Department of CSE(AI&ML)

Importance of the course

Computer Science and Engineering with specialization in Artificial Intelligence and Machine Learning (CSE–AI&ML) is one of the most dynamic and future-oriented fields of engineering. With the rapid digital transformation across industries, this branch continues to remain highly relevant and resilient to economic fluctuations. As technology advances and the demand for intelligent systems grows, the scope of CSE (AI&ML) is expanding beyond geographical boundaries, creating global opportunities for skilled professionals.Students who graduate in CSE (AI&ML) have numerous career opportunities in areas such as Software Development, Data Science, Artificial Intelligence, Machine Learning, Cloud Computing, Cyber Security, and Big Data Analytics. They can work in diverse sectors including healthcare, finance, e-commerce, transportation, education, and research organizations. In recent years, with the rapid growth of emerging technologies, the expertise of AI and ML engineers is increasingly required in fields such as robotics, autonomous systems, natural language processing, computer vision, smart cities, and intelligent automation.The demand for AI and ML professionals is expected to grow significantly in the coming years, making CSE (AI&ML) one of the most promising and high-paying career options in the global technology landscape.

B.Tech in Computer Science and Business Systems (CSBS) programme is offered in association with TCS from the Academic Year 2020-21 with an intake of 60. Computer Science and Business Systems is an Industry relevant Computer Science Programme launched by TCS. To address the growing need of engineering talent with skills in digital technology, TCS, in partnership with GPREC, has designed a curriculum for 4 years undergraduate program on Computer Science titled "Computer Science and Business Systems (CSB).

This curriculum aims to ensure that the students graduating from the program not only know the core topics of Computer Science but also develop an equal appreciation of humanities, management sciences and human values. The students are also exposed to emerging topics such as Analytics, Machine Learning, Cloud Computing, Internet of Things etc to make them industry ready at the end of four years of study.

AI&ML— Artificial Intelligence (AI) and Machine Learning (ML)—represents an important evolution in computer science and data processing that is quickly transforming a vast array of industries. Artificial intelligence (AI) refers to the development of computer systems that mimic a human brain and enable them to perform tasks that usually require human intelligence.

The Department of Computer Science and Engineering in Data Science (CSE-DS) was established in the year 2021 with an intake of 60. Over the years, it has grown by leaps & bounds and the intake was 120.

Data science is the domain of study that deals with vast volumes of data using modern tools and techniques to find unseen patterns, derive meaningful information, and make business decisions. With the help of data science, IT companies have successfully obtaining meaningful insights from unstructured and raw data.

Placement Details

S.No	*AcademicYear*	*No.of Students placed*	*Highest salary*
1	2025	97	18LPA
2	2024	33	9LPA

Student's testimonials

S Sai Kamalesh, B.Tech CSE(AI&ML),Class of 2025,Programmer Analyst Trainee, Cognizant company

GPREC has provided me with an excellent academic environment that fostered both learning and growth. The dedicated faculty, well-equipped laboratories, and library resources greatly supported my educational journey. Various workshops, seminars, and hackathons enhanced my technical knowledge and practical exposure. The Training and Placement Cell guided me in developing essential professional and communication skills. Extracurricular activities and student clubs also contributed to my overall personality development. I am truly grateful to the institution for shaping my career and preparing me for future challenges.

N Sharvani, B.Tech CSE(AI&ML),class of 2025, Digital Specialist Engineer, Infosys company

My four years at GPREC have been a truly transformative journey that helped me grow both academically and personally. The college offered a perfect balance of studies, clubs, sports, and cultural activities, which gave me opportunities to explore my abilities in many ways. With supportive faculty, quality education, and placement training, I was able to build confidence and shape my career. The excellent infrastructure, library, and various forums created the right environment for learning and growth, while the guidance from professors helped me choose the right path. Above all, GPREC taught me values of teamwork, positivity, and responsibility, turning challenges into opportunities and preparing me for the real world. I feel proud and grateful to be a part of GPREC, a place where talents are nurtured and dreams become reality.

Faiza Mahek, B.Tech CSBS, Class of 2025, Systems Engineer in Grade C1, TCS company

The CSM department at GPREC provides a solid academic foundation with supportive faculty who guide students through core concepts effectively. The college encourages participation in hackathons, workshops, and technical events, which help students gain practical exposure. Cultural fests and sports activities are conducted regularly, allowing students to balance academics with extracurricular interests. The College also conducts advanced technical sessions that help students stay competitive and industry-ready. Overall, GPREC offers a balanced environment for both academic and personal growth.

G Jaswanth, B.Tech CSBS, Class of 2025, Systems Engineer in Grade C1, TCS Company

GPREC has changed my life-both academically and personally. All the faculty and mentors have been extremely helpful for me as they have encouraged me to make mistakes while continuing to progress my own skills. Programs, such as ITCA, along with brainstorming, counseling, and self-awareness efforts, helped keep me industry-ready and confident. The college also encourages us to participate in the hackathons, workshops, cultural fests, and sports, and the combination of these experiences balances out academic and extra-curricular efforts. GPREC has really provided me with an enriching experience that leads to well-rounded professionals.

Y Sai Srikar Reddy, B.Tech CSD, Class of 2025, IT Technology Services Associate, SAP LABS

GPREC has been a transformative place for my learning journey, especially as a student of the Computer Science and Engineering in Data Science (CSD) branch. The curriculum is designed to blend computer science fundamentals with modern technologies like Data Science, which helps students understand both theoretical concepts and practical applications. The faculty members are highly supportive and encourage students to explore new ideas, work on projects, and develop problem-solving skills. Through the CSD program, I gained exposure to data analysis, programming, machine learning concepts, and real-world datasets, which helped me understand how data science is used to solve practical problems in industries. The department also motivates students to participate in technical events, workshops, hackathons, and project-based learning, which strengthens both technical and analytical abilities. Overall, the CSD branch at GPREC provides a strong foundation in data science and computing, helping students become industry-ready professionals with creativity, technical knowledge, and confidence to face real-world challenges.

K Nimisha, B.Tech CSD, Class of 2025, Packaged App Development Associate, Accenture

GPREC has provided me with an excellent learning environment that combines core computer science concepts with modern technologies such as Data Science, Artificial Intelligence, and design thinking. The department focuses not only on theoretical knowledge but also on practical learning through projects, coding practice, and real-world problem solving. The faculty members are very supportive and continuously guide students to improve their technical skills, creativity, and analytical thinking. Through various workshops, technical sessions, hackathons, and industry-oriented activities, the CSD branch encourages students to stay updated with the latest trends in technology. Learning about data science has been particularly valuable, as it helps us understand how data can be analyzed and used for decision-making in different industries. the CSD branch at GPREC plays a significant role in shaping students into innovative, skilled, and industry-ready professionals by providing a balanced combination of academics, technology exposure, and practical experience.

D Chenna Kesava Reddy, B.Tech CSB, Class of 2024, Systems Engineer in Grade C1, TCS Company

The CSM department at GPREC offers a strong academic environment where students can build a clear understanding of computer science and emerging technologies. The faculty members are approachable and always ready to support students in both academics and project work. Their guidance helps students strengthen their technical knowledge and problem-solving abilities.The college actively motivates students to participate in hackathons, coding competitions, workshops, and technical seminars, which provide valuable hands-on experience and industry exposure. In addition to academics, cultural programs, sports events, and student activities are organized regularly, helping students develop teamwork, leadership, and confidence.Furthermore, the department conducts special training programs and technical sessions that help students improve their programming and analytical skills. Overall, GPREC creates a positive learning atmosphere that supports both academic excellence and overall personality development.

Y Pavan Kumar Reddy, B.Tech CSB, Class of 2024, Systems Engineer in Grade C1, TCS Company

The CSM department at GPREC provides a supportive learning environment that helps students build a strong foundation in computer science and modern technologies. The faculty members are dedicated and always encourage students to clarify concepts, work on practical assignments, and improve their technical knowledge. Their continuous guidance plays an important role in enhancing students' confidence and academic performance. The college regularly organizes technical workshops, coding events, seminars, and hackathons, which give students opportunities to apply what they learn in the classroom. These activities help students gain practical exposure and stay updated with current industry trends. Apart from academics, cultural events, sports activities, and student clubs allow students to develop creativity, teamwork, and leadership skills. Overall, GPREC provides a balanced platform where students can grow academically, technically, and personally, preparing them to become responsible and skilled professionals.

Career path for CSE(AI&ML) Engineers

Technically, Computer Science and Engineering with specialization in Artificial Intelligence and Machine Learning (CSE–AI&ML) involves the application of computational principles, data-driven techniques, and intelligent algorithms to design, develop, and deploy smart systems that can learn from data and make informed decisions. AI and ML engineers analyse complex problems using concepts from programming, mathematics, statistics, and data science to build systems that are efficient, reliable, scalable, and capable of solving real-world challenges. Today, almost every digital product and service—from search engines and recommendation systems to virtual assistants and autonomous vehicles—has the influence of AI and machine learning to enhance human life.Whether it is healthcare, climate change, finance, smart cities, or transportation, professionals in CSE (AI&ML) design intelligent applications that provide sustainable and innovative solutions to modern-day challenges. For a successful career in CSE (AI&ML), students need strong analytical thinking, programming skills, and creativity to transform ideas into intelligent technological solutions. This field offers a wide range of career opportunities across industries such as information technology, healthcare, finance, e-commerce, robotics, and research.Graduates in CSE (AI&ML) can work in roles such as AI engineers, Machine Learning engineers, Data Scientists, Software Developers, and AI researchers. AI and ML engineers focus on developing intelligent models and algorithms using tools and frameworks such as Python, TensorFlow, PyTorch, and Scikit-learn, while data scientists analyse large datasets to derive meaningful insights and support decision-making. Professionals in this field are highly valued in leading technology companies such as Google, Microsoft, Amazon, and IBM, where they contribute to the development of advanced AI-powered applications and platforms.Some graduates choose to specialize in advanced domains such as Computer Vision, Natural Language Processing, Deep Learning, and Autonomous Systems.

Others may work in areas like Robotics, Cybersecurity, Cloud computing, or Research and Development focused on innovative AI technologies. With experience, professionals in CSE (AI&ML) can also move into leadership roles such as AI architects, Technology Managers, or pursue higher education and research in specialized areas like Deep Learning, Data Science, or Artificial Intelligence, opening pathways to advanced technological innovation and global career opportunities.