

ABOUT THE DEPARTMENT:

Department of Industrial & production Engineering was established in the year 1997 . Department has well qualified faculty & trained staff .Department has well equipped laboratories for students. The industry training for the students of final year & third year students are arranged to impart practical exposure in the organization like SECL, BHEL, BALCO, JINDAL, CSEB power plants and in other public and private company.

Department is also engaged in organizing other activities like seminars , guest lectures, aptitude test , quiz to provide and develop inter personal skills .

Every year approximately ten students qualify the national level GATE exam. The passed out students are working in company like RELIANCE ENERGY LTD., BALCO, JINDAL, CSEB, DRDO, ISRO, HAL, and Indian Railways.

VISSION AND MISSION:

Quality education to be provided to the students along with enhancement of their skills to make them globally competitive Production Engineers. Strengthening Continuing Education with special focus on training and skills up gradation of teaching. Dedicated efforts to be made for enhancing employability of students. Equip students with enhanced abilities to apply knowledge with proven abilities to theorize and develop emerging systems of learning coupled with value systems to be able to manage and lead contemporary and emerging business globally with specific excellence in the areas of manufacturing. Strengthening and expanding collaborations and partnerships across a spectrum of industries and Centres of Excellence for offering sustained and scalable world-class training research and higher education.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

The graduates of Industrial and Production Engineering will be able to:

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| PEO1: | The primary objective of carrying out teaching and research in the broad areas of production with specialization in Design, Metal Cutting, Machine Tools, CAD-CAM, Robotics, Industrial Engineering, Management, Finance and Quality Control, Advanced Manufacturing Practices, Advanced Materials and their characterization. |
| PEO2: | Apply the knowledge of technical fundamentals related to industrial and production engineering to address the needs of society. |
| PEO3: | Develop innovative technologies and find solutions to complex engineering problems, using modern engineering tools. |
| PEO4: | Communicate efficiently as a member of multidisciplinary team so as to convey effective decisions. |
| PEO5: | Enhance the intellectual breadth with updated knowledge and adapt to changes in environmental, safety, economic and ethical needs. |

PROGRAM OUTCOMES (POs)

The graduates of Industrial and Production Engineering will be able to:

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| PO1: | Basic Knowledge: Acquire basic knowledge about the Production and Industrial engineering. |
| PO2: | Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. |
| PO3: | Process Analysis: The student will be able to recommend the appropriate design process, production method, machining process and quality assurance. |
| PO4: | Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. |
| PO5: | 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. |
| PO6: | 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. |
| PO7: | Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern |

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| | engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations. |
| PO8: | 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. |
| PO9: | 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. |
| PO10: | Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. |
| PO11: | Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. |
| PO12: | 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. |
| PO13: | 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. |
| PO14: | 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 (PSOs):

The graduates of Industrial and Production Engineering will be able to:

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| PSO1: | Analyse, synthesize and control the manufacturing operations using statistical approach as well as the laboratory experiences and measure the manufacturing process variables to develop technical inferences about the process. |
| PSO2: | The student should be able to develop easiest production methods keeping objective of reduction of cost and manpower. Design and validate solutions to defined problems and write clearly and effectively for the practical utilization of their work. |
| PSO3: | Integrate the engineering systems using appropriate analytical, computational and experimental practices and the management systems into series of different technological environment. |
| PSO4: | Investigate the engineering principles underlying the structure, properties, processing and performance related to material systems appropriate to the field of engineering. |