

JAI MAHAKALI SHIKSHAN SANSTHA'S SHRI SHANKARPRASAD AGNIHOTRI COLLEGE OF ENGG,WARDHA <u>DEPARTMENT OF CIVIL ENGINEERING</u>

Program Outcomes (PO's)

PO's **STATEMENTS** Engineering knowledge: Graduates can apply the knowledge of mathematics, **PO 1** science, engineering fundamentals and an engineering specialization to Civil Engineering related problems. Problem analysis : An ability to identify, formulate, review research literature, **PO 2** and analyze Civil engineering problems reaching substantiated conclusions using principles of mathematics and engineering sciences. Design/development of solutions : An ability to plan, analyse, design and **PO 3** implement engineering problems and design system components or processes to meet the specified needs. **Conduct investigations of complex problems** : An ability to use research-based **PO 4** knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions. **PO 5** Modern tool usage : An ability to apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations. The engineer and society: An ability to apply contextual knowledge to assess **PO 6** societal, legal issues and the consequent responsibilities relevant to the professional engineering practice. Environment and sustainability : An ability to understand the impact of the **PO 7** professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. Ethics : An ability to apply ethical principles and commit to professional ethics **PO 8** and responsibilities and norms of the engineering practice.

PO 9 Individual and team work : An ability to function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings to accomplished a common goal.

PO Communication : An ability to communicate effectively on engineering
10 activities with the engineering community and with society at large, such as,

	being able to comprehend and write effective reports and design documentation, and make effective presentations
PO 11	Project management and finance : Ability to 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.
PO 12	Life-long learning : An ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSO's)

PO's	STATEMENTS
PSO 1	Analyse and design various civil engineering structures by analytical, numerical,
	graphical and simulation methods.
PSO 2	Plan, estimate, execute and manage civil engineering projects with due
	consideration to economic, safety and environmental issues while following
	ethical practices.