E-Track Curriculum Policies

Data Science and AI (DSAI) Major

The Data Science & AI (DSAI) major equips students with advanced IT skills, preparing them for a rapidly evolving digital environment. Students first build a strong foundation in computer science, mathematics, and statistics before advancing to AI and digital-business applications. The curriculum was created to prepare graduates for careers as data scientists, analysts, AI engineers, and digital-business specialists. It consists of six key areas:

1. DATA ANALYTICS to build a solid foundation in statistics, mathematics, and analytical methods, which is necessary for evidence-based decision-making.

2. COMPUTER SCIENCE to learn the core concepts of system design and data structure and algorithms that underpin advanced software and AI development.

3. PROGRAMMING AND AI to develop practical programming skills while learning key machine-learning and deep-learning concepts.

4. AI ENGINEERING to focus on applied AI, including Natural Language Processing, Generative AI, and AI engineering, which prepare students to design and implement AI solutions for real-world challenges.

5. AI APPLICATION to explore the use of AI in emerging fields such as intelligent product development, cybersecurity, quantum computing and so forth.

6. DIGITAL TECHNOLOGY AND BUSINESS to learn strategic and data-driven business decisions, bridging technology and business innovation.