# FACULTY DEVELOPMENT PROGRAMME
## on
## *"Generative AI (BAIL657C) and Human Centered AI (BAI613A)"*
### *19th – 24th February, 2025*

Name: _____

Designation: _____

Department: _____

Institution Address: _____

_____

Phone / Mobile No: _____

E-mail id: _____

## Certificate

Certified hereby that Dr./Mr./Mrs._____ will be permitted to attend the above Faculty Development Programme to be held at Don Bosco Institute of Technology Bengaluru from 19th to 24th February, 2025.

**Declaration by the Applicant**

I agree to abide by the rules and regulations of the workshop and shall attend all the sessions compulsorily.

Date:                          Signature of the Applicant


Recommended and Forwarded


Signature of the Head of the Institution

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**CHIEF PATRON**
*Sri. B. Bylappa*
President, WET, Bengaluru

**PATRONS**
*Sri. B. Manjunath*
Executive Director, DBIT, Bengaluru

*Sri. Raghav Bylappa,*
Secretary, WET, Bengaluru

**ORGANIZING CHAIR**
*Dr. B. S. Nagabhushana*
Principal, DBIT, Bengaluru

*Dr. Nataraj K. R*
Dean and Director R & D

**CONVENOR**
*Dr. Anasuya N Jadagerimath*
Professor & Head, Dept. of CSE (AI&ML)
DBIT, Bengaluru
Hon. Secretary, CSI, Bengaluru Chapter

**CHIEF COORDINATOR**
*Dr. Emmanvel Raj M Chirchi*
Professor, Dept. of CSE(AI&ML), Bengaluru

**COORDINATORS**
*Dr. AJK Prasad*
Professor, Dept. of CSE(AI&ML), Bengaluru

*Dr. Chethan Chandra S Basavaraddi*
Associate Professor, Dept. of CSE(AI&ML), Bengaluru

**ORGANIZING COMMITTEE**
*Faculty Members of CSE (AI&ML)*

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**DEPARTMENT OF CSE (ARTIFICIAL INTELLIGENCE & MACHINE LEARNING)**

**Organizes**
**A Five – Day**
**Faculty Development Programme on**
*"Generative AI (BAIL657C) and Human Centered AI(BAI613A)"*
*19th – 24th February, 2025*

**in Association with VTU, Belagavi**

**Date & Time**: 19th to 24th February 2025.
(9.30 am to 4.30 pm)
**Venue**: **CSE (AI&ML) Lab B- 308**, DBIT, Bengaluru

## ABOUT VTU

Visvesvaraya Technological University (VTU) one of the premier Technological Universities in the country (Established in 1998, is named after Bharat Ratna Sir M. Visvesvaraya, a renowned Engineer). VTU has been proactive in adapting to the National Education Policy (NEP)-2020, which aims to modify Indian Education system to make it more inclusive, flexible and multidisciplinary. In alignment with vision of NEP, VTU has revised its Curriculum to incorporate multidisciplinary approaches such as Skill-based learning and research oriented education. VTU is encouraging the adoption of Indian languages in technical education, aligning with goals of NEP for promoting cultural heritage while fostering global competitiveness. The university is placing a strong emphasis on experiential learning, innovation and the use of technology to enhance teaching and learning outcomes. It has introduced Credit-Based systems, enabling students to choose electives across different disciplines.

VTU has been working to integrate Vocational training, Value-based Education and Digital learning tools into its Programmes. The University promotes Internships, Industry collaborations and Project-based assignments to bridge the gap between theoretical knowledge and practical applications. VTU is facilitating continuous learning opportunities through flexible degree Programmes and allowing students to exit and re-enter academic courses at different stages, thereby supporting lifelong learning. Through these initiatives, VTU is transforming its academic Ecosystem to Empower students with the skills and knowledge required for the future. In the year 2024, VTU introduced a new approach for handling undergraduate Programmes by reorganizing Final-year courses, allowing students to participate in Internships in collaboration with MSME, NSDC and also encourages fast leaners by providing additional opportunity to get UG honours degree.

## ABOUT DBIT

Don Bosco Institute of Technology (DBIT) was established in the year 2001 under aegis of Wayanamac Education Trust has set high benchmarks in quality and commitment. This premier institute, affiliated to VTU, Belagavi, offers undergraduate Programmes in Computer Science & Engineering, CSE (Artificial Intelligence and Machine Learning), Artificial Intelligence and Data Science, Information Science & Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering and MBA Programme.

DBIT has achieved several notable milestones:

- ❖ Achieved Autonomous status in 2024 under VTU.
- ❖ National Assessment and Accreditation Council (NAAC) A-Grade in 2024.
- ❖ Received Prestigious Grant from AICTE-IDEA (Idea Development, Evaluation & Application) LAB for setting up of laboratory infrastructure in 2025.
- ❖ Hosted the prestigious Smart India Hackathon (SIH) in December 2024.
- ❖ Received QS I-GAUGE gold award in the year 2024.

This illustrious track record demonstrates DBIT's commitment to excellence in academics, innovation, entrepreneurship and industry collaborations.

A highly qualified Teaching fraternity with extensive academic, research and industrial experience shapes the student community, not only in academics but also in overall personality development, preparing them to pursue their chosen career paths. While fulfilling their academic responsibilities the teaching faculty continuously updates and upgrades their skill sets to suit the dynamically changing societal needs. Equipping students with soft skills is an integral part of the academic process.

DBIT has all the State-of-the-art Infrastructure such as Spacious and Smart Classrooms, Well-equipped Laboratories, Skill Development Centre, several Incubation Centers to provide a superior learning experience to the students. Industry interaction is a cornerstone of the institution's culture. Students are encouraged to participate in training Programmes, guest lectures and personality development sessions to ensure they are well-prepared for changing demands of the industry.

At DBIT quality process is governed by Internal Quality Assurance Cell (IQAC) for continual quality maintenance and updating.

DBIT consistently supports research and innovation, fostering the inherent talents of both staff and students while bringing their unique ideas to fruition.

A dedicated Training and Placement Cell is entrusted with managing the recruitment process for students. Numerous renowned companies have successfully recruited our graduates. Additionally, the Placement Cell offers comprehensive career guidance to help students shape their professional journeys.

## ABOUT THE DEPARTMENT

The Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning) was established in the year 2020 with an initial intake of 60 students which increased to 120 in 2021.The department boasts a diverse faculty team with backgrounds in various engineering disciplines, offering a blend of expertise and experience. Equipped with state-of-the-art infrastructure. The department features advanced laboratories and a dedicated library to support both students and faculty. The department emphasizes exposure to cutting-edge technologies aligned with industry needs, ensuring students are well-prepared for future challenges. Beyond academics, the department focuses on the holistic development of students by nurturing leadership and entrepreneurial skills, fostering a well-rounded education that equips graduates to excel in their chosen fields.

Achievements of the department:

- ❖ Student have won the SIH 2023, Bhubaneshwar, Odisha.
- ❖ Student received Gold medal in Map reading competition (SD) in All India THAL SAINIK camp inter directorate in the year 2023.
- ❖ 'Digital Academy' Lab establishment in association with Capgemini.
- ❖ One of the Outgoing Batch Student secured 8th Rank from VTU.
- ❖ Accolades of the faculty include Jyeshta Acharya, Best Professor award.
- ❖ Research Grants received from private and government organizations.
- ❖ Encourages Outreach Programmes to the students.
- ❖ Faculty involved in NEP 2020 implementation by translating technical text books into Kannada language.

## OBJECTIVES OF THE FDP

- ❖ To emphasize the relevance of Generative AI and Human-Centered AI for students and faculty in CSE (AI & ML) and related disciplines.
- ❖ To Explore Effective Modalities for subject content delivery and Evaluation Metrics in alignment with the VTU syllabus.

- To Provide in-depth knowledge of emerging trends, tools, and techniques in Generative AI and Human-Centered AI.
- To Foster Hands-on experience through practical sessions, enabling participants to integrate AI concepts into academic and research activities.
- To Encourage interdisciplinary learning and collaboration by showcasing Real-world applications of Human-Centered AI.
- To Equip faculty with innovative pedagogical approaches and frameworks to enhance teaching outcomes in Gen-AI and HC-AI.

## TOPICS TO BE COVERED

**Day 1 Dr. Anasuya N Jadagerimath, DBIT.**
- Introduction.
- What is human-centered Artificial Intelligence
- Explore pre-trained word vectors. Explore word relationships using vector arithmetic. Perform arithmetic operations and analyze results.

**Day 2 Mr. Balaji V, TECH Fortune.**
- Human-centered AI framework and design metaphors.
- Discussion on dimensionality reduction (e.g., PCA or t-SNE) and Train a custom Word2Vec model on a small dataset

**Day 3 Ms. Amrutha M K, TECH Fortune.**
- Governance structures – 1.
- Prompt improvements in Generative AI model.
- Usage of word embeddings to Create of meaningful sentences and creative tasks.
- Usage of pre-trained Hugging Face model to analyze sentiment in text.

**Day 4 Ms. Amrutha M K, TECH Fortune.**
- Governance structures – 2
- Summarizing long texts using a pre-trained summarization model using Hugging face model.
- Installation of lang chain, cohere (for key), lang chain-community.
- Usage of Pydantic by taking Institution name as input to define the schema for the desired output and create a custom output parser.
- Building a chatbot for the Indian Penal Code.

**Day 5**
- Local Industrial Visit to Tech Fortune, Rajaji Nagar, Bengaluru, followed by Valedictory ceremony and distribution of Certificates

## OUTCOMES OF THE FDP

Participants gain a deeper understanding of generative AI technologies and their better understanding of ethical challenges related to generative AI, such as bias, misuse, and misinformation.

- Exposure to real-world case studies showcasing successful implementation of generative and human-centered AI.
- Awareness of how these approaches can solve challenges in education, healthcare, business, and other domains.
- Greater alignment of Institutional Goals with cutting-edge AI technologies and their responsible use.
- Faculty will be able to adapt and tune to innovative pedagogical approaches and frameworks to enhance Teaching Outcomes in Gen-AI and HC-AI.

## WHO CAN PARTICIPATE
- Faculties of Engineering Colleges
- VTU Research Scholars

## REGISTRATION DETAILS
The Participants have to remit the Fees to the below shared Bank Account number and email the soft copy of duly filled Application form along with the payment Screenshot to emmanvelraj@dbit.co.in on or before 1**7th February, 2025.**

| Registration Fees | Rs.500/- Per Head |
|---|---|
| Account name | Principal DBIT Seminar Account |
| Bank Name | ICICI Bank |
| Branch | DBIT Kumbalagodu |
| Account No | 263701000121 |
| IFSC | ICIC0004325 |

**Note**- Participants please bring Laptops for hands on Training.

## SELECTION OF THE PARTICIPANTS
The batch size of the FDP will be limited to 70 registrations only. Selection will be on First cum First serve basis.
Selected candidates will be intimated by e-mail on 18th February, 2025.

## CONTACT FOR INFORMATION
***Dr. Emmanvel Raj M Chirchi,*** Mob:9595959809
**Email:** emmanvelraj@dbit.co.in
***Dr. AJK Prasad,*** Mob: 9448508506
**Email:** prasad.ajk@dbit.co.in
***Dr. Chethan Chandra S Basavaraddi,*** Mob: 9844508359
**Email:** chethanraddi@dbit.co.in

## REGISTRATION LINK:

https://forms.gle/VnbsHMtcY6RQgZcc9

| INAUGURATION COMMITTEE | REGISTRATION COMMITTEE |
|---|---|
| Dr. Anasuya N J | Mr. Puneeth Kumar P |
| Dr. Emmanvel Raj M Chirchi | Mr. Sanjay Kumar |
| Dr. A.J.K Prasad | Mr. Ravi Y C |
| | Mr. Ashfaq Ahmed R |

| TECHNICAL COMMITTEE | HOSPITALITY COMMITTEE |
|---|---|
| Dr. Manu K S | Mrs. Veena A C |
| Dr. Rekha S | Ms Deepthy S |
| Dr. Rakshitha C M | Mrs. Savitha B |
| Dr. Chethan Chandra S Basavaraddi | |
| Dr. B Kursheed | |

## REPROGRAPHIC SERVICES COMMITTEE
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