

Rajaram Pangavhane (Patil) Founder President Nashik Gramin Shikshan Prasarak Mandal's

Brahma Valley College of Engineering & Research Institute

Recognized by AICTE, New Delhi, Govt. of Maharashtra \* DTE & Affiliated to Savitribal Phule Pune University. Pune Brahma Valley Educational Campus, Trimbak Road, Anjaneri, Nashik - 422 213 Tel.: (02594) 220202/203, 220066 • Telefax : (02594) 220077 Nashik Office : (0253) 2311244, 2312904 E-mail : princi.bvcoe@gmail.com • Web : www.brahmavalley.com Unipune College Code - Engg. - 62, MBA - 1230

## PROGRAM OUTCOMES (POs): (Engineering Course)

Engineering Graduates will be able to

**PO01 Engineering Knowledge**: Apply the knowledge of basic sciences and engineering fundamentals and engineering fundamentals to the solve the complex engineering problems

**PO02 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.

**PO03 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.

**PO04 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 for complex problems:

- that cannot be solved by straight forward application of knowledge, theories and techniques applicable to the engineering discipline as against problems given at the end of chapters in a typical text book that can be solved using simple engineering theories and techniques;
- that may not have a unique but possible multiple solutions, also require consideration of appropriate constraints / requirements not explicitly given in the problem statement such as cost, power requirement, durability, product life, etc.; and
- ➤ which need to be defined (modelled) within appropriate mathematical framework.

**PO05 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

**PO06 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.



**PO07 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

**PO08 Ethics:** Understand their professional and ethical responsibility and enhance their commitment towards best engineering practices.

**PO09 Individual and team work:** Function effectively as a member or a leader in diverse teams, and be competent to carry out multidisciplinary tasks.

**PO10 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.

**PO11 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.

**PO12 Life-long learning**: Recognize the need of self education, ability to engage in independent and life-long learning process in order to keep abreast with the ongoing technological changes & developments in the field of engineering.