

About Artificial Intelligence and Data Science Department (AI&DS Dept)

About AI&DS Department:

B. Tech in Artificial Intelligence and Data Science is a blend of Artificial Intelligence and Data Science in the domain of Computer Science and Engineering. This program enables the students to build intelligent machines / bots, software, or applications with a combination of state of the art artificial intelligence/ machine learning, analytics and visualization tools / technologies.

Artificial Intelligence is a well-established exciting specialization of computer science concerned with methods to make computers or machines more intelligent. It leads to learning from experience, deriving implicit knowledge and predict the future course of actions that people can follow.

Many successful applications based on machine learning exist already, including systems that analyze past sales data to predict customer behaviour (financial management), recognize faces or spoken speech, optimize robot behaviour so that a task can be completed using minimum resources, and extract knowledge from data.

This programme discusses AI methods based in different fields, including neural networks, Machine Learning, Deep Learning, Data Analytics and Data Visualization, in order to present a unified treatment of Societal problems and solutions.

Salient Features of the AI&DS Department:

1. Emphasis on hands-on training using Real-world examples and projects that help students apply the skills they learned as part of laboratory sessions.
2. Humanities and Social sciences is an integral part of the curriculum, particularly covering ethical aspects of AI.
3. Interacting with experienced industry practitioners to offer context
4. Building research skills through Project based learning along with undergraduate thesis.
5. Strong and Eminent certified faculty support both from industry and Academia through various forums such as Hackathons/ workshops
6. State of the Equipment and Laboratories
7. Building an echo systems to adopt open source tools/ technologies

What Students will learn in AI&DS DEPT:

1. Understand foundational topics in Computer Science, Artificial Intelligence, Machine Learning and Data Science.

2. Understand the impact of AI based solutions in an economic, societal, and environment context
3. Model and analyse a variety of problems using appropriate mathematical/computational concepts of Data Science.
4. Design and implement intelligent algorithms for solving societal problems by using concepts of AI.
5. Apply and develop AI algorithms to transform large amount of data into intelligent decisions and/or behaviour.

VISION of AI&DS Dept:

To impart Quality Education and produce innovative and Ethical Engineers in the Domain of Artificial Intelligence and Data Science.

Mission Of AI&DS Dept:

- 1 To Impart Strong foundation of statistics for understanding data science and develop self-sustained professionals.
- 2 To establish high performance computational facilities and tools to develop innovative and intelligent solutions.
- 3 To collaborate with renowned industries and institutions for multidisciplinary research and development.
- 4 To impart value-based education and lifelong learning skills in developing AI and DS based solutions for the satisfaction of all stakeholders.

Recognition of AI&DS Dept:

- 1.AICTE
- 2.NAAC
- 3.NIRF
- 4.JNTUK
- 5.Skill AP by APSSDC

Labs in AI&DS Dept:

1.Data Science lab

To know more about Data Science lab refer to this link:

https://www.lbrce.ac.in/ai/ai_labs/Data%20Science%20Lab.pdf

2.Programming languages Lab :

To know more about Programming Languages Lab refer this link:

https://www.lbrce.ac.in/ai/ai_labs/Programming%20Languages%20Lab.pdf

Student Clubs in AI&DS Dept:

1.Sprit of AI Club:

About Spirit of AI Club

Objectives of the Spirit of AI Club:

1. To create a platform to encourage the hidden talents of the students.
 2. To improve the technical and non-technical skills of the students.
 3. To Share the knowledge among the members they acquired by reading books.
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Membership and Procedure for Enrollment of Spirit of AI Club:

1. All the students of the department are members of the Departmental Association.
 2. Membership is valid throughout their graduation for 4 years.
 3. Membership fee will be decided by the managing committee.
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Termination of Membership of Spirit of AI Club:

1. Faculty Managing Committee has reserved right to terminate membership of any student member.
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Managing Committee - Powers and Duties of Managing Committee of Spirit of AI Club:

1. Student's committee comprises of President, Vice President Ministers and Event Managers.
 2. Head of the department will be the Honorary President
 3. Faculty Advisers has privilege to appoint President, Vice president, Ministers and Event Managers.
 4. Honorary President / Faculty Advisers has reserved right to Schedule or Cancel any event to be organized in the department under the Association banner.
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Meeting of the Managing Committee of Spirit of AI Club:

1. Meetings will be conducted at regular intervals.
2. Faculty Advisers will schedule the meeting to plan/design the events, review the events conducted and to grant funds for future events etc.

Events organized by Spirit of AI Club:

To know about latest events of Spirit of AI Club of AI&DS Dept. Please do refer this link:

<https://www.lbrce.ac.in/ai/aispiritclub.php>

Committee Members of Spirit of AI Club:

To know about latest Committee Members of Spirit of AI Club of AI&DS Dept. Please do refer this link:

<https://www.lbrce.ac.in/ai/aispiritclub.php>

Student Members of Spirit of AI Club:

To know about latest Student Members of Spirit of AI Club of AI&DS Dept. Please do refer this link:

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About AI&DS Dept HOD:

[Dr. O. Rama Devi](#)

Professor & Head of the Department,

Department of AI&DS,

Lakireddy Bali Reddy College of Engineering (A), Mylavaram

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More info about AI&DS HOD:

Dr. O. Rama Devi did her B. Tech & M.Tech in CSE from KLCE in 2005 & 2008. She was awarded Doctoral Degree from JNTUK, Kakinada in 2017. Her robust repertoire includes more than 20 research papers published in peer reviewed & indexed national and international journals. She has got 3 Patents published to her credit. She was instrumental in organizing a Host of International Conference, FDPs, STTPs, Workshops, Webinars and Certification Programs. She was honoured the "Best Researcher by IJIMER-ELSEVEIR SSRN RESEARCH AWARDS IESRA-2020". She received "Best Teacher Award" at "LBRCE". Her thirst for learning made her a Life Member of several Professional Bodies such as CSI & ISTE.

POs, PEOs & PSOs of AI&DS Department:

Program Educational Objectives (PEOs) of AI&DS Dept:

PEO1: To develop intelligent systems with a cutting-edge combination of machine learning, analytics, and visualisation technologies.

PEO2: To adapt the new technologies and develop the solutions to real world problems with ethical practices thereby contributing to the society.

PEO3: To continue education for fulfilling their long-term goals and achieve satisfaction as successful professionals in industry, academia and research.

Program Outcomes (POs) of AI&DS Dept:

PO1 - Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2 - 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.

PO3 - 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.

PO4 - 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.

PO5 - 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.

PO6 - 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.

PO7 - 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.

PO8 - Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9 - Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 - 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.

PO11 - Project Management and Finance: Demonstrate knowledge and understanding of the project 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.

PO12 - 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 (PSOs) of of AI&DS Dept:

PSO1: To apply the fundamental engineering knowledge, computational principles, and methods for extracting knowledge from data to identify, formulate and solve real time problems.

PSO2: To develop multidisciplinary projects with advanced technologies and tools to address social and environmental issues.

PSO3: To provide a concrete foundation and enrich their abilities for Employment and Higher studies in Artificial Intelligence and Data science with ethical values.

Academic Calendars of AI&DS Dept:

To get the latest Academic Calendar of AI&DS department of any year or semester, please do refer this link:

<https://www.lbrce.ac.in/ai/aiacadcalendars.php>

Timetables of AI&DS Dept:

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<https://www.lbrce.ac.in/ai/aitimetables.php>

STUDENT INTERNSHIPS & INDUSTRIAL VISITS of AI&DS Dept:

To know about **STUDENT INTERNSHIPS & INDUSTRIAL VISITS** of AI&DS department o, please do refer this link:

<https://www.lbrce.ac.in/ai/aiinternships.php>

Events Organized by AI&DS Department:

To know about all latest event organized in AI&DS Department , please do refer this link:

<https://www.lbrce.ac.in/ai/aieventsorganized.php>

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