

One Week Online Short Term Course  
On  
**“Digital Electronics”**  
December 14–18, 2020



**ORGANIZING TEAM**

**Patron**

Professor (Dr.) Goutam Sutradar  
Director, National Institute of Technology, Manipur

**Chairman**

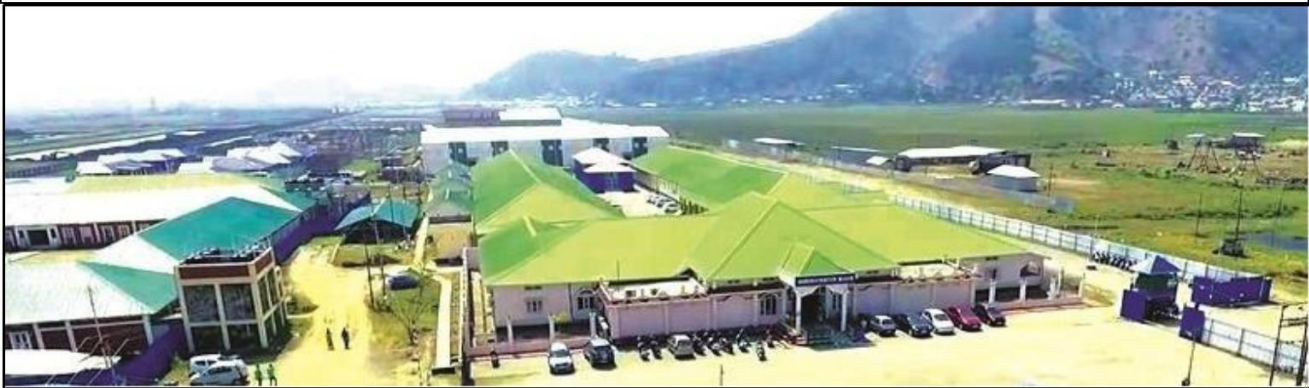
Dr. Aheibam Dinamani  
Dean Students Welfare  
National Institute of Technology, Manipur

**Coordinator**

Dr. L. Surajkumar Singh  
Head of Department  
Electronics & Communication Engineering  
National Institute of Technology, Manipur

**Convener**

Dr. Manoj Kumar  
Assistant Professor, Department of Electronics &  
Communication Engineering  
National Institute of Technology, Manipur



**Organized By:**

**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING  
NATIONAL INSTITUTE OF TECHNOLOGY MANIPUR, IMPHAL – 795004,  
MANIPUR, INDIA**

### ABOUT NIT, MANIPUR

National Institute of Technology Manipur, a centrally funded institution is set up to impart quality technical education at various levels of higher learning. It is one of the ten new NITs established and developed as “Institute of National Importance” by an act of Parliament in 2007. NIT Manipur started its first session with the three branches of Engineering-Electrical & Electronics Engineering, Electronics & Communication Engineering and Computer Science Engineering. The functioning of the institute was started at its temporary campus at Takyelpat, Imphal under the mentorship of NIT, Agartala. As one of the National Institutes of Technology (NIT), the Institute has the responsibility of providing high quality education in Engineering, Technology and Sciences to produce competent technical and scientific manpower for the country. The Institute offers B Tech, M Tech, M Sc, MBA and PhD programmes in several disciplines of Engineering, Technology and Sciences.

### ABOUT THE COURSE

This course will provide a detailed understanding of combinational and sequential circuits. In this course the following contents will be discussed.

- Number systems, Boolean expressions, Minimization of Boolean expressions
- Logic gates, Implementations of Logic functions using gates
- NAND-NOR Implementations
- Multi-level gate Implementations
- Combinational Circuits design using Gates
- Sequential Circuits Blocks-Latches, Flip-Flops

A Course certificate will be issued upon successful completion this course.

### OBJECTIVES OF THE COURSE

- i. The main objective of this STC is to provide a unique platform to facilitate the scientists, researchers, academicians, industrialist and 12<sup>th</sup>, UG, PG/PhD students to share the knowledge for digital Electronics.
- ii. Intended to provide good knowledge of Combinational & Sequential circuits

### Who can attend this STC through Online?

Students: (12<sup>th</sup>, UG, PG, PhD)

Faculty of Engineering: (Any Branch)

Other Professionals: Engineers & Scientists from Industry and R&D organizations

Registration: Kindly register through this link: [\(link will be provided later\)](#)

#### Registration fee for attending this STC.

UG/12<sup>th</sup> Students: Rs 400/- including GST

PG/PhD Students: Rs. 550/- including GST

Faculty: Rs. 1000/- including GST

Engineers /Other professionals: Rs.2000/- including GST

*Numbers of participants are limited to 50. Shortlisted candidates will be informed through email.*

#### Details of the Bank Account:

Name: Director NIT Manipur IRG

Acc. No. 60330100000143

Bank and Branch: Bank of Baroda, NIT Manipur Campus

IFSC code: BARBONITMAN

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*For any query, you can contact to the course coordinator*

Dr. Manoj Kumar Assistant Professor (ECE)

Email: [manojara400@gmail.com](mailto:manojara400@gmail.com) ; Mb: +91-9862812186

#### IMPORTANT DATES

Last Date of Registration

December 11, 2020

**Resource Persons:**



**Dr. Aheibam Dinamani Singh** received B. Tech. in Electronics and Communication Engineering from North Eastern Hills University, Shillong, India in 2004. He completed M. Tech and Ph.D. in Electronics and Communication Engineering from the North Eastern Regional Institute of Science and Technology (NERIST), Nirjuli, Arunachal Pradesh, India, in 2010 and 2015 respectively.

He joined HCL, Nariman Point Mumbai in the year 2004. He was a faculty in the Department of Electronics and Communication Engineering, NERIST from 2006 to 2019. He is currently working as Associate Professor in the Department of Electronics and Communication Engineering at National Institute of Technology, Manipur.

His research interests are in the area of wireless communication, Fading Channels, Image Processing, Computer Vision, Biomedical Image Processing, Signal Processing, Antennas array, and Millimeter-wave antennas. He published over 55 scientific papers in research journals, international and national conferences of repute.



**Dr. L. Surajkumar Singh** is currently working as an Assistant Professor in Department of Electronics & Communication Engineering, National Institute of Technology, Manipur. He received his PhD from National Institute of Technology Manipur.

He has published several research articles in national and international reputed journals and attended various conferences across India and abroad. His Research Area includes Embedded systems, Semiconductor nanotechnology. He has published over 35 scientific articles in International, National journals of repute and in several conferences.



**Dr. Manoj Kumar** is currently working as Assistant Professor in Department of Electronics and Communication Engineering, National Institute of Technology, Manipur, India. He obtained his PhD degree from National Institute of Technology Manipur. He has published several research articles in reputed journals. His research interest includes Digital and Analog CMOS IC design, VLSI DSP, Digital Circuits.