

Department of Computer Engineering

About B. Tech. in Artificial Intelligence & Machine Learning (AI & ML)

The program is focused to provide aspiring computer engineers with an impressive range of courses centred around the latest advancements in Artificial Intelligence and Machine Learning (AI & ML) while building a strong foundation in Computer Science & Engineering. This comprehensive 4-year full-time program will provide hands-on experience with cutting-edge technologies to develop applications and solutions for our evolving world.

The curriculum places a significant emphasis on probability and applied statistics, equipping students with the necessary skills to approach AI & ML applications from both practical and theoretical perspectives. This knowledge should enable them to optimize models and solutions, ensuring they are well-prepared for the challenges of the industry.

By blending theoretical concepts with practical exposure, the program at NIT Kurukshetra is intended to prepare students to tackle real-world problems through AI & ML. Through various courses that they would study the students should be able to gain deep understanding of AI algorithms, data analysis techniques, pattern recognition, natural language processing, and other essential topics. Additionally, they would have the opportunity to work on projects and engage in research activities that further enhance their skills and knowledge in the field.

Overall, the B. Tech (AI & ML) program of the department is designed to empower students to become proficient as working professionals who can contribute effectively to IT industries and other domains where AI can be used.

Career Opportunities in AI & ML

The field of AI&ML offers promising career opportunities, given the significant growth in data science and its applications. Students can explore diverse roles such as Big Data Engineer, Business Intelligence Developer, Data Scientist, Machine Learning Engineer, Research Scientist, AI Data Analyst, AI Engineer, Robotics Scientist, and more. These roles are in high demand, with renowned companies like Microsoft, Amazon, Google, Tesla, NVIDIA, Facebook, VMware and Apple making global hiring. In India too there is a visible shift as more and more IT companies are hiring engineers in this domain.

The impact of AI&ML extends beyond the IT sector, reaching domains like healthcare and beyond. The field has showcased its value, and the future holds numerous roles and possibilities built on the foundation of AI&ML. Graduates from this program will also possess the required skills and knowledge to pursue higher education and research at esteemed national or international universities, opening doors to a rewarding future in research.