



# LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)

Accredited by NAAC with 'A' Grade, ISO 9001:2015 Certified Institution

Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada

L.B.Reddy Nagar, Mylavaram-521230, Krishna Dist, Andhra Pradesh, India

## RECOMMENDATIONS/SUGGESTIONS REPORT

PO/PSO ATTAINMENTS

Batch: (2016-20)

A.Y:2020-21

POs	Target Level	Attainment Level	Observations
<b>PO1: Engineering knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.			
	60	74.8	<b>Target reached</b> Out of 68 courses, only 54 courses are contributing to this PO1. Out of 54, 44 courses are above PO attainment value of 60%.
	<b>Action 1:</b> Application of fundamentals should be covered through case studies, live examples etc for more clarity of subjects. <b>Action 2:</b> Conducting revision classes and giving additional assignments for the specific courses that contributed less.		
<b>PO2: Problem analysis:</b> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.			
	60	72.1	<b>Target reached</b> Out of 68 courses, only 54 courses are contributing to this PO2. Out of 54, 42 courses are above PO attainment value of 60%.
	<b>Action 1:</b> More practice on analyzing the given data, formulation of the problem and problem solving should be adopted. <b>Action 2:</b> The faculty are instructed to conduct more tutorials to improve the student thinking ability with respect to above aspects.		
<b>PO3: Design/development of solutions:</b> 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.			
	60	74	<b>Target reached</b> Out of 68 courses, only 29 courses are contributing to this PO3. Out of 29, 23 courses are above PO attainment value of 60%.
	<b>Action 1:</b> Open ended design/analysis problems should be given in assignments for improving the analytical ability. <b>Action 2:</b> Higher cognitive level problems particularly in design/analysis orientated courses should be discussed in the class rooms.		
<b>PO4: Conduct investigations of complex problems:</b> 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.			
	60	70.26	<b>Target reached</b> Out of 68 courses, only 37 courses are



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			contributing to this PO4. Out of 37, 28 courses are above PO attainment value of 60%.
	<b>Action 1:</b> The concerned faculty are advised to provide relevant additional problems and for practice		
<b>PO5: Modern tool usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.			
	60	70.2	<b>Target reached</b> Out of 68 courses, only 36 courses are contributing to this PO5. Out of 36, 26 courses are above PO attainment value of 60%.
	<b>Action 1:</b> Graduates should be exposed to modern tool usage in the respective subjects.		
<b>PO6: The engineer and society:</b> 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.			
	60	67.9	<b>Target reached</b> Out of 68 courses, only 27 courses are contributing to this PO6. Out of 27, 17 courses are above PO attainment value of 60%.
	<b>Action 1:</b> Graduates should be exposed to safety, health, and societal issues in respective courses.		
<b>PO7: Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.			
	60	71	<b>Target reached</b> Out of 68 courses, only 37 courses are contributing to this PO7. Out of 37, 26 courses are above PO attainment value of 60%.
	<b>Action 1:</b> Graduates should be made aware of the connection of Civil Engineering discipline with the environment in day-to-day life and the necessity of sustainable development.		
<b>PO8: Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.			
	60	66.5	<b>Target reached</b> Out of 68 courses, only 28 courses are contributing to this PO8. Out of 28, 18 courses are above PO attainment value of 60%.
	<b>Action 1:</b> Graduates should be exposed to the significance of maintaining professional ethics and norms to be followed in their professional career.		
<b>PO9: Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings			
	60	73.1	<b>Target reached</b> Out of 68 courses, only 19 courses are contributing to this PO9. Out of 19, 13 courses



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			are above PO attainment value of 60%.
	<b>Action 1:</b> Graduates should be highlighted the significance of team work, individual responsibility in carrying out the civil engineering related field works in all the concerned subjects.		
<b>PO10: Communication:</b> 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.			
	60	71.2	<b>Target reached</b> Out of 68 courses, only 22 courses are contributing to this PO10. Out of 22, 17 courses are above PO attainment value of 60%.
	<b>Action 1:</b> Graduates should be apprised the need of articulation and communication skills that are necessary for a successful professional growth.		
<b>PO11: Project management and finance:</b> 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.			
	60	67.3	<b>Target reached</b> Out of 68 courses, only 27 courses are contributing to this PO11. Out of 27, 16 courses are above PO attainment value of 60%.
	<b>Action 1:</b> Graduates should be taught the necessity of applying engineering and management principles to successfully complete the civil engineering projects or tasks in their professional career.		
<b>PO12: Life-long learning:</b> 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.			
	60	70.5	<b>Target reached</b> Out of 68 courses, only 50 courses are contributing to this PO12. Out of 50, 40 courses are above PO attainment value of 60%.
	<b>Action 1:</b> The faculty members should highlight the need for continuous learning by the graduates to get updated in their respective subject domains and handle the professional demand with ease.		
<b>PSO 1:</b> Possesses necessary skill set to analyze and design various systems using analytical and software tools related to civil engineering			
	60	72.7	<b>Target reached</b> Out of 68 courses, only 52 courses are contributing to this PSO1. Out of 52, 40 courses are above PO attainment value of 60%.
	<b>Action 1:</b> Technical knowledge in the subject domains, analytical abilities in solving complicated/real-life problems by the graduates should be periodically assessed by the faculty members through their regular evaluation and monitoring.		
<b>PSO 2:</b> Possesses ability to plan, examine and analyze the various laboratory tests required for			



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the professional demands			
	60	72.03	<p><b>Target reached</b></p> <p>Out of 68 courses, only 41 courses are contributing to this PSO2. Out of 41, 29 courses are above PO attainment value of 60%.</p>
	<p><b>Action 1:</b> Graduates should be given rigorous training in performing/understanding the laboratory tests and analyzing the results through additional exercises. The faculty members should monitor their involvement and performance and guide them in this regard.</p>		
	<p><b>PSO 3:</b> Possesses basic technical skills to pursue higher studies and professional practice in civil engineering domain.</p>		
	60	71.23	<p><b>Target reached</b></p> <p>Out of 68 courses, only 39 courses are contributing to this PSO3. Out of 39, 27 courses are above PO attainment value of 60%.</p>
	<p><b>Action 1:</b> Graduates should be taught the opportunities for higher studies and career development in their respective domains. They should be guided by the faculty members to improve their technical and communication skills in this regard.</p>		

CO-ORDINATOR

HOD-CIVIL