****

**Bharatiya Vidya Bhavan’s**

**Sardar Patel Institute of Technology**

**Department of Computer Science and Engineering**

**Vision**

 “To develop globally competent and ethical professionals in Computer Science and engineering and enable them to contribute to society.”

### Mission

* To provide rigorous, high-standard, multidisciplinary curriculum and innovative T-L-E-A processes and ensure a stimulating academic environment.
* To promote research and innovations through collaborations.
* To develop requisite attitudes and skills, besides providing a strong knowledge foundation.
* To foster ethics and social responsibility among stakeholders and imbibe a sense of contribution.

**Program Outcomes (PO’s) for UG Program**

*At the end of four years program, Engineering Graduates will be able to:*

**PO1: Engineering Knowledge:** apply knowledge of mathematics, science, and engineering to solve the real-life problems in computer-based systems.

**PO2: Problem Analysis:** identify, analyze and formulate computer science & engineering related problem and conduct new experiments.

**PO3: Design & Development of Solutions:** design computer-based systems to meet desired needs within realistic constraints.

**PO4: Conduct Investigation of Complex Problems:** design and conduct experiments to interpret data and analyze the results.

**PO5: Modern Tools Usage:** use modern tools for engineering practice.

**PO6: The Engineer and Society:** understand the impact of an engineer in general and Computer Science Engineer in particular on societal, safety, health, legal, and cultural issues.

**PO7: Environment & Sustainability:** understand the need and impact of computer science & engineering solutions on environment and its sustainability.

**PO8: Ethics:** take professional decision with a sense of ethical responsibility.

**PO9: Individual & Team work:** function effectively as an individual, and as a member or leader in multidisciplinary and/or cross cultural teams.

**PO10: Communication:** communicate effectively and design documentation.

**PO11: Project management & Finance:** apply engineering & management principles in day-to-day life while managing projects in a multidisciplinary environment.

**PO12: Life-long Learning:**  adapts to the lifelong learning process in the continually changing technological context.

****

**Department of Computer Science and Engineering**

**Program Education Objectives (PEO’s) for B.Tech (CSE) Program**

* 1. ***years from graduation, B.Tech. (CSE )graduates will\_\_***

**PEO1: Conceive, design, analyze, develop, test, deploy,** and **maintain** the software and hardware products, services, and systems.

**PEO2: Engage** in the advancement of Computer Science and engineering recognizing the need to stay abreast of the latest technology while serving industry, public and private institutions, academia, or any other chosen field.

**PEO3: Demonstrate** excellent computational, communication, teamwork, finance, and project management skills to analyze and solve multi-disciplinary real-life problems.

**PEO4:** Assume **leadership** in the chosen vertical and demonstrate sensitivity to social, environmental, national, and global issues.

**Program Specific Outcomes (PSO’s) for B.Tech (CSE) Program**

***At the end of graduation, B.Tech.(CSE) students will demonstrate\_\_***

**PSO1:** Apply the principles of CSE and AI, Machine Learning, Data Science, UI/UX, Blockchain, Quantum Computing, Security, AR-VR technologies, IOT and use Open-source technologies for problem-solving under realistic constraints.

**PSO2:** Develop and deploy software products and systems, demonstrate leadership, teamwork, communication skills, LLL attitude, entrepreneurial mindset, and social sensitivity.