

**भारतीय सूचना प्रौद्योगिकी संस्थान भागलपुर**  
**Indian Institute of Information Technology**  
**Bhagalpur**

(Institute of National Importance Under an Act of Parliament)



**Two Weeks**  
**Faculty Development Program**

*on*

**Artificial Intelligence and**  
**Machine Learning in Healthcare**  
**and Agriculture**

**12<sup>th</sup> – 23<sup>rd</sup> December, 2022**



**Patron**

**Prof. Arvind Choubey**  
**Director, IIT Bhagalpur**

**ABOUT IIT BHAGALPUR**

Indian Institute of Information Technology Bhagalpur (IIT Bhagalpur) is one of the 25 IITs set up by MHRD, Govt. of India and it started functioning from the academic year 2017. The institute is actively exploring the technical intervention required for the development of the country under the Make in India Initiative. The institute is in notable progress under the able leadership of Prof. Arvind Choubey, Hon'ble Director of the Institute.

The institute is currently offering B. Tech. degree in Computer Science and Engineering, Electronics and Communication Engineering and Mechatronics Engineering. The institute has started Ph.D, M.Tech and Dual Degree M.Tech & Ph.D programs from August 2021.

**ABOUT THE FDP**

This online short-term course is aimed at imparting knowledge and training on the fundamentals and advancements of artificial intelligence and machine learning in healthcare and agriculture. Expert lectures will be delivered by faculty members from academia and industry. This programme will be beneficial to faculty members, research scholars, PG students who intend to pursue research in the field of processing and analysis of data using techniques such as Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL) for Healthcare and Agriculture.

At the end of the program, the participants should be able to understand and apply the following topics:

- How AI, machine learning and deep learning works along with motivations in healthcare and agriculture.
- Applications of AI, machine learning and deep learning in healthcare and agriculture sector.
- How to formulate problems into artificial intelligence, machine learning and deep learning framework.
- Apply the concepts and practical knowledge in analysis, design and development of AI, machine learning, deep learning techniques.
- Practical session on machine learning and deep learning techniques by using python majorly in healthcare and agriculture.
- Disease types in both healthcare and agriculture that the AI and machine learning communities are currently tackling.

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**Sponsored by**

**AICTE Training and Learning**  
**(ATAL) Academy**

**12<sup>th</sup> – 23<sup>rd</sup> December, 2022**



**Organized by**

**Department of Computer Science and**  
**Engineering,**  
**IIT Bhagalpur**

**Coordinator**

**Dr. Dilip Kumar Choubey**  
**CSE, IIT Bhagalpur**

**Co-Coordinator**

**Dr. Babul Prasad Tewari**  
**CSE, IIT Bhagalpur**



## About AICTE Training and Learning

AICTE is committed for development of quality technical education in the country by initiating various schemes launched by Govt. of India, Ministry of Human Resource Development e.g. SWAYAM, MOOCs, Start-up Initiatives, Prime Minister Kaushal Vikas Yojana (PMKVY), Sansad Adarsh Gram Yojana (SAGY), Swachh Bharat/Unnat Bharat Abhiyan, Yoga Activities etc. There is an urgent need to train the young generation in skill sector and having faculty & technicians to be trained in their respective disciplines. It was felt that Training with latest tools and technologies is vital to keeping an institute competitive and more productive. Training is required for increasing the knowledge and skills of students to make them more employable to acquire global competencies.

### Target Participants

Assistant Professors/Associate Professors/Ph.D. scholars/PG students of the AICTE recognized universities and engineering colleges.

### Eligibility to Attend FDP

Faculty members of the AICTE approved institutions, Research scholars, PG Scholars, participants from Government, Industry (Bureaucrats/ Technicians Participants from Industry etc.) and staff of host institutions. Not more than 30% from Host Institution Stress reduction

### Registration Fee: Nil

There is no fee for attending this FDP  
Participants can register for this course on AICTE ATAL by following steps

<https://atalacademy.aicte-india.org/signup>

### How to register?

**Step 1.** One can Register themselves with an email id (sign up). If one has already registered, then login.

**Step 2.** Click on Workshops FDPs.

**Step 3.** Search by type “ATAL” and Month “December” from above dropdown box.

**Step 4.** Click the RED plus sign button to register.

**Step 5.** A short notification “successfully course registered” appears.

**Step 6.** One can also check their registration by clicking on the Applied Workshops (after done successfully registration)

**Number of Seats (Maximum): 50** (on first come first basis)

### Details of FDP Mode

The mode of the FDP is ONLINE (week 1) and OFFLINE (week 2) There is no Registration fee from any participant. Preference will be given to new participants. Program will be delivered through online mode.

### Test & e-Certificate

- A test shall be conducted by the coordinator at the end of the program.
- The e-certificates shall be issued to those participants who have attended the program with minimum 80% attendance and scored minimum 60% marks in the test.

### RESOURCE PERSONS

Prof. Arvind Choubey, Director, IIIT Bhagalpur

Mr. Kundana Lal, President, Vitti Foundation

Prof. Rajiv Misra, CSE, IIT Patna

Prof. Kalyan Chatterjee, HoD EE, IIT (ISM), Dhanbad

Prof. Maheshwari Prasad Singh, HoD, CSE, NIT Patna

Prof. Prabhat Kumar, CSE, NIT Patna

Dr. Jyoti Prakash Singh, Assoc. Prof., NIT Patna

Dr. Akshay Deepak, Assoc. Prof., NIT Patna

Dr. Sandeep Raj, Asst. Prof., ECE, IIIT Bhagalpur

Dr. Dilip Kumar Choubey, Asst. Prof., CSE, IIIT Bhagalpur

### ORGANIZING COMMITTEE

#### Patron

Prof. Arvind Choubey, Director, IIIT Bhagalpur

#### Chairperson

Dr. Babul Prasad Tewari, HoD CSE, IIIT Bhagalpur

#### Coordinator

Dr. Dilip Kumar Choubey, CSE, IIIT Bhagalpur

### Co-Coordinator

Dr. Babul Prasad Tewari, CSE, IIIT Bhagalpur

### Organizing Committee

Dr. Pradeep Kumar Biswal, CSE, IIIT Bhagalpur

Dr. Thejaswini M, CSE, IIIT Bhagalpur

Dr. Chandan Kumar Jha, ECE, IIIT Bhagalpur

Dr. Dheeraj Kumar Sinha, ECE, IIIT Bhagalpur

Dr. Dhruvajyoti Bhattacharya, ECE, IIIT Bhagalpur

Dr. Prakash Ranjan, ECE, IIIT Bhagalpur

Dr. Sanjay Kumar, ECE, IIIT Bhagalpur

Dr. Sandeep Raj, ECE, IIIT Bhagalpur

Dr. Suraj, ECE, IIIT Bhagalpur

Dr. Abhinav Gautam, MEA, IIIT Bhagalpur

Dr. Gaurav Kumar, MEA, IIIT Bhagalpur

Dr. Purnendu Kumar Mandal, MEA, IIIT Bhagalpur

Dr. Tameshwer Nath, MEA, IIIT Bhagalpur

Dr. Himadri Nayak, BSH, IIIT Bhagalpur

Dr. Pankaj Kumar Tiwari, BSH, IIIT Bhagalpur

### CONTACT DETAILS

#### Address for Correspondence

#### Dr. Dilip Kumar Choubey

Asst. Prof., Dept. of CSE

IIIT Bhagalpur, Sabour, Bhagalpur, Bihar-813210

Email: dkchoubey.cse@iiitbh.ac.in

Mobile: +91 7033789676

#### Dr. Babul Prasad Tewari

Asst. Prof., Dept. of CSE

IIIT Bhagalpur, Sabour, Bhagalpur, Bihar-813210

Email: bptewari.cse@iiitbh.ac.in

Mobile: +91 6297479700

### Registration:

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**SCHEDULE PLAN**  
**Two Weeks Faculty Development**  
**Program**  
**on**  
**Artificial Intelligence and Machine**  
**Learning in Healthcare and Agriculture**  
**(Week 1 – Online)**

<b>12/12/2022 (Day 1)</b>	<b>13/12/2022 (Day 2)</b>	<b>14/12/2022 (Day 3)</b>	<b>15/12/2022 (Day 4)</b>	<b>16/12/2022 (Day 5)</b>	<b>17/12/2022 (Day 6)</b>
<b>07:00 PM - 07:50 PM</b> <b>Session 1 (I)</b> Prof. Prabhat Kumar	<b>07:00 PM - 07:50 PM</b> <b>Session 2 (I)</b> Prof. Maheshwari Prasad Singh	<b>07:00 PM - 07:50 PM</b> <b>Session 3 (I)</b> Mr. Kundana Lal	<b>07:00 PM - 07:50 PM</b> <b>Session 4 (I)</b> Prof. Rajiv Misra	<b>07:00 PM - 07:50 PM</b> <b>Session 5 (I)</b> Prof. Kalyan Chatterjee	<b>07:00 PM - 07:50 PM</b> <b>Session 6 (I)</b> Prof. Arvind Choubey
<b>08:00 PM – 08:50 PM</b> <b>Session 1 (II)</b> Prof. Prabhat Kumar	<b>08:00 PM – 08:50 PM</b> <b>Session 2 (II)</b> Prof. Maheshwari Prasad Singh	<b>08:00 PM – 08:50 PM</b> <b>Session 3 (II)</b> Mr. Kundana Lal	<b>08:00 PM – 08:50 PM</b> <b>Session 4 (II)</b> Prof. Rajiv Misra	<b>08:00 PM – 08:50 PM</b> <b>Session 5 (II)</b> Prof. Kalyan Chatterjee	<b>08:00 PM – 08:50 PM</b> <b>Session 6 (II)</b> Prof. Arvind Choubey
<b>09:00 PM - 09:30 PM</b> <b>Session 1</b> Prof. Prabhat Kumar Interactions	<b>09:00 PM - 09:30 PM</b> <b>Session 2</b> Prof. Maheshwari Prasad Singh Interactions	<b>09:00 PM - 09:30 PM</b> <b>Session 3</b> Mr. Kundana Lal Interactions	<b>09:00 PM - 09:30 PM</b> <b>Session 4</b> Prof. Rajiv Misra Interactions	<b>09:00 PM - 09:30 PM</b> <b>Session 5</b> Prof. Kalyan Chatterjee Interactions	<b>09:00 PM - 09:30 PM</b> <b>Week 1</b> MCQs



**SCHEDULE PLAN**  
**Two Weeks Faculty Development**  
**Program**  
**on**  
**Artificial Intelligence and Machine**  
**Learning in Healthcare and Agriculture**  
**(Week 2 – Offline)**

<b>19/12/2022</b> <b>(Day 1)</b>	<b>20/12/2022</b> <b>(Day 2)</b>	<b>21/12/2022</b> <b>(Day 3)</b>	<b>22/12/2022</b> <b>(Day 4)</b>	<b>23/12/2022</b> <b>(Day 5)</b>
<b>09:00 AM to 09:30 AM</b> Inauguration	<b>09:30 AM to 12:00 PM</b> Dr. Jyoti Prakash Singh	<b>09:30 AM to 12:00 PM</b> Dr. Jyoti Prakash Singh	<b>09:30 AM to 12:00 PM</b> Dr. Sandeep Raj	<b>09:30 AM to 12:00 PM</b> Prof. Kalyan Chatterjee
<b>09:30 AM to 12:00 PM</b> Dr. Jyoti Prakash Singh	<b>12:00 PM to 01:00 PM</b> Article 1 Discussion	<b>12:00 PM to 01:00 PM</b> Article 2 Discussion	<b>12:00 PM to 01:00 PM</b> MCQs	<b>12:00 PM to 01:00 PM</b> Visit Report (Team)
<b>12:00 PM to 01:00 PM</b> Lunch	<b>01:00 PM to 02:00 PM</b> Lunch	<b>01:00 PM to 02:00 PM</b> Lunch	<b>01:00 PM to 02:00 PM</b> Lunch	<b>01:00 PM to 02:00 PM</b> Lunch
<b>01:00 PM to 02:00 PM</b> Travel for Visit	<b>02:00 PM to 04:00 PM</b> Dr. Akshay Deepak	<b>02:00 PM to 04:00 PM</b> Dr. Akshay Deepak	<b>02:00 PM to 04:00 PM</b> Dr. Dilip Kumar Choubey	<b>02:00 PM to 03:00 PM</b> Reflection Journal
<b>02:00 PM to 04:00 PM</b> Visit	<b>04:00 PM to 05:15 PM</b> Teaching Practice	<b>04:00 PM to 05:15 PM</b> Teaching Practice	<b>04:00 PM to 05:15 PM</b> Teaching Practice	<b>03:00 PM to 04:00 PM</b> Feedback
<b>04:00 PM to 05:00 PM</b> Travel back				<b>04:00 PM to 05:15 PM</b> Valedictory