>   |  |
|  | 04-00 PM to 05-30 PM  | <b>Lecture-7</b> New Era of Renewable Resources and Energy Harvesting<br>Mr. Umesh Kumar Soni, Ph.D. Scholar, M.N. National Institute of Technology Allahabad, India   |
| 05-30 PM to 06-00 PM   | Discussion with the participants to share their views on the 2 <sup>nd</sup> day lectures |  |
| <i>II nd. Day of the Course Ends</i>   |   |  |
| <b><u>3<sup>rd</sup> Day</u></b><br><br><b>18/09/2020</b><br><b>Friday</b>   | 09-30 AM to 11-00 AM  | <b>Lecture-8</b> Modelling and Simulation of Simple Battery Charger and 1-phase Inverter using Typhoon HIL Software<br>Mr Sudipto Poddar, Field & Support Engineer<br>Typhoon HIL Hard Ware Solutions              |
|  | <i>Break 11-00 am - 1130 am</i>   |  |
|  | 11-30 AM to 01-00 PM  | <b>Lecture-9</b> Real Time Simulation of Electric Vehicle, Induction Motors And AC-DC Converters using Typhoon HIL Software<br>Shashank Kumar , Sr. Application Engineer<br>Typhoon HIL Hard Ware Solutions        |
|  | <i>Lunch break 0100 pm -0200 pm</i>   |  |
|  | 02-00 PM to 03-30 PM  | <b>Lecture-10</b> Introduction to PSCAD and use in Power Electronics Simulation<br>Dr. Raju Swami, Pacific University, India   |
|  | <i>Break 0330 pm - 0400 pm</i>  |  |
|  | 04-00 PM to 05-30 PM  | <b>Lecture-11</b> Panel Discussion with Electrical Engineering Expert  |
| 05-30 PM to 06-00 PM   | Discussion with the participants to share their views on the 3 <sup>rd</sup> day lectures |  |

# Motilal Nehru National Institute of Technology Allahabad

Allahabad -211004

## Electrical Engineering Department

Schedule Plan for Short Term Course on  
Online Short Term Course *PERICA-2020, September 16<sup>th</sup> to 20<sup>th</sup>, 2020*

|   |  |  |
|---|--|--|
|   | <i>III rd. Day of the Course Ends</i>        |  |
| <b>4<sup>th</sup> Day</b><br><br><b>19/09/2020</b><br><b>Saturday</b> | 09-30 AM to 11-00 AM                         | Lecture-12 Solar PV Grid Interfaced Systems<br>Prof. Bhim Singh, Indian Institute of Technology Delhi, India   |
|   | <i>Break 1100 am - 1130 am</i>               |  |
|   | 11-30 AM to 01-00 PM                         | Lecture-13 Power Quality Problems and Power Filters<br>Prof. Bhim Singh, Indian Institute of Technology Delhi, India   |
|   | <i>Lunch break 0100pm -0200 pm</i>           |  |
|   | 02-00 PM to 03-30 PM                         | Lecture -14 Harmonic Filter Design for Power Quality Improvement<br>P. Karuppanan, M.N. National Institute of Technology Allahabad, India  |
|   | <i>Break 0330 pm - 0400 pm</i>               |  |
|   | 04-00 PM to 05-30 PM                         | Lecture -15 Adjustable speed drives - Future challenges and applications.<br>Dr. Indrajit Sarkar, National Institute of Technology Rourkela, India                                   |
|   | 05-30 PM to 06-00 PM                         | Discussion with the participants to share their views on the 4th day   |
|   | <i>4<sup>th</sup> Day of the Course Ends</i> |  |
| <b>5<sup>th</sup> Day</b><br><br><b>20/09/2020</b><br><b>Sunday</b>   | 09-30 AM to 11-00 AM                         | Lecture -16 Digital Controller for Power Converters Applications<br>Prof. Rajesh Gupta, M.N. National Institute of Technology Allahabad, India                                       |
|   | <i>Break 11-00 am - 1130 am</i>              |  |
|   | 11-30 AM to 01-00 PM                         | Lecture-17 Energy Storage Technologies, Charging Schemes and Charging Stations for Electric Vehicles<br>Dr.M.Venkatesh Naik, M.N. National Institute of Technology Allahabad, India. |
|   | <i>Lunch break 0100 pm -0200 pm</i>          |  |
|   | 02-00 PM to 03-30 PM                         | Lecture-18 The Future of Distribution<br>Prof.Paulson Samuel, M.N. National Institute of Technology Allahabad, India.  |
|   | <i>Break 0330 pm – 0400 pm</i>               |  |
| 04-00 PM to 06-00 PM  | Valedictory and Feedback from participants   |  |
|   | <i>Short term course PERICA-2020 Ends</i>    |  |