### Subject

Proposal for Enhancing AI/ML and Cybersecurity Education in the MIST CSE Program

# 1 Early Integration of AI/ML/Cybersecurity in Curriculum

- Current Concern: AI/ML/Cybersecurity domains are introduced late (end of Level 4), limiting deep learning and real-world application.
- Proposed Change: Beginning these subjects from Level 3, enabling:
  - In-depth project-based learning
  - Better preparation for internships and jobs
  - Integration of AI into final-year projects

#### 2 . Launch of AI and Cybersecurity Research Clubs

- Establish **student-led research groups** under faculty supervision.
- Host seminars, hackathons, and inter-university challenges.
- Facilitate participation in **international AI/Cybersecurity competitions** (e.g., DEFCON, Kaggle, AI Blitz).

#### 3 Affordable or no barrier Access to Cyberrange

- Problem: Lack of access to cyber range and costly cybersecurity courses.
- Recommendations:
  - Implement a **scholarship or subsidy model** based on merit and interest for the cyberrange courses conducted in mist, so students can easily join them
  - Increasing the courses and activities in the cyberrange
  - Continue the initiative planned by Brig Gen Touhid Sir to make cybersecurity education accessible, affordable and keeping no fees for students for the cyberrange courses

## 4 Extracurricular Courses and Workshops

- If immediate curriculum changes are impractical, initiate extracurricular workshops, bootcamps, and certifications.
- Collaborate with local AI startups and research labs (e.g., BRAC AI Lab, BJIT, Datasoft).
- Utilize **open-source platforms** like Google Colab, FastAI, and HuggingFace for practical learning.