(065-CSE-03-03) CSE (Artificial Intelligence and Data Science)

Significance of the Program

Artificial Intelligence (AI) is the technology of mimicking human intelligence. AI is one among the most sought-after technologies in this highly competitive digital economy. In this day and age where large amounts of data are pouring in, AI technology is able to read, interpret, and make decisions without specific task algorithms. AI technologies have created critical innovations to help mankind such as speech recognition, autonomous vehicles, smart manufacturing, and much more. Take advantage of this AI and Data Science program to gain a competitive edge in the job market. This course aims at equipping the Post graduates with advanced conceptual knowledge, technical skills and ability to pursue research.

Career Options

Pursuing a professional Post Graduate program in AI and ML, students can explore the following opportunities:

- They can work as a Big Data Engineer/ Machine Learning Engineer in various organizations/ Research labs to create an ecosystem for the business systems.
- They can work as a Data Scientist/ Research scientist to assist in gathering relevant data from multiple sources and performing extensive research for the purpose of assessing it to gain constructive inferences.
- They can work as a Product Manager to resolve challenging problems by strategically collecting data
- They can work as a Robotics Scientist/ Robotics Engineer in different AI Labs and various organizations

Program Objectives

- Design and develop solutions for real life problems using AI and Data Science tools.
- Have extensive and effective practical skills in Computer Science and Engineering and the ability to analyze and interpret experimental results in frontier areas of Artificial Intelligence and appetite for research in multidisciplinary areas.
- Seeking to advance their career in the industry / entrepreneurial aspirations

Outcomes of the Program

- Demonstrate the ability to collaborate with engineers of other disciplines and work on projects requiring multidisciplinary skills.

- Demonstrate an appreciation of ethical and social responsibilities in professional and societal context.
- Apply effective prompt engineering techniques to improve the performance and control the behavior of generative AI models
- Understand the meaning, purpose, scope, stages, applications, and effects of AI and ML

Major Course Outline

- Mathematical and statistical essentials for AI and Data Science.
- Programming for AI and Data Science
- Advanced Machine and Deep Learning
- Data Management for Machine Learning
- AI and Data Science tools