**Overview of the course**

**Dec 3-7, 2018**

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|  | **09.45-11.15** | **11.30-13.00** | **14.00-15.30** | **16.00-17.30** |
| Day 1 | Introduction to Big data | Big Data Enabling Technologies | Hands on session | Hands on session |
| Day 2 | Apache Spark, HDFS, YARN | Map Reduce | Hands on session | Hands on session |
| Day 3 | Big Data Storage Technologies, Zookeeper, Paxos | Cassandra, HBase | Hands on session | Hands on session |
| Day 4 | Spark Streaming | Kafka, Streaming Ecosystem | Hands on session | Hands on session |
| Day 5 | Machine Learning with Spark | Graph Processing, Deep Learning for Big Data | Hands on session | Hands on session |

**About the Course**

In today's fast-paced digital world, the incredible amount of data being generated every minute has grown tremendously from sensors used to gather climate information, posts to social media sites, digital pictures and videos, purchase transaction records, and GPS signals from cell phone to name a few. This amount of large data with different velocities and varieties is termed as big data and its analytics enables professionals to convert extensive data through statistical and quantitative analysis into powerful insights that can drive efficient decisions.

This Short Term Course CEP/FDP is aimed at giving Faculty, Research Scholars and Students an in-depth understanding of terminologies and the core concepts behind big data problems, applications, systems, techniques, and hands on training using state of the art tools, and will equip participant with the skills necessary to apply these tools and techniques to solving complex scientific and business problems. The specific topics include: Apache Spark, Hadoop, MapReduce, key/value storage systems, NoSQL distributed databases, Apache Cassandra, HBase, Apache Spark Streaming, Apache Kafka Streams, applications of Big Data Analytics using Machine Learning, Deep Learning, Graph Processing and many others. This course is organized under Technical Education Quality Improvement Programme (TEQIP) and Centre for Continuing Education Programme (CEP), IIT Patna.

**About IIT Patna**

Indian Institute of Technology Patna is an autonomous institute of education and research in science, engineering and technology located in Bihta, 35 km from Patna. As of today, IIT Patna has 10 academic departments that offers B.Tech, M.Tech and PhD programmes.  The faculties of this institute come with academic and research training from various institutes of excellence within the country and abroad. The recent publication records of the faculty with several practical constraints appear to be outstanding. It includes many reputed national and international journals.

Students: Rs 3000.00

Faculty: Rs 5000.00

Industry: Rs 7000.00

Registration Fee:

Research activity in IIT Patna has been published in high quality and peer-reviewed national and international journals. Please browse individual faculty member web-page for more information. Faculty members of IIT Patna have been also participating in national and international conferences of repute.

**Registration Process**

Registration is required for participating to this course. Number of seats is limited to 55. Seats will be allocated first come first served basis. Selected candidates will be confirmed through Email. Registration Deadline: **Nov 5, 2018.**

**How to Apply:** Please fill the google form using the link below: https://goo.gl/forms/583LVSCeWwhmMOuN2

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| Account Name | Indian Institute of Technology Patna |
| Account No. | 30957551934 |
| IFSC Code | SBIN0017164 |
| Bank Name | State Bank of India |
| Branch Name | IIT Patna, Bihta Campus |
| MICR No. | 801002005 |

**Account Details:** For paying the registration fees, following account details of IIT Patna can be used. Please keep a copy of the transaction

**For registration contact:**  Yashwant Singh Patel

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