Department of Artificial Intelligence and Data Science { about:

The Department of Artificial Intelligence and Data Science was established in the year 2020 and it has an Industry Collaboration with Robert Bosch Pvt Ltd as a knowledge partner. The Department signed Memorandum of Understanding (MoU)with Resilience Business Grids LLP(RBG.AI), ConnectIndia Pty Ltd, Melbourne, Australia and Guvi HCL, Chennai to collaborate on curriculum development, students internships, projects, faculty development and partial delivery of the vertical Intelligent systems. The department faculty members working on consultancy projects for reputed industries such as L&T Technology Services Ltd and UI Bridge Solutions Pvt Ltd in the domains of AI and Students have interned in industries such as Bosch Global Software Technologies Private Limited, L&T Technology Services Ltd, Edsols Innovations private limited, Dhyan Networks and Technologies Private Limited and Resilience Business Grids LLP. Nurture Partner Network (NPN) program was offered by Cognizant Technology Solutions for students. Students from the Department of Artificial Intelligence and Data Science have participated in corporate level Hackathons and earned excellent presents and cash prizes. Dr.Suresh Rajappa, Executive Director, KPMG LLP,USA is appointed as adjunct faculty for the Department of Artificial Intelligence and Data Science.

Head Of the B.Tech Artificial Intelligence and Data Science: Dr. V. Karpagam Dr. V. Karpagam is currently Professor and Head of the Department of Artificial Intelligence Data Science, Sri Ramakrishna Engineering College Coimbatore. Her academic experience spans 26 years. She completed Ph.D in the faculty of Information and Communication Engineering from Anna University, Chennai in 2014. She obtained her Masters degree in Software Engineering from Sri Ramakrishna Engineering College, Coimbatore in 2008 and completed her Bachelor's Degree in Computer Science & Engineering from Kumaraguru College of Technology, Coimbatore in 1996. She is a recognized Anna University Supervisor and is guiding 5 scholars currently in the domains of Artificial Intelligence, Medical Image Processing and Cyber Security. Her research and teaching interests include Computer Vision, Deep Learning, Database Technologies, Cyber Security and Health Analytics. She is involved in consultancy work for reputed industries like GE Healthcare and Honeywell in the domain of machine learning and point cloud image processing. She has been the technical chair for many International Conferences and Reviewer for International journals. She has published a number of papers in Image Processing, Machine Learning and Deep Learning in National/International Conferences and refereed journals. She has published book chapters in the domains of "Cyber Security for Industrial 4.0" and "Blockchain for Digital Twins". She was an invited speaker for the 16th edition of the NASSCOM – DSCI Annual Security Information Summit. She was invited for a panel discussion on the theme "Building" Tech-innovators of tomorrow" hosted by IBM Research in collaboration with Data Quest. She was a jury member for an AICTE Smart India Hackathon problem statement in Blockchain from Greefi Technologies. She has been the resource person for many guest lectures and Faculty Development Programmes. She has been awarded with Inspire-Infosys Campus Connect Faculty Excellence Award - Bronze Level in 2017. She is a life member of CSI and ISTE.

VISION

To achieve excellence in the domain of Artificial Intelligence and Data Science and produce globally competent professionals providing multidisciplinary, sustainable solutions for societal challenges and industrial needs.

MISSION

M1: To actively engage in the implementation of ethical, sustainable and intelligent solutions for interdisciplinary domains.

M2: To promote research, innovation, leadership and entrepreneurial skills through industry and academic collaboration.

The graduates of this program after four to five years will,

- PEO 1: Exhibit proficiency in their career, research with strong foundations in Mathematics, Computing, Artificial Intelligence and Data Science.
- PEO 2: Apply Artificial Intelligence and Data Science knowledge and skills to develop innovative, sustainable and responsible solutions for multi-disciplinary problems, adhering to ethical standards.
- PEO 3: Engage in constructive research, professional development and life-long learning with skills in emerging technologies.

Program Outcomes

Program Outcomes as stated by NBA: Engineering Graduates will be able to

- 1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems: Use research—based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

- 11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. Life—long learning: Recognize the need for, and have the preparation and ability to engage in independent and life—long learning in the broadest context of technological change

Program Specific Outcomes

Graduates of Artificial Intelligence and Data Science at the time of graduation will be able to

PSO 1: Analyze, design and build sustainable intelligent solutions to solve challenges imposed by industry and society.

PSO2: Demonstrate data analysis skills to achieve effective insights and decision making to solve real-life problems.

PSO3: Apply mathematical and statistical models to solve the computational tasks, and model real-world problems using appropriate AI / ML algorithms.

B.Tech Artificial Intelligence and Data Science - Laboratories BYOD Lab AIDS LAB 1

Faculties:

Dr. V. KARPAGAM Head of the Department

Dr. J. ANITHA Professor

Mrs. P.V. KAVITHA
Assistant Professor(Sl.Grade)

Dr. M. LOGAPRAKASH Assistant Professor(SI.Grade)

Mrs.A.Kayalvizhi Assistant Professor(Sr.Grade)

Mrs.K.Sudha Assistant Professor(Sr.Grade)

Mrs. C. KAVITHA Assistant Professor

Mrs. R. RAMPRIYA Assistant Professor Mr. K.B.Lingkash Assistant Professor

Mrs.V.Gomathi Sankari Assistant Professor

Mrs. D.Devipriya Assistant Professor

Mrs. M. Divya Assistant Professor

Mrs.V.Subalakshmi Programmer

Mrs. P. MALLIKA Non Teaching Staff(s)

Mrs. M. Indradevi Non Teaching Staff(s)