

**Department of Artificial Intelligence and Data Science**

**1. About the Department:**

The Department of Artificial Intelligence and Data Science offers a comprehensive curriculum that combines theoretical knowledge with practical applications, preparing students to thrive in AI-driven industries. We emphasize interdisciplinary learning by integrating core principles of computer science, mathematics, and statistics with modern AI and data analytics technologies. Our programs are designed to equip students with expertise in core subjects including machine learning, deep learning, big data analytics, natural language processing, and computer vision

**Industry Collaboration:**

The department has signed an MoU with Pinesphere, Coimbatore for knowledge exchange programs. Also, the department has strong connections with several industries in and around Coimbatore for consultancy project works, student and faculty internships and knowledge transfer programs.

**2. Facilities Available for Industry Collaboration**

**Artificial Intelligence Laboratory & Data Science Laboratory**

Both the laboratories are equipped with each 39 Apple iMac machines powered by Intel i7 processors, cutting-edge tools and resources to explore, design, and implement intelligent systems. Students and researchers can conduct experiments in areas such as:

- **Machine Learning:** Training and testing models for supervised, unsupervised, and reinforcement learning.
- **Deep Learning:** Building neural networks for tasks like image recognition, natural language processing, and generative models.
- **Computer Vision:** Working on object detection, image classification, and video analytics.
- **Natural Language Processing (NLP):** Implementing language models for sentiment analysis, text summarization, and chatbots.

### 3. Consultancy Services

The department offered has student and faculty teams who have expertise in completing industrial projects in various areas including building data analytics dashboards for business intelligence, exploratory data analysis, full stack application development and building AI based solutions

### 4. Executive Development Programs

- ❖ Technical training programs to other industry professionals to upgrade their skills by adopting AI and data science technologies
- ❖ enhance their organization's capabilities in data-driven decision-making and innovation.

### 5. Research and Development Collaborations

- The Artificial Intelligence and Data Science Laboratory can foster meaningful collaborations with industries to drive innovation and solve complex challenges.
- The possible areas of collaboration include, developing custom AI models for industry-specific problems, conducting joint research to extract actionable insights from industry datasets, enhancing operational efficiency and decision-making etc.,

### 6. Achievements and Success Stories

- The department successfully completed a consultancy project focused on the development of an Enterprise Resource Planning (ERP) system, showcasing its technical expertise and commitment to address real-world industry needs.
- In addition, numerous faculty members and students have actively participated in industry-sponsored internships and training programs, gaining valuable hands-on experience and exposure to cutting-edge technologies. As a result, the team is well-prepared and highly capable of undertaking high-quality research and development (R&D) activities, as well as delivering innovative solutions in application development.