



LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (Autonomous)

Accredited NAAC with "A" grade, ISO 9001:2015 Certified Institution,
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DEPARTMENT OF INFORMATION TECHNOLOGY

Date: 06-09-2016

7.1. Actions taken based on the results of evaluation of each of the COs, POs & PSOs

POs Attainment Levels and Actions for improvement (2015-2016) 12 batch

POs	Target Level	Attainment Level	Observations
PO-1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.			
PO 1	75%	70%	<ol style="list-style-type: none"> 1. Target was not reached. 2. PO1 still needs improvement. 3. After analyzing results and interacting with students, it was attributed that still they need more practice on problem solving with the help of mathematical logic/knowledge.
Action Taken: <ol style="list-style-type: none"> 1. Tutorials/ Assignments were given. 2. Additional classes were conducted to give thorough practice in problem solving. 			

POs	Target Level	Attainment Level	Observations
PO-2. 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.			
PO 2	75%	73%	<ol style="list-style-type: none"> 1. Target was not reached. 2. It was observed that few more courses need improvement. 3. After analysis of results and interacting with students it is attributed that they need more analytical capabilities in Advanced java programming.
Action Taken: <ol style="list-style-type: none"> 1. Assignments / Tutorials / Remedial Classes were conducted for the course which was not attained. i.e. Advanced java programming. 2. Workshop conducted on WOWZAPP worldwide hackthon for windows 			

POs	Target Level	Attainment Level	Observations
PO-3. 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.			
PO 3	75%	70%	<ol style="list-style-type: none"> 1. Target was not reached. 2. It was observed that few courses need improvement.i.e. Design analysis of algorithms. 3. It was also identified the need of additional care to strengthen the design capabilities of students, after analyzed results and interacted with students.
Action Taken: <ol style="list-style-type: none"> 1. More number of classes/tutorials were conducted for the courses which are contributing design &development of solutions. 2. 			

POs	Target Level	Attainment Level	Observations
PO-4. 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.			
PO 4	75%	66%	<ol style="list-style-type: none"> 1. Target was not not. 2. It was observed that few courses need improvement.i.e. Advanced java programming. 3. After analysis of results, it is observed that students are doing laboratory experiments without enough preparation i.e.,in terms of designing experiment, analyzing and interpretation of results.
Action Taken: <ol style="list-style-type: none"> 1. To improve practical knowledge, Hands-on Sessions/Demonstration classes were conducted before executing the experiment. 2. Conducted workshop on Visualization of data structures to improve logical thinking skills. 3. Conducted workshop on 			

POs	Target Level	Attainment Level	Observations
PO-5. 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.			
PO 5	75%	68%	<ol style="list-style-type: none"> 1. Target was not reached. 2. It is observed that few courses attained less.
Action Taken: <ol style="list-style-type: none"> 1. Tutorials were conducted for the courses which contributed less. 			

POs	Target Level	Attainment Level	Observations
PO-6. 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.			
PO 6	75%	67%	<ol style="list-style-type: none"> 1. Target was not reached. 2. After analyzing results and interacting with students, it is observed that students are still to be motivated.

Action Taken:

1. Motivated the students by explaining the importance of doing internship and project work.

POs	Target Level	Attainment Level	Observations
PO-7. 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.			
PO 7	75%	67%	<ol style="list-style-type: none">1. Target was not reached.2. It was observed that still few courses required improvement.3. After interacting with students, it is found to be due to lack of awareness on environment and sustainable development.

Action Taken:

1. Conducted a Lecture on “Environment and sustainability” by senior faculty.

POs	Target Level	Attainment Level	Observations
PO-8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.			
PO 8	75%	72%	<ol style="list-style-type: none">1. Target was not reached2. After analysis of results and interacting with students, additional efforts required to improve knowledge on professional ethics and moral values.

Action Taken:

1. Additional classes on professional ethics and norms of the engineering practice were conducted

POs	Target Level	Attainment Level	Observations
PO-9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.			
PO 9	75%	68%	<ol style="list-style-type: none">1. Target was not reached.2. It was observed that few courses need improvement.

Action Taken:

1. Awareness on leadership qualities was created by project assessment and evaluation committee.
2. Create awareness on teamwork by preparing the posters.

POs	Target Level	Attainment Level	Observations
PO-10. 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.			
PO 10	75%	69%	<ol style="list-style-type: none">1. Target was not reached2. After interacting with students, it was identified that additional focus required on development of communication skills.

Action Taken:

1. CSS Communication and Soft Skills classes were conducted.

2.Student Association activities were carried out.

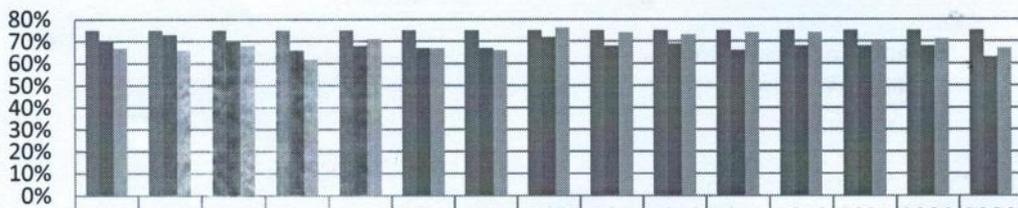
POs	Target Level	Attainment Level	Observations
PO-11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.			
PO 11	75%	66%	<ol style="list-style-type: none"> 1. Target was not reached 2. It was observed that still few courses required improvement. 3. After interacting with students, it was identified that additional focus required on development of communication skills.
Action Taken: <ol style="list-style-type: none"> 1. Focused on motivating the students by explaining the importance of doing internship and project work. 2. Created awareness on project management by project assessment and evaluation committee. 3. Conducted workshop on Visualization of Data structures to improve the programming skills. 			

POs	Target Level	Attainment Level	Observations
PO-12. 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.			
PO 12	75%	68%	<ol style="list-style-type: none"> 1. Target was not reached 2. It was observed that still few courses required improvement.
Action Taken: <ol style="list-style-type: none"> 1. Encouraged students to participate in workshops/seminars/ symposia 2. Provided library hours. 3. Conducted association activities. 4. Conducted self learning courses. 			

PSOs	Target Level	Attainment Level	Observations
PSO1: Organize, Analyze and interpret the data to extract meaningful conclusions.			
PSO 1	75%	68%	<ol style="list-style-type: none"> 1. Target was not reached 2. It was observed that still few courses required improvement.
Action Taken: <ol style="list-style-type: none"> 1. More number of classes /tutorials were conducted to strengthen the courses. 2. Conducted workshop on Visualization of Data Structures to improve Programming Skills& Logical Thinking Ability. 3. Conducted Workshop on "My Smart Phone kit for IOT- A Practical Approach" 			

PSOs	Target Level	Attainment Level	Observations
PSO2: Design, Implement and Evaluate a computer-based system to meet desired needs.			
PSO 2	75%	68%	<ol style="list-style-type: none"> 1. Target was not reached 2. It was observed that still few courses required

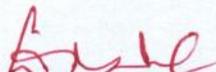
PO's and PSO's Attainment Levels



	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
■ TARGET	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
■ 2015-16	70%	73%	70%	66%	68%	67%	67%	72%	68%	69%	66%	68%	68%	68%	63%
■ 2014-15	67%	66%	68%	62%	71%	67%	66%	76%	74%	73%	74%	74%	70%	71%	67%

Observations and Action taken report:

It is observed that the skills of graduates of 2015 batch were improved compared to 2014 batch except for PO5, PO8, PO9, PO10, PO11, PO12, PSO1 and PSO2.


HEAD OF THE DEPARTMENT