

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 Savitribai 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.



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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.

❖ B.E [Mechanical Engineering]

PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

The graduates of Mechanical Engineering should be able to:

PEO01: Apply the overall knowledge of Mechanical Engineering along with concepts of Mathematics, Science, Communication and Computing skills to understand specific problem areas and finding the optimal solutions for the same.

PEO 2: Implement ideas of Mechanical Engineering for the challenging tasks in the interdisciplinary areas like Electrical, Electronics, Computer Science, Civil, Bio-Technology and allied branches.

PEO 3: Widely talented in the fields of manufacturing, service and design industries, which will not only improve their employability but also aid in establishing the above said industries.



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PEO 4: Develop lifelong learning attitudes, ethics and values that will help their career employability and growth in engineering, academia, defence, state and central government sectors.

PROGRAM SPECIFIC OUTCOMES (PSOs):

The students of Mechanical engineering will be able to:

PSO1: Specify, fabricate, test and operate various machines along with essential documentations.

PSO2: Analyse, design, develop and implement the concepts of mechanical systems and processes towards product development.

PSO3: Design components for automotive applications.

❖ B.E [Electrical Engineering]

PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

The graduates of Electrical Engineering should be able to:

PEO01: develop seamless knowledge for providing solution to any industrial problem.

PEO02: equip the theoraticals, practical knowledge of designing of core areas of EE in order to develop & maintain modern electrical equipments and to actively take part in application based research and development.

PEO03: test and verify the characteristics of common electrical equipments / machines / control system and to develop the skill to analyze, appreciate and interpret the data for engineering applications

PEO04: inculcate professional and ethical attitude, communication and team work skills and the ability to relate engineering issues from broader social perspective for truly contributing to the needs of the nation.



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PROGRAM SPECIFIC OUTCOMES (PSOs)

The students of Electrical engineering will be able to:

PSO01: Develop models, analyse and assess the performance of different types of generation, transmission, distribution and protection mechanisms in power systems.

PSO02: Design, develop, analyse and test electrical and electronic systems; deploy control strategies for power electronics related applications.

PSO03: Measure, analyse, model and control the behaviour of electrical quantities associated with constituents of energy or allied systems.

❖ B.E [Computer Engineering]

PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

The graduates of Computer Engineering should be able to:

PEO1: Pursue successful professional career in IT and IT-enabled industries/public sector/research organizations or work as an entrepreneur.

PEO2: Pursue lifelong learning in generating innovative engineering solutions using research and complex problem-solving skills.

PEO3: provide solutions to challenging problems in their profession by applying computer engineering theory and practices.

PEO4: Demonstrate professionalism, ethics, inter-personal skills and continuous learning to develop leadership qualities to work effectively in multidisciplinary environment.

PROGRAM SPECIFIC OUTCOMES (PSOs)

The students of Computer engineering students will be able to:

PSO01: Design and develop the web applications using various technologies such as HTML, JSP, PHP, ASP and ASP.NET to cater the needs of the society.

PSO02: Offer solutions which impact geo-socio-economic and Environmental scenario by using Machine Learning, Artificial Intelligence and IoT.



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❖ B.E [Civil Engineering]

PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

The graduates of Computer Engineering should be able to:

PEO01: Contribute to Nation's growth, enabling time-bound creation of world-class infrastructure in the country and delivering sustainable solutions for rural and urban development.

PEO02: Pursue professional development to enhance their undergraduate degree and advance their careers.

PEO03: Exhibit commitment, engage in lifelong learning and continuous improvement for enhancing their professional and personal capabilities.

PROGRAM SPECIFIC OUTCOMES (PSOs)

The students of Civil engineering students will be able to:

PSO01: manage large infrastructure projects ensuring safe and cost-effective execution of projects having knowledge of fast track construction and project management.

PSO02: use building software packages to calculate safe loads and stresses for designing structural members to ensure safety and serviceability.

PSO03:provide innovative solutions for traffic safety and efficiency through intelligent transportation systems, and mitigate the environmental impact of construction by adopting green building concepts.

Masters in Business Administration

Program Outcomes (POs)

PO01: Generic and Domain Knowledge - Ability to articulate, illustrate, analyze, synthesize and apply the knowledge of principles and frameworks of management and allied domains to the solutions of real-world complex business issues.



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PO2: Problem Solving & Innovation - Ability to Identify, formulate and provide innovative solution frameworks to real world complex business and social problems by systematically applying modern quantitative and qualitative problem solving tools and techniques.

PO03: Critical Thinking - Ability to conduct investigation of multidimensional business problems using research based knowledge and research methods to arrive at data driven decisions.

PO04: Effective Communication - Ability to effectively communicate in cross-cultural settings, in technology mediated environments, especially in the business context and with society at large.

PO05: Leadership and Team Work - Ability to collaborate in an organizational context and across organizational boundaries and lead themselves and others in the achievement of organizational goals and optimize outcomes for all stakeholders.

PO06: Global Orientation and Cross-Cultural Appreciation- Ability to approach any relevant business issues from a global perspective and exhibit an appreciation of Cross Cultural aspects of business and management.

PO07: Entrepreneurship - Ability to identify entrepreneurial opportunities and leverage managerial & leadership skills for founding, leading & managing startups as well as professionalizing and growing family businesses.

PO08: Environment and Sustainability - Ability to demonstrate knowledge of and need for sustainable development and assess the impact of managerial decisions and business priorities on the societal, economic and environmental aspects.

PO09: Social Responsiveness and Ethics - Ability to exhibit a broad appreciation of the ethical and value underpinnings of managerial choices in a political, cross-cultural, globalized, digitized, socio-economic environment and distinguish between ethical and unethical behaviors & act with integrity.

PO10: Life Long Learning – Ability to operate independently in new environment, acquire new knowledge and skills and assimilate them into the internalized knowledge and skills.



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* PROGRAM SPECIFIC OUTCOMES (PSOS)

PROGRAM SPECIFIC OUTCOMES [MARKETING MANAGEMENT]

PSO01: Ability to integrate concepts like product life cycle, adoption, and segmentation, branding, pricing, distribution, and market communication and use it for effective marketing decisions

PSO02: Ability to exhibit Sales professionalism

PSO03: Ability to assess how Technology & connectivity has changed human life and business in the context of real-world commodities, products & services.

PROGRAM SPECIFIC OUTCOMES [FINANCIAL MANAGEMENT]

PSO01: Ability to use financial data to make knowledgeable decisions about the Working performance, resources apportionment and financial position of a company.

PSO02: Ability to remain updated with respect to economic reforms and financial markets

PSO03: Ability to demonstrate knowledge of the legal framework of International Financial reporting standards, Goods and Services tax, income tax and filing of the returns.

PROGRAM SPECIFIC OUTCOMES [HUMAN RESOURCE MANAGEMENT]

PSO01: To enable students to become proficient in the key functions of Human Resource Management viz: Human resource planning, Recruitment and selection, Performance management, Learning and development, Career planning, Function evaluation, Rewards and Recognition, Industrial relations, Employee participation and communication, Health and safety, Personal wellbeing and Administrative responsibilities.

PSO02: To familiarize students with the technological interventions in Human Resource Management and the Current trends and Cases in HRM.

PSO03: To acquaint students with real time problems and their probable solutions in the areas of Organizational Behaviour, Development and Diagnosis.



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PROGRAM SPECIFIC OUTCOMES [OPERATIONS MANAGEMENT]

PSO01: Ability to gain a robust perspective on Six Sigma, lean operations management, innovation, and operational leadership.

PSO02: Ability to be expert in economic order quantity, inventory classification and other inventory management techniques.

PSO03: Ability to understand and process internal and external customer needs within the quality framework

PROGRAM SPECIFIC OUTCOMES [BUSINESS ANALYTICS]

PSO01: Evaluate the systems and processes used in an organization including the planning, decision-making, group dynamics, innovation, production, supply chain, operations, technologies, marketing and distribution management.

PSO02: Design alternatives to solve business problems utilizing quantitative analysis, critical thinking and sound ethical decision making.

PSO03: Use research based knowledge and methods including company analysis, primary and secondary data collection, analysis and interpretation of data to find solution to business problems