

Indian Institute of Technology  
(Banaras Hindu University)  
Varanasi-221005, UP, India

**REGISTRATION FORM**

**Online Short Term Course on  
IoT and Its Applications**

**(25<sup>th</sup>-31<sup>st</sup> December 2020)**

Name \_\_\_\_\_

Designation \_\_\_\_\_

Institute \_\_\_\_\_

Gender: Male / Female

Postal Address \_\_\_\_\_

\_\_\_\_\_

Email ID \_\_\_\_\_

Telephone / Mobile No. \_\_\_\_\_

Undertaking:

I shall abide by rules and regulations and shall attend course. Failing which certificate may not be issued.

Signature of Applicant

\_\_\_\_\_  
Signature of Candidate  
(With date)

**COORDINATORS**

Dr. Prasenjit Chanak  
Assistant Professor

Department of Computer Science and Engineering  
Indian Institute of Technology (BHU), Varanasi-05, UP

Dr. Ajinkya N. Tanksale  
Assistant Professor

Department of Mechanical Engineering  
Indian Institute of Technology (BHU), Varanasi-05, UP

**FOUNDER OF THE BANARAS HINDU  
UNIVERSITY**



**Pandit Madan Mohan Malaviya ji**

**ADDRESS FOR CORRESPONDANCE**

Dr. Prasenjit Chanak  
(Coordinator)

Department of Computer Science and Engineering  
Indian Institute of Technology (BHU)  
Varanasi-221005, UP, India

**Email: prasenjit.cse@iitbhu.ac.in**

Indian Institute of Technology  
(Banaras Hindu University)  
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AICTE Sponsored Online QIP Short  
Term Course  
On  
**IoT and Its Applications**

**DURATION**  
25<sup>th</sup>-31<sup>st</sup> December 2020

CELEBRATING CENTENARY



**JOINTLY ORGANIZED BY**

**Department of Computer Science  
and Engineering  
And  
Department of Mechanical  
Engineering**

**Indian Institute of Technology  
(Banaras Hindu University)  
Varanasi-221005, UP, India**

## INTRODUCTION:

Recently, the Internet of Things or IoT has attracted much interest with a wide spectrum of applications such as smart healthcare, home automation, transportation, and smart city. In these applications, billions of physical devices around the world are connected to the internet for collecting and sharing data. The IoT is making the fabric of the world around us smarter and more responsive. It migrates the physical universe into the digital world. The connection of IoT 'things' and usage of IoT data enables various improvements and innovations in the lives of consumers, in business, healthcare, mobility, cities, and society. Therefore, this program provides an overview of the key concepts and principles in areas of IoT. Topics include IoT system architecture, IoT enabling technologies, IoT communication and networking protocols such as network coding, and IoT services and applications.

## COURSE CONTENTS:

- Introduction of Internet of Things (IoT)
- IoT communication and networking protocols
- IoT-enabled wireless sensor networks
- Security in IoT
- IoT services, applications, and test-beds
- Intelligent Sensing
- IoT application design
- Introduction of data analytics for IoT
- Data Mining for IoT-based applications
- Industrial Internet of Things/Industry 4.0
- Application of IoT in
  - Smart village
  - Agriculture
  - Healthcare
  - Smart home
  - Industrial process safety management
  - Livestock Management
  - Logistics & Supply Chain Management
- Future Internet design for IoT

## EXPERTS:

Subject experts will be drawn from premier institutions like IITs, NITs, IISc and from the industry.

## PROGRAM DURATION:

**6 Days (25<sup>th</sup> -31<sup>st</sup> December 2020)**

## WHO CAN PARTICIPATE?

This program can be attended by all UG/ PG/PhD students, faculties and researchers from any branch of Engineering/ Science who are interested to work in the field of Internet of Things (IoT).

## REGISTRATION:

Intending participants are requested to register their names by filling the attached registration form or by filling the online registration form. Scanned copy of the filled application is to be mailed at [fdpiitbhu@gmail.com](mailto:fdpiitbhu@gmail.com).

**Registration link:** <https://forms.gle/mGUmYbSLc5V5SjXzZ9>

**Last Date of Registration:** 21<sup>st</sup> December 2020

## Registration Fees:

There is no registration fee for this short term course

## ABOUT THE INSTITUTE:

The Indian Institute of Technology (Banaras Hindu University) owes its existence to Mahamana Pandit Madan Mohan Malviya, Bharat Ratna-the founder of the first residential university of modern India, the Banaras Hindu University. The three of the erstwhile engineering colleges of BHU, namely BENCO, MINMET and TECHNO, were merged to form the Institute of Technology (IT-BHU) in 1968 to provide an integrated educational base. The IT-BHU has been admitting students through the JEE conducted by the IIT's since 1972, and has been consistently ranked amongst the top few engineering institutions of the country. IT-BHU became IIT (BHU) in June 29, 2012 by an Act of Parliament. The Institute has maintained high academic standard since its inception. It has turned out luminary engineers and administrators who served the nation with great distinction.



## ABOUT THE COMPUTER SCIENCE AND ENGINEERING DEPARTMENT:

The Department of Computer Engineering was established in July 1983. The department offers a 4 year course, B.Tech. in Computer Sc. & Engineering, 5 year Integrated Dual Degree (B.Tech. and M.Tech.) in Computer Sc. & Engineering from 2005-2006, and Ph.D. degree in various specializations of Computer Sc. and Engineering. The faculty members of the department have international experience and training. The departmental research is focused in the areas of Artificial Intelligence, Neuro Computing, Parallel Processing, Software Engineering, Image Processing and Computer Vision, Medical Image Processing, Pattern Recognition, Datamining and Webmining, Biometrics, semantic web, Natural Language Processing (NLP), Machine Learning, and Information Extraction. Besides plan funding, the Department attracts financial inputs through externally funded projects and alumni donations.

## ABOUT THE MECHANICAL ENGINEERING DEPARTMENT:

The Department of Mechanical Engineering came into existence in 1919 under the leadership of Professor Charles A. King, the first Head of the Department and Principal of the erstwhile Banaras Engineering College. Over the last ninety nine years, the department has grown four folds to become the largest department in IIT (BHU), Varanasi. The post-graduate and doctoral program in the department is well-established and infrastructural facilities exist for studies and research for a range of specializations such as Machine Design, Thermal and Fluid Engineering, Production Engineering and Industrial Management.

