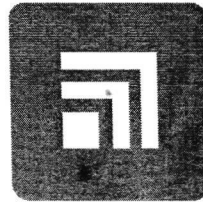# CHITKARA UNIVERSITY

HIMACHAL PRADESH
NAAC ACCREDITED

Report on

PO Attainment

BCA 2018

Department of Computer Applications

Report on PO Attainment
Batch 2018 BCA (Year I,II,III)
Department of Computer Applications

Dated: 27/09/2021

Overview

An outcome is a result of learning that reveals what the student should be able to do at the end of a course. Outcome-based curriculum is a performance-based education system which is crucial in determining the type of graduates we want. In this approach, the desired educational outcomes should be clearly specified. Having an unequivocal outcome facilitates the nature of course offered, its content and also the teaching plans. Constructive alignment is a principle used for devising teaching and learning activities and assessment tasks that directly address the course outcomes (COs) intended. The outcome-based approach provides a mechanism to ensure the accountability and quality assurance to an educational programme.

Course mapping shows the educational relationship (Level of Learning achieved) between Course Outcomes and Program Outcomes for a Course. The result strongly indicates whether the students are able to achieve the course learning objectives. The method can be used for any course and is a good way to evaluate a course syllabus.

The below mentioned steps shall address the procedure for assessing the percentage achievement of Program Outcomes.

Program Outcome

The Program Outcomes for the BCA Program are the following:

PO1: Application of Knowledge: Apply knowledge of software development paradigms in a systematic manner to solve real-time problems.

PO2: Employability: Build skills, knowledge and attitude necessary to work as responsible software professional.

PO3: Societal & Environmental Concern: Design solution for software application problems with appropriate consideration for societal and environmental issues.

PO4: Modern Tool Usage: Create, select and apply appropriate techniques, resources and modern IT tools.

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PO5: Professional Ethics: Apply ethical principles and practices towards the use of technology and commit to professional ethics and responsibilities.

PO6: Individual & Team Work: Function effectively as an individual, and as a member or a leader in diverse teams and multi-disciplinary fields.

PO7: Communication Efficacy: Communicate effectively and write effective reports and Design documents, make effective presentations and give and receive clear instructions.

PO8:Life-long Learning: Recognize the need for and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

PO9:Problem Analysis: Prepare plan, design and develop solutions for the real-world problems of the industry.

PO10:Innovation and Entrepreneurship: Identify opportunities; develop entrepreneurship vision and use of innovative ideas to create value and wealth for the betterment of the individual and society.

Course Outcomes mapping with Program Outcomes:

The course outcomes were mapped with the program outcomes for BCA on the scale of High, Medium and Low. Thereafter, the mapped values were allocated with weights i.e., High: 3; Medium: 2; and Low: 1.The subject wise result was compiled for all semester from 1st to 6th.
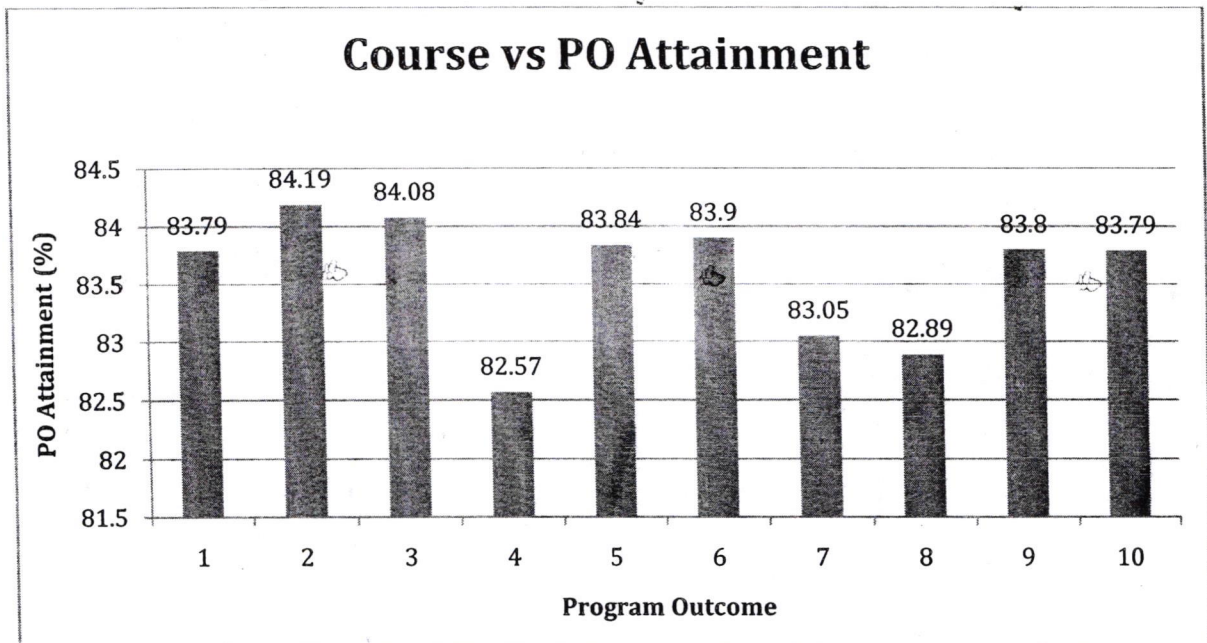
PO Attainment of subjects: BCA

Subject	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
AM107	73	73	73	73	73	73	73	73	73	73
CA101	81	81	81	81	81	81	81	81	81	81
CA102	100	100	100	100	100	100	100	100	100	100
CA103	83	83	83	83	83	83	83	83	83	83
CA104	96	96	96	96	96	96	96	96	96	96
CA105	63	63	63	63	63	63	63	63	63	63
CA106	92	92	92	92	92	92	92	92	92	92
AM108	79	79	79	79	79	79	79	79	79	79
CA109	77	77	77	77	-	77	77	77	77	77
CA110	92	92	92	92	92	92	92	92	92	92
CA107	58	58	58	58	58	58	58	58	58	58
CA108	81	81	81	81	81	81	81	81	81	81
CA112	65	65	65	65	65	65	65	65	65	65
CA111	79	79	79	79	79	79	79	79	79	79
AM109	71	71	71	71	71	71	71	71	71	71
CA113	63	63	63	63	63	63	63	63	63	63
CA114	79	79	79	79	79	79	79	79	79	79
CA115	65	65	65	65	65	65	65	65	65	65
CA116	79	79	79	79	79	79	79	79	79	79
CA117	63	63	63	63	63	63	63	-	63	63
CA118	69	69	69	69	69	69	69	69	69	69
CA119	63	63	-	63	63	63	63	63	63	63
CA121	92	92	92	92	92	92	92	92	92	92
CA122	83	83	83	83	83	83	83	83	83	83
CA123	92	92	-	92	92	92	92	92	92	92
CA124	83	83	83	83	83	83	-	-	83	83
CA125	92	92	92	92	92	92	92	92	92	92
CA126	96	96	96	96	96	96	96	96	96	96
CA127	96	96	96	96	96	96	96	96	96	96
CA128	100	100	100	-	100	100	-	100	100	100

CA129	100	100	100	100	-	100	100	-	100	100
CA131	96	96	96	96	96	96	96	96	96	96
CA130	100	100	100	-	100	100	100	100	100	100
CA132	83	83	83	83	-	83	83	83	83	83
CA133	90	90	90	-	-	90	90	90	90	90
CA135	100	100	100	100	100	100	100	-	100	100
CA136	79	79	79	-	79	79	79	-	79	79
CA137	100	100	100	100	100	100	100	100	100	100
CA138	98	98	98	98	98	98	98	-	98	98
CA139	100	100	100	-	100	100	100	-	100	100
CL205	67	-	-	67	-	67	67	67	67	67
CA140	98	98	-	98	98	98	-	98	98	98
HUL2101	88	88	-	88	88	88	88	88	-	88
POA	83.8	84.2	84.1	82.5	83.8	83.8	83.1	82.8	83.7	83.79

Representation of PO attainment:

Course vs PO Attainment

PO Attainment (%)

Program Outcome	Value
1	83.79
2	84.19
3	84.08
4	82.57
5	83.84
6	83.9
7	83.05
8	82.89
9	83.8
10	83.79

Program Outcome

Analysis -

The representation shows that the students of batch 2018 have successfully attained a minimum of 82% . This indicates that the evaluation pattern has been consistent in terms of questions asked and the marks obtained by the students have been consistent. Though this is on a higher side of the scale as the maximum achieved percentage is 84% but still we can infer that the students have overall attained the Program outcomes.

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CLO PO ATTAINMENT FOR AM 107 (Foundation Course in Mathematics)

The average attainment of each CLO with corresponding PO is shown in the table below. The value of 1 means that the 100% attainment. For this particular course the average attainment is 0.7 which is a good attainment value.
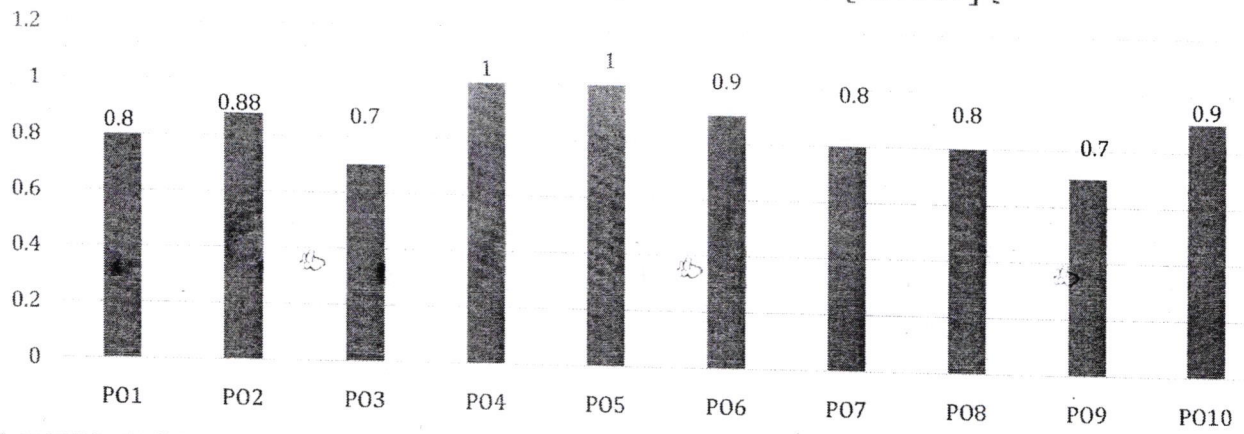
AM107	Foundation Course in Mathematics	CLO 1. Student will construct and analyze the graphs of trigonometry functions. Students will apply the concepts of trigonometry to any angle in a rectangular co-ordinate plane.
		CLO 2. Describe how circle, parabola, ellipse and hyperbola form the sections of cone and drive the standard equations of conics.
		CLO 3. Understand the respective application areas such as maxima-minima and area of a plane region through an overview of differentiation and integration respectively.
		CLO 4. Enhance mathematical skills to solve computer related problems.
		CLO 5. Develop Skills to correlate programming problems with mathematics.

TABLE CLO-PO ATTAINMENT FOR AM107

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CLO1	0.7	1	0.7		1	0.7	0.7	1		1
CLO2		0.7	0.7	1		1			0.7	0.7
CLO3	1	0.7			1		1	0.7		
CLO4		1		1	1	1		0.7	0.7	
CLO5	0.7	1	0.7				0.7			1
AVG	0.8	0.88	0.7	1	1	0.9	0.8	0.8	0.7	0.9

Foundation Course in Mathematics [AM107]

Bar chart showing values for PO1 through PO10:
- PO1: 0.8
- PO2: 0.88
- PO3: 0.7
- PO4: 1
- PO5: 1
- PO6: 0.9
- PO7: 0.8
- PO8: 0.8
- PO9: 0.7
- PO10: 0.9