



Department of Computer Science & Engineering

REPORT ON FDP

Title of the Event: Cybersecurity and Artificial Intelligence: Strengthening Teaching Practices and Research Competencies

Organized By: Department of Computer Science and Engineering, Skill Development Centre (SDC)

Date and Time: 13/07/2026 to 17/07/2026 - 9.30 AM to 4.30 PM every day for 5 days

Mode of Conduct: Offline

Target Audience: Faculty (Internal and external participants)

Resource Persons:

1. Ms. Anindita Mishra, Cyber Peace Foundation
2. Mr. Sushil Kumar, CISCO
3. Dr. Ambareesh, SMVIT
4. Mr. Mahesh Vastranad, Agamy CyberTech
5. Dr. Durbadal Chattaraj, DSU
6. Mr. Samarth Bhat, Reinfosec Engg. PVT. Ltd. and
7. Dr. Vasudevan A R, NIT Calicut

Introduction:

The Department of Computer Science and Engineering, New Horizon College of Engineering, Bengaluru, successfully organized a Five-Day Faculty Development Programme (FDP) on **"Cybersecurity and Artificial Intelligence: Strengthening Teaching Practices and Research Competencies."** The programme aimed to enrich faculty members with the latest advancements in Artificial Intelligence, Cybersecurity, Quantum Computing, Research Methodologies, Cloud Technologies, and Industry Practices. The FDP brought together distinguished academicians, industry experts, and researchers who shared their expertise through interactive technical sessions, demonstrations, discussions, and hands-on activities. The programme witnessed enthusiastic participation from faculty members, research scholars, and postgraduate students from various engineering institutions. Each session was carefully designed to bridge the gap between academia and industry while promoting innovative teaching methodologies and quality research.

The first day of the FDP focused on introducing the convergence of **Artificial Intelligence and Cybersecurity**. Ms. **Anindita Mishra** and Ms. **Udita**, Senior Trainers from the **CyberPeace Foundation**, highlighted the role of AI in intelligent threat detection, automated response systems, predictive analytics, and cyber resilience, while also discussing the ethical challenges associated with AI-driven security solutions. Mr. **Sushil Kumar**, Senior Engineer

at Cisco, presented the fundamentals of cybersecurity and AI integration, covering information security principles, authentication mechanisms, network security, and AI-enabled security applications. The final session by **Dr. S. Ambareesh**, Professor, SMVIT, provided insights into the evolving cyber threat landscape, including malware, phishing, social engineering, the Cyber Kill Chain, and recent cyberattacks. The day concluded with interactive discussions on integrating emerging cybersecurity concepts into teaching and research.

The second day emphasized **Digital Forensics and Practical Cybersecurity**. Mr. **Mahesh Vastrad**, Director, Agamy Cyber Tech, introduced participants to digital evidence collection, forensic investigation procedures, and network security through demonstrations of **FTK Imager** and **Amped Software**. In the afternoon, **Dr. Durbadal Chattaraj**, Associate Professor, Dayananda Sagar University, conducted a session on **Hack the Box, Classical Cryptography, and Cybersecurity Practices**, covering encryption techniques, ethical hacking, vulnerability assessment, and hands-on cybersecurity learning. The sessions enhanced participants' practical understanding of forensic tools and cybersecurity practices.

The third day focused on **Web Security and Intrusion Detection**. Mr. **Samarth Bhat** from Reverse Engineering Infosec Pvt. Ltd. demonstrated **Web Application Security and VAPT**, explaining OWASP Top 10 vulnerabilities and the use of tools such as **Burp Suite** and **Nmap** for penetration testing. The afternoon session by **Dr. Vasudevan A. R.**, Assistant Professor, NIT Calicut, introduced **Network Intrusion Detection Systems (NIDS)**, covering network monitoring, anomaly detection, AI-assisted intrusion detection, and enterprise security. Participants actively discussed emerging research opportunities in AI-driven cybersecurity.

The fourth day featured an **educational visit to the State Forensic Science Laboratory**, providing participants with practical exposure to cybercrime investigation and digital forensics. Faculty members visited various sections of the laboratory, including **Computer Forensics, Mobile Forensics, Cybercrime Investigation, Digital Evidence Analysis, Fingerprint Examination, Document Examination, Ballistics, Biology, Chemistry, Toxicology, and DNA Analysis**. Experts demonstrated evidence collection, forensic analysis procedures, and the use of advanced forensic tools in criminal investigations. The visit offered valuable insights into legal procedures, evidence management, and the practical applications of forensic science, effectively bridging classroom concepts with real-world investigative practices.

The final day began with a session on **Digital Media Literacy** by **Ms. Anindita Mishra**, Senior Trainer, CyberPeace Foundation. The session highlighted responsible digital citizenship, misinformation detection, cyber ethics, privacy protection, and safe online practices through interactive discussions and activities. Participant feedback collected at the end of the programme indicated a high level of satisfaction with the quality of technical sessions, practical demonstrations, expert speakers, and the overall organization of the FDP. The programme concluded with the **Valedictory Ceremony**, with Principal, Vice Principal, Dean-CSE, HoD's, Faculties & Participants. Certificates were distributed and the successful completion of the five-day FDP was celebrated.

Outcomes of the FDP:

The programme successfully achieved its intended objectives by:

- Enhancing faculty knowledge in Artificial Intelligence, Cybersecurity.
- Promoting industry-academia interaction through expert sessions.
- Encouraging interdisciplinary and collaborative research.

- Improving participants' understanding of research methodologies and publication practices.
- Motivating faculty members to integrate emerging technologies into curriculum delivery and student projects.
- Strengthening professional networking among academicians and industry experts.

Conclusion:

The Five-Day Faculty Development Programme proved to be a highly enriching academic initiative that equipped participants with contemporary technical knowledge, practical skills, and research perspectives. The sessions fostered meaningful discussions on emerging technologies, innovative pedagogical approaches, and collaborative research opportunities. The overwhelming response from participants and positive feedback reflected the success of the programme.

Pictures:

ABOUT THE INSTITUTION

New Horizon College of Engineering, (NHCE) is an autonomous institution permanently affiliated with Visvesvaraya Technological University (VTU) and approved by the All India Council for Technical Education (AICTE) as well as the University Grants Commission (UGC). It is accredited by NAAC with an 'A' Grade and by the National Board of Accreditation (NBA), QS I-GAUGE Diamond Ranking. The college is in the heart of India's IT capital, Bangalore. The campus is in proximity to multinational corporations.

ABOUT THE DEPARTMENT

The Department of Computer Science and Engineering at NHCE was established in the year 2001 and offers undergraduate, postgraduate, and PhD programmes. The department has been accredited by the National Board of Accreditation (NBA) and has a total strength of over 1000+ students, with highly qualified, motivated, and experienced faculty members. The Computer Science and Engineering department strongly emphasises learning fundamentals and analysing the latest technology to develop students' creativity by encouraging them to undertake projects with varying levels of complexity.

ABOUT THE FDP

The Faculty Development Programme (FDP) on "Cybersecurity and Artificial Intelligence: Strengthening Teaching Practices and Research Competencies" focuses on the increasing importance of secure and intelligent technologies in education and research. The programme highlights the role of cybersecurity in safeguarding academic data and digital learning platforms from cyber threats. It also explores how Artificial Intelligence enhances teaching through personalised learning, automated assessment, and intelligent educational tools. Participants will gain knowledge of AI-based research methodologies, data analysis, and the ethical use of technology. The FDP aims to strengthen digital teaching practices, research capabilities, and cyber awareness among educators and researchers. It provides a platform to promote innovative, secure, and technology-driven academic environments.

ORGANISING COMMITTEE

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Department of Computer Science and Engineering

In association with

Skill Development Centre

Five Day Faculty Development Programme

on

**Cybersecurity and Artificial Intelligence:
Strengthening Teaching Practices
and Research Competencies**

📅 **13th - 17th July 2026**











Signature Of Coordinator
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Professor

Signature Of Convenor
Dr. Asha Joseph
HoD-CSE