



# **BHAGWAN PARSHURAM INSTITUTE OF TECHNOLOGY**

## **Department of Computer Science & Engineering**

### **Vision**

To emerge as a center of excellence, in the field of Computer Science and Engineering & Research, by grooming our pupils with strong conceptual knowledge to enable them as a professional and researcher for the benefit of society.

### **Mission**

1. To inculcate self-motivation among the students, who can find and understand the need of the day.
2. To produce best quality professionals with strong conceptual knowledge and hands-on experience.
3. To enable the students to be technically competent among their peers and serve as ethical software professionals.
4. To facilitate industry interaction exposure for the benefit of the stakeholders.
5. To motivate faculties and students for continuous improvement of their academic standards with qualitative research.

### **Program Educational Objectives (PEOs)**

1. To promulgate strong foundation in Applied Sciences, Mathematics and Engineering fundamentals.
2. To be able to comprehend, analyze and map the computational logics with real time problems.
3. To provide extensive knowledge to design and build products with innovative solutions for problems using their skills in Computer Science and Engineering and other related domains.
4. To inculcate attributes such as self-confidence, ethics, teamwork, leadership skills, communication skills for life-long learning.
5. To succeed with excellence as computer professionals or successful entrepreneurs or pursue higher studies through quality education.

### **Program Specific Outcomes (PSOs) (w.e.f 2015 onwards)**

1. Foundation of Computer System: Ability to comprehend mathematical science principles, coupled with engineering specialization to analyze & design solutions to real world problems.
2. Proficiency in Software Development Skills: Applying the concepts for building new innovations with a wide range of programming languages and recent open-source platforms, by upgrading with new skills and techniques.
3. Successful Career and Entrepreneurship: Ability to excel in his/her innovative career ethically and engaging himself/herself professionally as an entrepreneur, software professional, pursue higher studies with good communication and leadership skills, for the benefit of the society

### **Program Specific Outcomes (PSOs) (w.e.f 2021)**

1. To develop and integrate knowledge of different disciplines- Computer Science, Electronics, Economics, Mathematics and Statistics to analyze and design computing solutions to solve the problems in different domains.
2. To demonstrate research and technical skills for emerging areas to produce solutions to problems through open source and proprietary platforms.
3. To exhibit the ability to ethically excel in life-long professional career, higher studies and entrepreneurship with good communication, writing and leadership skills for the benefit of society.

### **PROGRAM OUTCOMES(POs) COMMON TO ALL BRANCHES**

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.