(064-CSE-03-02) CSE (ARTIFICIAL INTELLIGENCE AND DATA SCIENCE)

Significance of the Programme:

B.Tech. program in Artificial Intelligence and Data Science is significant due to the increasing demand for skilled professionals, the role of these technologies are driving innovations in machine learning, natural language processing, computer vision, and predictive analytics. AI and data science contribute to automation, streamlining processes, and improving overall efficiency. This is particularly valuable in industries that handle large amounts of data or require complex computations. This program typically involves a blend of computer science, mathematics, and domain-specific knowledge. This cross-disciplinary approach equips students with a versatile skill set, making them adaptable to various industries and roles

Career Options:

- Data Scientist
- AI / ML Engineer
- Business Intelligence (BI) Analyst
- Data Engineer
- Artificial Intelligence Researchers
- Statistical Programming Analysts

Program Objectives:

- To empower the students with knowledge through experiential learning.
- To make students strong in data processing, data analysis, data visualisations.
- To create a conducive ambience for learning through the latest cutting-edge technologies with collaboration of industries.
- To enhance the student knowledge to become ready to fit as per industry needs.

Outcomes of the Program:

- Able to evolve AI based efficient domain specific processes for effective decision making in several domains such as business and governance domains.
- Able to create, select and apply the theoretical knowledge of AI and Data Analytics along with practical industrial tools and techniques to manage and solve wicked societal problems

- Able to develop data analytics and data visualization skills, skills pertaining to knowledge acquisition, knowledge representation and knowledge engineering, and hence be capable of coordinating complex projects.

- Able to carry out fundamental research to cater the critical needs of the society through cutting edge technologies of AI.

Major Course Outlines:

- Mathematics for AI and DS
- Artificial Intelligence
- Machine Learning
- Data Science
- Tools and Techniques for AI & DS
- Emerging Trends- Big Data Analytics, Cloud Computing, IoT