



**Bharati Vidyapeeth's  
College of Engineering, Lavale, Pune  
Department of Computer Engineering**

**Program Outcomes (POs)**

**(for Bachelor of Computer Engineering at Savitribai Phule Pune University)**

Learners are expected to know and be able to–

**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 analyse 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 modelling 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 practices.

**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 Engineering practice.

**PO9 Individual and Teamwork**

Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO10 Communication Skills**

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 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.

**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 (PSO)**

A graduate of the Computer Engineering Program will demonstrate-

### **PSO1 Professional Skills-**

The ability to understand, analyse and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer-based systems of varying complexities.

### **PSO2 Problem-Solving Skills-**

The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success.

### **PSO3 Successful Career and Entrepreneurship-**

The ability to employ modern computer languages, environments and platforms in creating innovative career paths to be an entrepreneur and to have a zest for higher studies.

## **Program Educational Objectives(PEO)**

### **PEO1**

To prepare globally competent graduates having strong fundamentals, domain knowledge, updated with modern technology to provide the effective solutions for engineering problems.

### **PEO2**

To prepare the graduates to work as a committed professional with strong professional ethics and values, sense of responsibilities, understanding of legal, safety, health, societal, cultural, and environmental issues.

### **PEO3**

To prepare committed and motivated graduates with research attitude, lifelong learning, investigative approach, and multidisciplinary thinking.

### **PEO4**

To prepare the graduates with strong managerial and communication skills to work effectively as individual as well as in teams.