



ABOUT THE COLLEGE:

Government Engineering College (GEC), Buxar, established in 2019, is a public engineering institution in Bihar, affiliated with Bihar Engineering University and approved by AICTE. It offers B.Tech programs in Civil, Electrical, Electronics & Communication, Mechanical, and Computer Science Engineering, with admission based on JEE Main scores and UGEAC counseling by BCECEB. The college maintains a low fee structure as a government institution and provides essential facilities including separate hostels for boys and girls, a library, well-equipped laboratories, a cafeteria, and sports amenities.

ABOUT THE DEPARTMENT:

The Departments of Electrical Engineering (EE), Electronics & Communication Engineering (ECE), and Computer Science & Engineering (CSE) at Government Engineering College (GEC) Buxar collectively aim to equip students with strong technical foundations and practical skills essential for modern engineering industries. EE focuses on electrical machines, power systems, control systems, power electronics, and renewable energy technologies to prepare students for roles in power generation, transmission, distribution, and automation. ECE emphasizes analog and digital electronics, communication systems, microprocessors and microcontrollers, VLSI design, embedded systems, and signal processing, enabling students to excel in electronics design, telecommunications, and emerging tech domains. CSE imparts comprehensive knowledge in data structures and algorithms, operating systems, database management systems, computer networks, artificial intelligence, machine learning, and software engineering, preparing graduates to contribute effectively in software development, IT services, cybersecurity, cloud computing, and data-driven technologies.

GOVERNMENT ENGINEERING COLLEGE BUXAR

(Under Department of Science Technology and Technical Education, Bihar, Patna)



**One Week
Faculty Development Programme (FDP)**

On

**From Automation to Autonomy:
AI security Framework for
Smart Utility**

20th to 24th December 2025

Jointly Organised by:

**Department of Electrical
Engineering, Electronics and
Communication Engineering
&
Computer Science Engineering
GEC Buxar**

ABOUT THE PROGRAM:

The Faculty Development Programme (FDP) on From Automation to Autonomy: AI security Framework for Smart Utility, is a rigorous training initiative aimed at faculty members (professors, assistant professors, lecturers, and researchers) inside academic institutions. The objective is to provide them with the most current information, skills, and pedagogical methods about many elements of security frameworks. The program will include experienced speakers from prestigious institutions and industries, presenting case studies and practical expertise to provide attendees with advanced tools and approaches.

ABOUT DSTTE BIHAR:

Department of Science Technology and Technical Education acts as the administrative and regulatory body for government-run technical institutions (engineering colleges, polytechnics) within Bihar. It implements central and state government policies related to science, technology, and technical education at the state level. It also ensures that technical education institutions adhere to the norms and standards set by bodies like AICTE and adapting them to state-specific needs. It plays a significant role in promoting skill development and vocational training programs and encourages scientific research and innovation in various fields.

OBJECTIVE OF THIS WORKSHOP:

- To enhance participants' understanding of AI-driven cybersecurity frameworks for securing modern smart utilities and power systems.
- To develop skills in detecting and mitigating cyber threats using AI, machine learning, and data analytics in SCADA, AMI, and other grid infrastructures.
- To promote secure, autonomous, and adaptive protection strategies for cyber-physical power networks including renewable and EV-integrated grids.
- To encourage multidisciplinary collaboration among academia, industry, utilities, and cybersecurity professionals.
- To support participants in creating practical solutions and research outcomes such as AI-based cyber defense applications for smart grid security.
- To explore the development of memristive devices and ReRAM crossbar array technologies for future computing applications, enabling advanced memory architectures that support AI-driven cybersecurity and neuromorphic computing systems.

REGISTRATION PROCEDURE

Eligible candidates have to register through the QR or Link



Link: <https://forms.gle/2UJpoc9Kf99Eu6jQ6>

Registration Fee:

1. Rs. 50/- for student/Research scholar
2. Rs. 250/- for Faculty Members.

CHIEF PATRON:

Dr. Pratima
IAS, Secretary, DSTTE Bihar

PATRON:

Prof (Dr.) Ram Naresh Rai
Principal, GEC Buxar

COORDINATOR

1. Dr. Utkarsh Raj
(Assistant Professor, EE, GEC Buxar)
2. Mr. Amit Kumar
(Assistant Professor, ECE, GEC Buxar)
3. Miss. Surbhi Rani
(Assistant Professor, CSE, GEC Buxar)

Co-COORDINATOR

1. Dr. Anjini Kumar Tiwary
(Associate Professor, ECE, GEC Buxar)
2. Mrs. Akriti
(Assistant Professor, EE, GEC Buxar)
3. Miss. Annapurna Verma
(Assistant Professor, Geology, GEC Buxar)

ELIGIBILITY CRITERIA:

- All faculty Members
- Undergraduate students
- Postgraduate Students
- Research Scholars

CONFIRMATION OF PARTICIPATION AND CERTIFICATES:

Upon registration, confirmation will be notified to the selected participants, and the detailed schedule will be shared by student coordinators. Certificates will be awarded to participants with more than 75% attendance.

REGISTRATION FEE PAYMENT PROCESS:

Registration fee will be paid online through following QR code and UPI Id:

UPI Id: 7992407629@pthdfc



PROMINENT SPEAKERS:

1. Prof. Kalyan Chatterjee

Professor
IIT (ISM) Dhanbad, Jharkhand

2. Dr. Ravi Bhushan

Assistant Professor,
NIT Jamshedpur

3. Dr. S.K. Parida

Associate Professor
IIT Patna, Bihar

4. Mr. Avinash Sinha

Deputy Manager,
NTPC Ltd.

5. Dr. Ravi Shankar

Assistant Professor
NIT Patna

6. Dr. R. P Gupta

Assistant Professor
MIT Muzaffarpur

7. Dr. Deepak Punetha

Assistant Professor
MNNIT Allahabad

8. Dr. Vivek Pratap Singh

Assistant Professor
Dongguk University,
Seoul, South Korea

9. Dr. Chandra Prakash Singh

Assistant Professor
IIIT Ranchi

10. Mr. Harshit Priyaranjan

Head Operations,
EdCreate, Cisco's NetAcad Global