Program Attainment Analysis and Action Taken Report

This report is a detailed analysis of the program attainment for the BCA course batch of 2021-24. The duration of this assessment would be three academic years, namely 2021-22, 2022-23, 2023-24. As the assessment was conducted to find out the level of attainment of POs and COs, it was used to enhance the quality of education. Each course's performance is evaluated based on the average scores achieved in assessments, with a scale ranging from 0 to 3, where:

- **3**: High attainment (≥75% of students scoring above average)
- **2**: Moderate attainment (≥60% - <75% of students scoring)
- **1**: Low attainment (≥50% - <60% of students scoring)
- **0**: No attainment (<50% of students scoring below benchmark)

The attainment levels for each PO are calculated using a combination of direct and indirect assessment tools, with direct assessments contributing 80% and indirect assessments contributing 20% to the final PO attainment score

Major Observations

The Program Outcomes and Course Outcomes uses Bloom's Taxonomy.

- All courses are specially designed to achieve the outcomes of the programme and vision of the department and institute.
- General findings indicate a strong level of attainment across several POs but some areas present potential for improvement.
- The students have performed well in the technical programs such as "Fundamentals of Computers and IT" and practical labs.
- Satisfactory responses by the alumni and employers indicate proper skill development as well as preparation of the trainees for the job market.
- High Attainment Courses: Courses such as Discrete Mathematics (BCA 101) and C Programming: An Overview (BCA 103) exhibit high attainment levels across multiple POs, indicating effective teaching strategies and student engagement.
- Moderate Attainment Courses: Subjects like Web Technologies (BCA 107) and Data Structure and Algorithm Using C (BCA 106) show moderate attainment levels, suggesting areas where instructional methods may need enhancement.
- Low Attainment Courses: Courses such as Computer Organization and Architecture (BCA 203) and Object-Oriented Programming with C++ (BCA 205) have lower attainment scores, highlighting potential challenges in content delivery or student comprehension.

Action Taken

In response to the findings, the following actions have been implemented:

- Curriculum changes: Inclusion of add-on workshops on theoretical topics that can enhance comprehension and practical applicability Teaching methods.
- Changes in the course content of "Computer Organization and Architecture" with more practical applications and practices.
- Better Learning Strategies: Lectures and the learning environment will be more integrated into modules that are receiving poor performance results.
- Assistance Programs for Students: More tutoring and mentoring will be available to students who are struggling with PO5 and other POs
- Institutional Industry Liaison: Guest speakers and internships will receive more cooperation from local businesses so that curricula may more effectively meet the practice needs of local business.
- Student Support Services: Implement tutoring and mentoring programs to offer extra academic support to students, especially in difficult subjects.
- Feedback Mechanisms: Student and alumni feedback are constantly gathered in order to update the programs. The changes will be made based on real-time basis.
- New Initiatives: Elective courses will include emerging technologies and in-demand skills like data science and machine learning.
- Resource Allocation: Provide sufficient resources, such as current textbooks, software tools, and lab facilities, to sustain the curriculum

Head of the Department
Department of Information, Communication & Technology