

# Veermata Jijabai Technological Institute

## Computer Engineering Degree Program Specific Outcome (PSO)

- **Professional Skills:** The ability to analyze, design and implement application specific computer engineering domains related to Big Data Systems, Cloud Computing, Artificial Intelligence, Machine Learning, Networking and Cyber Security applications for efficient design of computer based system of varying complexity by applying the knowledge of core science, engineering mathematics and engineering fundamentals.
- **Problem-Solving Skills:** The ability to adapt and apply rapid changes in tools and technology in software development using open ended programming environment to deliver a quality product relevant to professional engineering practice through life-long learning.
- **Successful Career and Entrepreneurship:** Excellent adaptability to function in multidisciplinary work environment, good interpersonal skills as a leader in a team in appreciation of professional ethics, societal responsibilities and a zest for higher studies.

## Information Technology Degree Program Specific Outcome (PSO)

- Develop an ability to use and apply Engineering conceptual knowledge and practices in the core information technologies of programming, networking, web technologies, human computer interaction and information management.
- Skills to synthesize extensible and reusable code or systems to strive balance between increasing complexity and reduction in time available for development.
- Understanding of professional ethics like confidentiality, restraining from use of unethical practices, due respect to IPR issues.
- Aptitude for contemporary technological developments.

## Program Outcome (PO)

Program Outcomes (POs) After the completion of the B.Tech program, the graduates of the department will have

- An ability to apply the knowledge of Mathematics, Science, Applied Mechanics, Engineering Graphics, Basic Electrical and Electronic Engineering, Basic Workshop Practices and Computer Engineering for the solution of complex engineering problems.
- An ability to identify, formulate, research literature and analyze complex engineering problems reaching substantiated conclusion using sound principles of Mathematics, Applied Sciences and Computer Science & Engineering.
- An ability to 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, & the cultural, societal and environmental considerations using sound principle of Computer Engineering.

- An ability to use research based knowledge and research methods in Computer Engineering including design of experiments, analysis & interpretation of data and synthesis of the information to provide valid conclusions
- An ability to create, select and apply appropriate techniques, resources and modern Computer engineering & IT modeling tools to complex engineering problems.
- An ability to apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the Computer Engineering Practice.
- An ability to analyze the impact of Computer Engineering solutions in societal & environmental contexts, and will demonstrate the knowledge of and need for sustainable solution development.
- Ethical principles and will commit to professional ethics, responsibilities, and norms of Computer engineering practice.
- An ability to function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary environments.
- Demonstrative ability to 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.
- Knowledge and understanding of the Computer Engineering and Management principles and apply these to his own work as a member and leader in a team to manage projects and in multidisciplinary environments.
- An ability to recognize the need for, and will have the preparations and ability to engage in independent and life-long learning in the broadest context of technological change in BTech Program.