



LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)

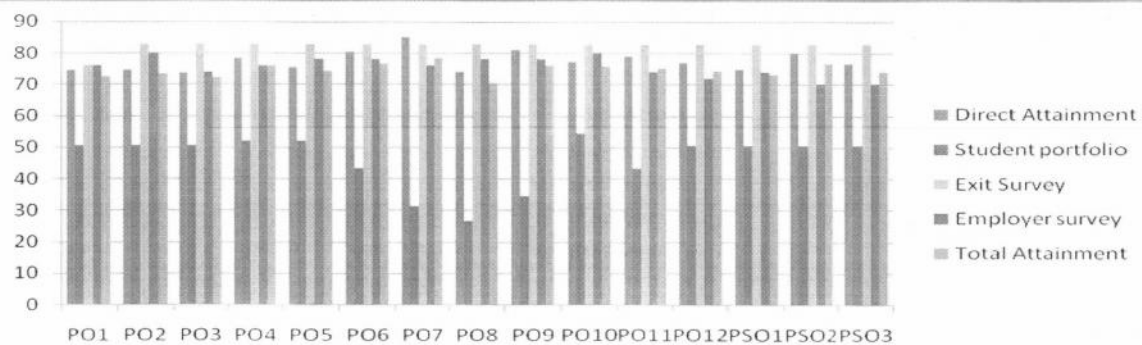
Accredited by NAAC with 'A' Grade, ISO 9001:2015 Certified Institution

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

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

FINAL PO-PSO ATTAINMENT OF 2014 ADMITTED BATCH

		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	
2014 ADMITTED	Direct Attainment	74.51	74.48	73.69	78.31	75.53	80.28	84.89	73.8	80.81	77.17	78.9	76.92	74.75	80.19	76.43	
	Indirect Attainment	Student portfolio	50.6	50.6	50.6	52.08	52.08	43.2	31.38	26.73	34.55	54.3	43.2	50.6	50.6	50.6	50.6
		Exit Survey	76.06	82.55	82.55	82.55	82.55	82.55	82.55	82.55	82.55	82.55	82.55	82.55	82.55	82.55	82.55
		Employer survey	76.00	80.00	74.00	76.00	78.00	78.00	76.00	78.00	78.00	80.00	74.00	72.00	74.00	70.00	70.00
	Total Attainment		72.42	73.45	72.3	75.88	74.14	76.57	78.42	70.39	76.08	75.7	75.2	74.36	73.04	76.45	73.82



Actions taken based on the results of evaluation of each of the POs & PSOs

POs& PSOs Attainment Levels and Actions for improvement in the CAY (2018-19)

PO	Target	Attained	Observation
PO1:Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.			
2017-2018	70	72.42	• Target reached
Action1: For improving Engineering Knowledge among students we have included a course called “Transformation Techniques and Vector Calculus” with the consideration Freshmen Engineering (FE) faculty of our college. Action2: Planned to conduct a seminar on “Micro Services and Spring Framework” in this academic year for improving students basic engineering knowledge.			
PO	Target	Attained	Observation
PO2: Problem analysis: Identify, formulate, review research literature, and analyse complexengineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.			
2017-2018	70	73.45	• Target reached
Action1: For improving problem analysis skills among students we have introduced new courses, in the R17 regulations, related to Problem Assisted Learning, Problem Based Learning. Statistical programming with R language is one such example. Suggestions from BOS members and industry representatives were useful to take this action. Action2: Planned to conduct a seminar on “Micro Services and Spring Framework” in this academic year for improving students basic engineering knowledge.			
PO	Target	Attained	Observation
PO3: Design/development of solutions: Design solutions for complex engineering problems anddesign 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.			
2017-2018	70	72.3	• Target reached
Action1: To ensure attainment of this PO, we have included courses viz. “Python Programming, Python Programming Lab, Statistical Programming with R, Problem Assisted Learning, Problem Based Learning, Swift Programming, Scala Programming, PHP Programming, Google Go Programming, and Android Technologies Lab” by considering suggestions of various stakeholders. Action2: Our faculty were trained by E-Box consultancy in problem solving through programming. Same people were further deputed to train the students. Action3: A Guest Lecture on “Enhancing problem solving skills” conducted by Mr. Dr. M.Babu Reddy, HOD, Dept. of Computer Science Krishna University, Machilipatnam, Andhra Pradesh under LBRCE CSI Student Branch on 17-03-2018.			
PO	Target	Attained	Observation
PO4: 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.			
2017-2018	60	75.88	• Target reached

Action1: For conducting investigations on complex problems we have included courses like “Statistical Programming with R Lab, Big Data Analytics, Big Data with HADOOP Lab” as per the directions from Alumni, Faculty, Students and Employers.			
Action2: We have invited students to write papers and make posters on various latest trends in Computer Science and organized events accordingly, under the banner of “Association of Computer Geeks (ACG)”, a student association of CSE.			
PO	Target	Attained	Observation
PO5:Modern tool usage: Create, select, and apply appropriate techniques, resources, and modernengineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.			
2017-2018	65	74.14	• Target reached
Action1: For making students to more familiar with modern tools, we have included “Android Technologies, Android Technologies Lab, and Statistical Programming with R Lab and Internet of Things with the considerations of Students, Alumni and Faculty.			
Action2: We have conducted a seminar on “Micro Services and Spring Framework” on 07-07-2018.			
Action3: We have conducted one day Workshop on “IoT Architecture, Protocols, Case Studies & Idea-Prototype-Product” on 10-08-2018.			
Action4: From the current semester, we have plans to expose our students to Virtual-lab environment (by IITs), where adequate tool exposers is given through Sys-internals.			
PO	Target	Attained	Observation
PO6: 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.			
2017-2018	60	76.57	• Target reached
Action1: Courses like Software Engineering, professional Ethics & Human Values and Professional Communication are contributing to this PO. More practice is required in Professional Communication Labs. The same recommendations were given to FE.			
Action2: Two new courses aremade mandatory viz. Employability Enhancement Skills I & II are introduced to improve decision making skills of the students.			
PO	Target	Attained	Observation
PO7: 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.			
2017-2018	60	78.42	• Target reached
Action1: Directed concerned faculty to put more focus wherever necessary on Environmental Science by giving an assignmentwhich may leadstudents to find Engineering solutions in this context.			
PO	Target	Attained	Observation
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.			
2017-2018	65	70.39	• Target reached
Action1: Directed concerned faculty of Professional Ethics and Human values course to give some example scenarios which may happen in real world and notice student responses, in order to inculcate ethical values and social responsibilities.			
PO	Target	Attained	Observation
PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary			

settings.			
2017-2018	65	76.08	• Target reached
<p>Action1: To enhance Individual performance among students we have included courses like “Problem Assisted Learning, Problem Based Learning”.</p> <p>Action2: Students were directed to do theoretical and applied research in latest trends in computer science engineering with four men team in each group.</p> <p>Action3: Students were directed to implement either desktop application, IoT project or web application with four men team in each group.</p>			
PO	Target	Attained	Observation
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.			
2017-2018	65	75.7	• Target reached
<p>Action1: For improving Communication skills among students we have included courses like “Employability Enhancement Skills-I and Employability Enhancement Skills-II” with the consideration of Employees from industry.</p> <p>Action2: Students supposed to prepare documentation for Main Project, Mini Project, Seminar, Internship, Problem Assisted Learning and Problem Based Learning and need to give presentation about the same. Continuous practice for making documentation and giving presentations may help students to improve effectiveness in that area.</p>			
PO	Target	Attained	Observation
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.			
2017-2018	60	75.2	• Target reached
Action1: For improving Project Management skills among students we have included courses like “Project Management” with the consideration of faculties in our college.			
PO	Target	Attained	Observation
PO12: 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.			
2017-2018	65	74.36	• Target reached
<p>Action1: We have included various newly introduced Programming languages for the upcoming regulations for making students to solve complex engineering problems using wide range of programming languages.</p> <p>Action2: Students are doing online NPTEL courses.</p> <p>Action3: Organizing Intra-Department competitions, National Level Technical Symposiums.</p> <p>Action4: Encouraging students to participate in various events organized in outside colleges/ Institutions.</p>			
PSO	Target	Attained	Observation
PSO1: Programming Paradigms: To inculcate algorithmic thinking, formulation techniques and visualization, leading to problem solving skills using different programming paradigms.			
2017-2018	70	73.04	• Target reached

Action1: We have included various Programming Languages in the new regulations for making students to be industry ready. Ex: Google Go, Swift Programming, Scala Programming etc.			
Action2: To inculcate algorithmic thinking, formulation techniques and visualization, leading to problem solving skills among students we have included following courses			
<ul style="list-style-type: none"> • Problem Assisted Learning • Problem Based Learning. 			
PSO	Target	Attained	Observation
PSO2: Data Engineering: To inculcate an ability to Analyse, Design and implement data driven applications into the students.			
2017-2018	70	76.45	• Target reached
Action1: For making students to get familiarity with Data Engineering constructs we have included following courses with the consideration of various stake holders.			
<ul style="list-style-type: none"> • Big Data Analytics • Big Data with HADOOP Lab 			
PSO	Target	Attained	Observation
PSO3: Software Engineering: Develop an ability to implement various processes / methodologies /practices employed in design, validation, testing and maintenance of software products.			
2017-2018	70	73.82	• Target reached
Action1: We have included "Software Security Engineering" for making students to be familiarized with software engineering constructs.			

 11/6/18

Program coordinator