



Indian Institute  
of Technology Patna

# Executive M. Tech in Computer Science & Engineering

Master Cutting-edge AI skills with IIT Advantage  
Seize the opportunity to unlock your career growth

Programme Coordinator

**Dr. Sriparna Saha**

Associate Professor Computer  
Science and Engineering, IIT  
Patna



## Who is this Programme for?

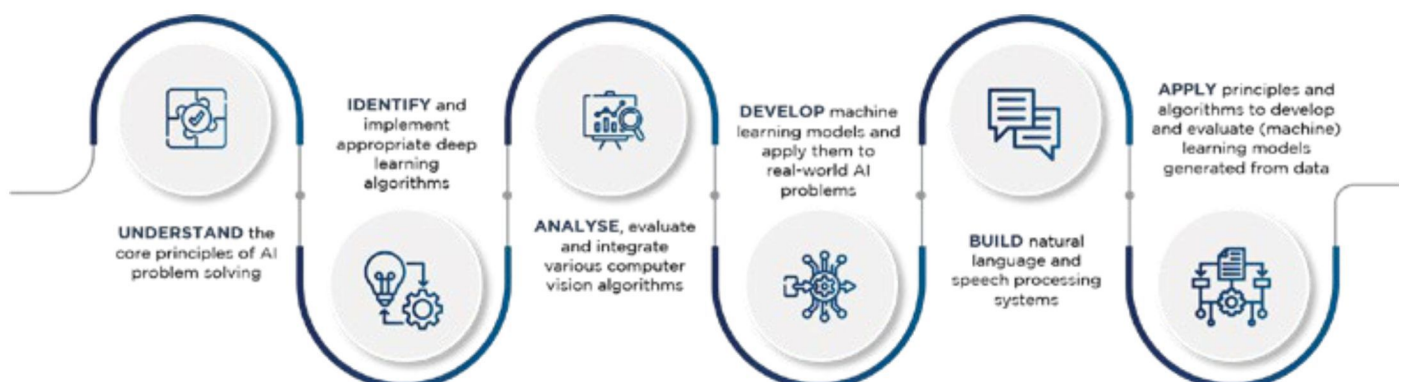
Early to Mid Level Professionals seeking  
career growth.

This programme is aimed to provide  
hands-on knowledge of AI implementation  
especially in the areas of Speech  
Technologies, Computer Vision and  
Natural Language Processing to early-  
career enthusiasts such as:

Data Analysts, Business Analysts, Data  
Scientists, ML Engineers, Computer  
Programmers, Developers, Software  
Engineers

## Overview

AI is set to transform business like never before,  
creating new opportunities for entrepreneurs,  
business leaders and workers in every industry.  
IIT Patna's Executive M. Tech in Artificial  
Intelligence programme has been designed for  
professionals across industries, looking to gain  
hands-on knowledge of AI implementation while  
building the next generation business models.





## Director's Message



It gives me immense joy to welcome you to the Quality Improvement Program (QIP), the new academic unit in the IIT Patna system. QIP aims to combine technology and management to prepare students to explore a future of possibilities. QIP plays a crucial role in upgrading and enhancing the capabilities and skill sets of pursuing graduates/ graduates and working professionals in technology & management education. With its industry-oriented future-centric curriculum, exceptional faculty, and strong international footprint, QIP has the right ingredients to achieve a leadership position among its peers in the time to come.

IIT Patna will undertake the following activities under QIP: Faculty Development Programme (FDP), Short Term Courses, Knowledge Dissemination Programme, National Summer & Winter Term and Internship (NSWTI), International Summer & Winter Term and Internship (ISWTI), Certificate Programmes, Online Courses and Training Programme for the School Students, Certificate Programmes, Executive Programmes.

I wish QIP and all its stakeholders a purposeful and joyful journey ahead and felicitate all its endeavours. I invite you to be part of this exciting journey and participate in the success of QIP at IIT Patna.

I welcome you to become a part of our story and to form a long-lasting association with the institute.

**Prof. T.N. Singh**

Director, Chief Academic Mentor, QIP, Indian Institute of Technology Patna

## Associate Dean (Resource) & Professor In-Charge



### Quality Improvement Program (QIP)

**Dr. Asif Ekbal**

**(Associate Dean Resource & Associate Professor,  
Department of Computer Science Engineering)**

**Executive M Tech in Artificial Intelligence and Data Science  
Engineering**

Asif Ekbal is an Associate Professor in the Department of Computer Science and Engineering at IIT Patna. He has been working in the broad areas of Artificial Intelligence, Machine Learning and Natural Language Processing since the last 18 years. His research is supported by various Govt bodies (MeitY, SERB etc) and Industries (e.g. Flipkart, Samsung Research, Wipro, Accenture etc). He has been listed in the top 2% scientists published by Stanford University, and is an awardee of Visvesvaraya Young Faculty Research Fellowship (YFRF), Govt of India; JSPS Invitation Fellowship from the Govt of Japan, and Innovative Project Award from the Indian National Academy of Engineering.



## Advisory Board Members



**Dr. Ravi P. Singh**  
Secretary General,  
Quality Council of India  
(September 2014-till date)



UG and PG from BHU, Varanasi, Ph.D and Postdoctoral experience in University of Western Ontario at London, CANADA. Dr Singh has experience in research, teaching and administration for the past more than 18 years in Professor Scale or above.

### Past Positions:

Director, Regional Services Division (RSD), IGNOU, Maidan Garhi, New Delhi-110068 (2011-12); Founder-VC, Sharda University (2009-11); Dean, Punjab Technical University (2004-09); Associate Dean, PTU, (2003-04); Deputy Director, AICTE (2001-03); Regional Officer of AICTE, Kanpur (1996- 99) and Kolkata (2000-2001); Assistant Director, AICTE (1996-01).

### Education:

Ph.D (1994) and Postdoctoral Fellowship in Physics from Canada (1994-95), Gold Medal from BHU in MSc (1989), NET-CSIR qualified (1989) and Topper of Honors Program in Physics (1987).



**Prof. Rajeev Srivastava**  
Professor CSE & Dean (Resource and  
Alumni Affairs) IIT (BHU), Varanasi



Prof. Rajeev Srivastava is currently working as a Professor in the Dept. of Computer Sc. & Engineering, Head of the Centre for Computing and Information Services (CCIS) and the Dean (Resource and Alumni Affairs), Indian Institute of Technology (BHU), Varanasi. He also served as Head of the Department of Computer Science and Engineering during August'2017-December'2020.

He holds the degrees of B.E., M.E., and PhD all in Computer Science & Engineering and possess 23+ years of teaching and research experience. He is a Fellow of Institution of Engineers (India) (FIE), Institution of Electronic and Telecommunication Engineers (FIETE), Senior Member IEEE USA, and Member ACM USA. He has published around 165+ research papers in reputed international journals and conferences, 04 research reference books, and 18 book chapters and a patent. He had been the Principal Investigator of research projects funded by MoE, Govt. of India and DRDO, Govt. of India. He has produced 13 PhDs, and 3 PhD thesis submitted and 04 PhDs are ongoing under his Supervision. He serves as Expert Member on different panels of NBA, UGC, UPSC, DRDO, UPPSC, reputed Institute and Universities of the Govt. of India. His research interests lies in the areas of Artificial Intelligence (AI), Machine Learning, Deep learning, Image and Video Processing, Computer Vision, and Computational Bioinformatics.



**Prof. H.P. Mathur**  
Dean and Head  
Faculty of Management Studies (Institute  
Of Management Studies)  
Banaras Hindu University, Varanasi



UG and PG from BHU, Varanasi, Ph.D and Postdoctoral experience in University of Western Ontario at London, CANADA. Dr. Singh has experience in research, teaching and administration for the past more than 18 years in Professor Scale or above.

### Current Affiliation:

Dean and Head, Institute of Management Studies, Banaras Hindu University (FMSBHU)  
Chairman, International Centre, Banaras Hindu University  
Chairman, Investment Committee, Banaras Hindu University  
Chairman, Placements and Corporate Affairs, Institute of Management Studies, Banaras Hindu University (FMS-BHU)  
Promoter Director, Atal Incubation Centre- Mahamana Foundation for Innovation and Entrepreneurship- Institute of Management Studies (Supported by Atal Innovation Mission, NITI Aayog, Government of India)  
Director/Chairman (Non-Executive), Utkarsh Welfare Foundation  
Member, Board of Governors, University of Petroleum and Energy Studies, Dehradun  
Member, Departmental Advisory Board, National Council of Educational Research and training

### Positions (Held):

Coordinator, Placement Coordination Cell, Banaras Hindu University Chief, University Employment and Information Guidance Bureau, Banaras Hindu University Coordinator, International Centre, Banaras Hindu University.

## Industry Advisors



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### Rajiv Singh

Founder CEO – Quant Samurai (A Global Cybersecurity Entity)  
Advisory Board of The Center For Innovation Commercialization, USA  
Advisory Board of School of CyberPeace, India

### Entrepreneur Experience:

Founder CEO of IndiCash (A TATA Group Venture), India  
Founder CEO of ACCPAC (A Computer Associates Venture), USA

### Leadership Experience:

Global Head – Cyber security - Tech Mahindra  
Managing Director - Entrust Datacard, USA  
President – TATA Communications Banking Infra Solutions Ltd.  
Managing Director - Diebold, USA  
Managing Director - Computer Associates (CA), USA

- Trusted Security Advisor to Governments, Law Enforcement, Military, and Enterprises across Global Markets. Experience with Military grade Cybersecurity Technologies & Services.
- Expertise in Innovative US Dept of Defense approved Cyber technologies, Silicon Valley & Israel Start-ups.
- NextGen Advanced Cyber Defence, Cyber Upskilling, National Security, and Zero-Trust
- Security Strategy.



**Dr. Shourya Roy**  
Senior Research Director, Flipkart



Dr. Shourya Roy is a seasoned technology leader with specialization in Artificial Intelligence and Machine Learning. Over the past two decades, he has led data science, data product, and data analytics teams with IBM, Xerox, American Express, and Flipkart. His past work includes a range of foundational and applied research, strategic innovation, product management, and building local and global teams. A thought leader and author of about a hundred peer-reviewed papers in premier journals and conferences and over 30 granted patents.





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**2nd**

in Emerging Government  
Colleges in a Best College  
Ranking 2022 by India  
Today-MDRA

**Ranked\***  
**9th**

for placement records

**Ranked\***  
**10th**

Best Government  
Engineering College in the  
performance category  
overall

**2500+\***  
**alumni**

serving national and  
international institutions at  
leadership positions

## Stand out with this IITP MTech Degree Certificate

A student is declared eligible for the award of an Executive M.Tech. degree if:

He/she has completed all of the credit requirements for the degree with a grade of DD or higher in each of the subjects (Theoretical, Laboratory, Workshop, Sessional, etc), Seminar, Project, and so on.

Obtained a CPI of 6.0 or higher at the end of the semester in which he/she has completed all degree requirements

*Note:*

*-All certificate images are for illustrative purposes only and may be subject to change at the discretion of IIT Patna.*

## IIT Patna Alumni Benefits

Access to Lifelong IIT Patna Email ID.  
Permanent access to the e-library of the institute.  
Concession in IIT Patna Guest House accommodation

charges.  
Easy access to the campus and sports and gym facilities at IIT Patna..

Network with global alumni community and opportunity to promote startup ideas as well as their owned business.

Organise events on campus such as Homecoming events, Alumni awards ceremonies, and Reunions. Invitation to Alumni Specific events during College Fests.



**Indian Institute of Technology Patna**  
www.iitp.ac.in



Executive  
**M Tech** Programme in  
**Computer Science Engineering**

**IIT Patna**  
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# 100% PLACEMENT SUPPORT\*

Fees	
Fees For Gen Candidate:	Fees For SC/ST/OBC/Min/EWS Candidate
₹64,500 Per Semester	₹59,100 Per Semester
Including Fees	
Exam Fees: Executive Alumni Fees:	₹4,050 Per Semester
Registration Fee:	₹6,000 (One Time)
	₹5000 (Included In Semester Fees)



Live Online Preparatory Classes shall start w.e.f 6 Oct 2023, followed by Assignments & Assessments till 10th Dec 2023.



Dec 2023 Assessment & Doubt Clearing QA Sessions.



w.e.f Jan 2024 onwards Regular Classes of 1st Semester.



1<sup>st</sup> Term Exam.



Regular Classes of 2<sup>nd</sup> Term.



2<sup>nd</sup> Term Exam.



3<sup>rd</sup> Semester Classes - Dissertation work starting Jan 2025 onwards.



Presentation on Thesis or Dissertation.



Final Term Research Paper Publication with Programme Coordinator.



Final Assessment.



Award of Degree Certificate during Convocation (2026).





# Indian Institute of Technology Patna

भारतीय प्रौद्योगिकी संस्थान पटना

Kanpa Road, Bihta, Patna – 801106, India, Phone: 06115-233102

## Executive M.Tech in CSE Preparatory Class Schedule (Tentative)

**October 06, 2023**

Introduction to Computer Science and Engineering

**October 07, 2023**

Introduction to Artificial Intelligence and Data Science Engineering

**October 13, 2023**

Fundamentals of Data Structures

**October 14, 2023**

Assignments on Data Structures using C

**October 20, 2023**

Preliminary of Algorithms

**October 21, 2023**

Assignments on Algorithm

**October 27, 2023**

Search on AI and Data Science-I

**October 28, 2023**

Tutorial on Python

**November 04, 2023**

Search in AI and Data Science-II

**November 05, 2023**

Database Preliminary

**November 11, 2023**

Assignments on Database

**November 12, 2023**

Fundamentals of Machine Learning -I

**November 18, 2023**

Fundamentals of Machine Learning -II

**November 19, 2023**

Assignment on Machine Learning

**November 25, 2023**

Neural Network Preliminaries

**November 26, 2023**

Assignments on Neural Networks

**December 01, 2023**

Interaction

**Online Assessment: December 10, 2023**

CALL TO FIND OUT MORE  
**9021156156**

HOW IT FITS WITH  
YOUR CAREER?

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[executive.cep@iitp.ac.in](mailto:executive.cep@iitp.ac.in)

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# Degree Certificate

अभिषद की अनुशंसा पर  
भारतीय प्रौद्योगिकी संस्थान पटना  
के अभिशासक परिषद द्वारा

XXXX

प्रौद्योगिकी परास्नातक की उपाधि आर्टिफिसियल इंटेलिजेंस  
में छब्बीस अगस्त दो हजार चौबीस को पटना में प्रदान की गयी

The Board of Governors  
of the

Indian Institute of Technology Patna

upon the recommendation of the Senate hereby confers the degree of  
Executive Master of Technology in Artificial Intelligence  
on

XXXX

given at Patna on this Twenty Sixth day of August, Two Thousand Twenty Four

Registrar

Director

Chairman, Board of Governor

Date: 26 Aug 2024

CALL TO FIND OUT MORE  
**9021156156**

HOW IT FITS WITH  
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[executive.cep@iitp.ac.in](mailto:executive.cep@iitp.ac.in)

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# Indian Institute of Technology, Patna

Indian Institute of Technology Patna, Bihta, Patna -801106 (Bihar)

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YOUR CAREER?

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HAVE QUESTIONS ABOUT THE PROGRAM OR

HOW IT FITS WITH YOUR CAREER?

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