

HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY
INFORMATION TECHNOLOGY
 2021-22

SEMESTER	4TH	COURSE TEACHER	MR. AJAY PARASHAR
COURSE CODE	KCS401	COURSE TITLE	OPERATING SYSTEM

CO - PO Mapping

COS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	-	-	-	-	-	-	2	-	3	3	3	-
CO2	3	3	2	1	-	-	-	-	-	1	-	3	3	3	-
CO3	3	3	3	3	-	-	-	-	-	2	-	3	3	3	-
CO4	3	3	2	3	-	-	-	1	-	2	-	3	3	3	-
CO5	3	2	3	2	-	-	-	2	-	1	-	3	3	3	-
Average	3	2.6	2.4	2.25	0	0	0	1.5	0	1.6	0	3	3	3	0

Course Outcome	CO - PO Mapping Justification	INTERNAL ATTAINMENT GUIDELINES			
CO1	PO1: Strongly mapped as the students will be able to gain foundational concepts of OS and their types. PO2: Moderately mapped as the students will be able to identify the types of OS and will be able to suggest problems associated with particular OS and how to solve it. PO3: Moderately mapped as the students will be to develop engineering based solutions related to OS. PO10: Moderately mapped as the students will be able to communication about the types of OS and Kernels along with the problems associated with	LESS THAN		40	0
		>40 & LESS THAN		60	1
CO2	PO1: Strongly mapped as the students will be able to gain the basic idea of concurrent processes. PO2: Strongly mapped as the students will be able to identify the problems related to concurrent processes in OS and their solutions. PO3: Moderately mapped as the students will be able to solve real life	>60 & LESS THAN		80	2

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CO2	<p>PO1: Moderately mapped as the students will be able to solve real life problems such as producer consumer problem, dining philosophers types of issues.</p> <p>PO4: Weakly mapped as the students will be able to try and conduct investigations related to problems related to OS.</p>	GREATER THAN	80	3	
CO3	<p>PO1: Strongly mapped as the students will be able to gain the idea of CPU scheduling algorithms and deadlock.</p> <p>PO2: Strongly mapped as the students will be able to identify the problems related to CPU scheduling and deadlocks along with their resolutions.</p> <p>PO3: Strongly mapped as the students will be able to solve real life problems such as deadlocks in OS.</p> <p>PO4: Strongly mapped as the students will be able to conduct investigations related to problems related to CPU scheduling and Deadlocks such as the factors and conditions related to them.</p>				
		ATTAINMENT GUIDELINES			
CO4	<p>PO1: Strongly mapped as the students will be able to gain the idea of memory management schemes.</p> <p>PO2: Strongly mapped as the students will be able to identify the problems related to memory management such as fragmentation, thrashing etc.</p> <p>PO3: Moderately mapped as the students will be able to solve real life problems related to paging, segmentation and virtual memory etc.</p> <p>PO4: Strongly mapped as the students will be able to conduct investigations related to MFT, MVT, paging, segmentation, and virtual memory.</p> <p>PO8: Weakly mapped as students will get the idea about the use of memory</p>	LESS THAN	35	0	
		>40 & LESS THAN	40	1	
CO5	<p>PO1: Strongly mapped as the students will be able to gain the idea of disk scheduling in depth.</p> <p>PO2: Moderately mapped as the students will be able to identify the problems related to disk scheduling schemes such as FCFS, SSTF etc.</p> <p>PO3: Strongly mapped as the students will be able to solve real life problems related to disk scheduling in minimum time as possible.</p> <p>PO4: Moderately mapped as the students will be able to conduct investigations related disk management strategies, file handling techniques etc.</p>	>50 & LESS THAN	55	2	
		GREATER THAN	65	3	
Course Outcome	CO - PSO Mapping Justification	DIRECT ATTAINMENT RATIO			

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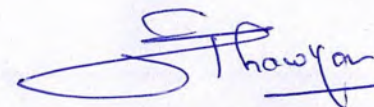
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CO1	PSO1: Strongly mapped as the students will be able to get latest knowledge related to types of OS and will be able to understand real world issues. PSO2: Strongly mapped as the students will be able to use their communication skills while learning and will be able to understand how OS is used for problem solving.	INTERNAL			0.30		
CO2	PSO1: Strongly mapped as the students will be able to learn new skills to understand topics such as critical sections, semaphores etc. PSO2: Strongly mapped as the students will be able to use their critical thinking and problem solving skills to solve issue related to process synchronization.	EXTERNAL			0.70		
CO3	PSO1: Strongly mapped as the students will be able to get the idea of latest algorithms used in CPU scheduling and how OS deals with deadlocks. PSO2: Strongly mapped as the students will be able to use their problem solving skills along with critical thinking to find the solutions of problems related to CPU scheduling and deadlocks.						
CO4	PSO1: Strongly mapped as the students will be able to learn latest techniques used in memory management in OS such virtual memory, buddy systems etc. PSO2: Strongly mapped as the students will be able to use their critical thinking and problem solving to solve issue related to MFT, MVT, paging, segmentation etc.	OVERALL ATTAINMENT RATIO					
CO5	PSO1: Strongly mapped as the students will be able to learn latest techniques used in file management, file allocation techniques and storage techniques such as RAID. PSO2: Strongly mapped as the students will be able to use their critical thinking and problem solving to solve issue related to file allocations, disk	DIRECT			0.80		
		INDIRECT			0.20		

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INFORMATION TECHNOLOGY
2021-22

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COURSE CODE	KCS401	COURSE TITLE	OPERATING SYSTEM

Roll No	CT MARKS OUR OF 30					TA + AT MARKS										Total		
	Internal Marks					Internal Additional Assessment					Internal Marks							
	7	6	6	6	5	4	4	4	4	4	11	10	10	10	9	CT	TA	
	CO1	CO2	CO3	CO4	CO5	CO1	CO2	CO3	CO4	CO5	CO1	CO2	CO3	CO4	CO5	30	20	
2000640130001	4.2	3.6	3.6	3.6	3	2.4	2.4	2.4	2.4	2.4	6.6	6	6	6	5.4	18	12	30
2000640130003	6.3	5.4	5.4	5.4	4.5	4	4	4	4	4	10	9.4	9.4	9.4	8.5	27	20	47
2000640130004	4.7	4	4	4	3.3	3	3	3	3	3	7.7	7	7	7	6.3	20	15	35
2000640130005	4.2	3.6	3.6	3.6	3	2.4	2.4	2.4	2.4	2.4	6.6	6	6	6	5.4	18	12	30
2000640130006	7.0	6	6	6	5	4	4	4	4	4	11	10	10	10	9	30	20	50
2000640130007	4.2	3.6	3.6	3.6	3	2.4	2.4	2.4	2.4	2.4	6.6	6	6	6	5.4	18	12	30
2000640130008	6.3	5.4	5.4	5.4	4.5	4	4	4	4	4	10	9.4	9.4	9.4	8.5	27	20	47
2000640130009	4.7	4	4	4	3.3	2.4	2.4	2.4	2.4	2.4	7.1	6.4	6.4	6.4	5.7	20	12	32
2000640130010	5.1	4.4	4.4	4.4	3.7	2.6	2.6	2.6	2.6	2.6	7.7	7	7	7	6.3	22	13	35
2000640130011	4.7	4	4	4	3.3	3	3	3	3	3	7.7	7	7	7	6.3	20	15	35

STUDENT FEEDBACK ON THE BASIS OF PERCENTAGE DIVIDE EQUALLY IN ALL CO'S					University Exam Marks	
Informal Attainment					External Marks	
3	3	3	3	3	100	
CO1	CO2	CO3	CO4	CO5	ALL COs	
3	2	3	3	3	48	
3	2	3	2	2	44	
3	3	3	2	3	58	
2	2	2	3	2	38	
3	3	3	3	3	78	
2	3	2	3	3	43	
2	2	3	3	3	34	
2	2	2	2	2	19	
3	3	3	3	2	64	
2	3	2	3	2	41	

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COURSE OUTCOME ATTAINMENT CALCULATIONS

INTERNAL ATTAINMENT GUIDELINES

LESS THAN	40	0
>40 & LESS THAN	60	1
>60 & LESS THAN	80	2
GREATER THAN	80	3

EXTERNAL ATTAINMENT GUIDELINES

LESS THAN	35	0
>40 & LESS THAN	40	1
>50 & LESS THAN	55	2
GREATER THAN	65	3

DIRECT ATTAINMENT RATIO

INTERNAL	0.300
EXTERNAL	0.700

OVERALL ATTAINMENT RATIO

DIRECT	0.80
INDIRECT	0.20

STD No	Internal Marks					Internal Marks Percentage					Internal Attainment					External Percentage					External Marks	External Attainment					DIRECT (Internal + External) Attainment					Informal Attainment					overall Attainment					
	11	10	10	10	9	50	11	10	10	10	9						20	20	20	20		20	100	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO1	CO2	CO3	CO4	CO5	total	CO1	CO2	CO3	CO4	CO5	CO1	CO2	CO3	CO4	CO5	CO1	CO2	CO3	CO4	CO5	ALL COs	CO1	CO2	CO3	CO4	CO5	CO1	CO2	CO3	CO4	CO5	CO1	CO2	CO3	CO4	CO5	CO1	CO2	CO3	CO4	CO5
2000640130001	6.6	6	6	6	5.4	30	60	60	60	60	60	2	2	2	2	2	48	48	48	48	48	48	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	2.2	2	2.2	2.2	2.2
2000640130003	10	9.4	9.4	9.4	8.5	47	94	94	94	94	94	3	3	3	3	3	44	44	44	44	44	44	2	2	2	2	2	2.3	2.3	2.3	2.3	2.3	3	2	3	2	2	2.4	2.2	2.4	2.2	2.2
2000640130004	7.7	7	7	7	6.3	35	70	70	70	70	70	2	2	2	2	2	58	58	58	58	58	58	3	3	3	3	3	2.7	2.7	2.7	2.7	2.7	3	3	3	2	2.5	2.8	2.8	2.8	2.6	2.7
2000640130005	6.6	6	6	6	5.4	30	60	60	60	60	60	2	2	2	2	2	38	38	38	38	38	38	1	1	1	1	1	1.3	1.3	1.3	1.3	1.3	2	2	2	3	2	1.4	1.4	1.4	1.6	1.4
2000640130006	11	10	10	10	9	50	100	100	100	100	100	3	3	3	3	3	78	78	78	78	78	78	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2000640130007	6.6	6	6	6	5.4	30	60	60	60	60	60	2	2	2	2	2	43	43	43	43	43	43	2	2	2	2	2	2	2	2	2	2	2	3	2	3	3	2.2	2	2.2	2	2.2
2000640130008	10	9.4	9.4	9.4	8.5	47	94	94	94	94	94	3	3	3	3	3	34	34	34	34	34	34	0	0	0	0	0	0.9	0.9	0.9	0.9	0.9	2	2	3	2.5	3	1.1	1.1	1.3	1.2	1.3
2000640130009	7.1	6.4	6.4	6.4	5.7	32	64	64	64	64	64	2	2	2	2	2	19	19	19	19	19	19	0	0	0	0	0	0.6	0.6	0.6	0.6	0.6	2	2	2	2	2	0.9	0.9	0.9	0.9	0.9
2000640130010	7.7	7	7	7	6.3	35	70	70	70	70	70	2	2	2	2	2	64	64	64	64	64	64	3	3	3	3	3	2.7	2.7	2.7	2.7	2.7	3	3	3	2.5	2	2.8	2.8	2.8	2.7	2.6
2000640130011	7.7	7	7	7	6.3	35	70	70	70	70	70	2	2	2	2	2	41	41	41	41	41	41	2	2	2	2	2	2	2	2	2	2	2	3	2	3	2	2.1	2.1	2.1	2.1	2.1
																									2.066																	

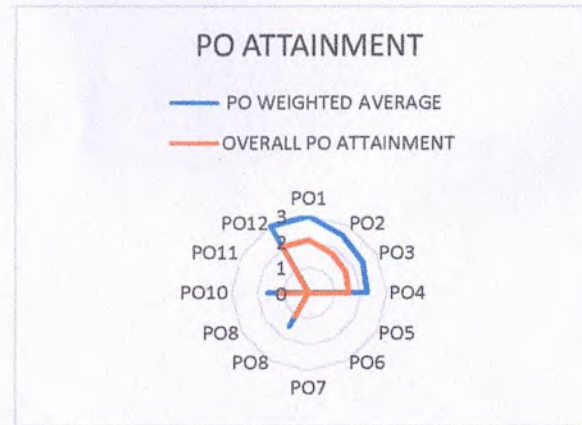
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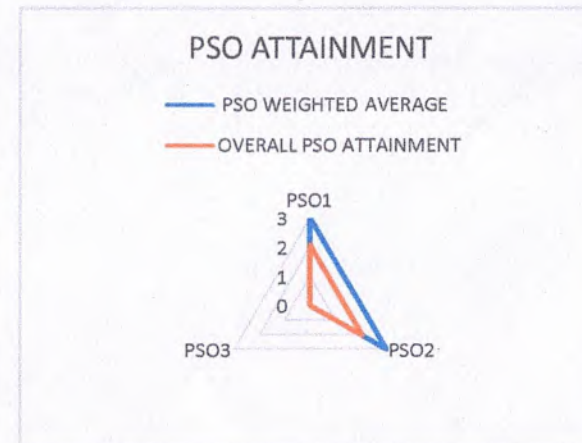
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PROGRAM AND PROGRAM SPECIFIC OUTCOME ATTAINMENT CALCULATIONS

Evaluation of PO Attainment			
AVERAGE CO ATTAINMENT			2.066
	PROGRAM OUTCOME	PO WEIGHTED AVERAGE	OVERALL PO ATTAINMENT
	PO1	3	2.066
	PO2	2.6	1.790533333
	PO3	2.4	1.6528
	PO4	2.25	1.5495
	PO5	0	0
	PO6	0	0
	PO7	0	0
	PO8	1.5	1.033
	PO8	0	0
	PO10	1.6	1.101866667
	PO11	0	0
	PO12	3	2.066



Evaluation of PSO Attainment			
AVERAGE CO ATTAINMENT			2.066
	PROGRAM SPECIFIC OUTCOMES	PSO WEIGHTED AVERAGE	OVERALL PSO ATTAINMENT
	PSO1	3	2.066
	PSO2	3	2.066
	PSO3	0	0



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HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

WEIGHTED AVERAGE OF CO-PO Mapping (2019-23 Batch)

S NO.	SESSION	SEM	SUB CODE	SUB NAME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3				
1	2019-20	I	KAS103	Maths I	3.00	2.80	2.40									2.00							
2			KAS101	Physics	3.00	3.00					3.00						2.40						
3			KEE101	Basic Electrical Engineering	3.00	2.72	2.00																
4			KEE101P	EE Lab	2.00	2.20	1.80																
5			KAS101P	Physics Lab	2.20	2.00	1.25	1.25							3.00			2.00					
6			KWS201	Workshop Lab	3.00		3.00								3.00								
7		II	KAS203	Maths II	3.00	3.00	2.80										2.80						
8			KAS102	Chemistry	2.20		3.00					1.80						1.40					
9			KCS201	CCP	3.00	3.00	3.00											3.00					
10			KAS204	Professional English											2.60	2.60		2.60					
11			KCE201	Graphics Lab	2.00			2.00	3.00														
12			KAS102P	Chemistry Lab	1.00	2.00				1.25	1.00				1.20			1.40					
13			KCE201P	CCP Lab	3.00	3.00	3.00											3.00					
14	2020-21	III	KAS301	Technical Communication					2.00				1.00	3.00		2.00	1.20	1.00					
15			KAS302	MATHS-IV	2.60	2.80	1.60	2.67									2.00		2.00				
16			KCS301	Data Structure	3.00	3.00	3.00	2.60	2.40				1.60		1.80	2.60	3.00	2.60	3.00				
17			KCS302	COA	3.00	2.00	1.00												1.00	1.00			
18			KCS303	Discrete Structure & Theory of Logic	2.60	2.00	3.00	1.50	1.67									1.20	1.80	1.60			
19			KCS351	Data Structure LAB	2.40	2.20	2.40	2.40	2.40						2.80	2.40	2.60	3.00	3.00				
20			KCS352	Computer Organisation LAB	1.20	1.80	1.33												1.80	1.00			
21			KCS 353	Discrete Structure & Theory of Logic LAB	2.80	2.00	2.20	1.80	1.80									2.00	1.40	1.00			
22			KCS354	Industrial Training LAB	2.25	2.00	1.75	2.25	1.33						1.25		1.25	1.25	1.50	1.50	1.50		
23			IV	KCS401	Operating System	3.00	2.60	2.40	2.25					1.50		1.60		3.00	3.00	3.00			
24	KCS402	Theory & Formal Language		1.20	2.20	2.20	1.60										1.20	1.60	1.80	1.00			
25	KIT401	Web Design		1.80	1.80	2.60	1.20	2.00				2.00	2.00	2.00	2.00	2.20	2.60	2.00					
26	KOE048	Electronics Engg.		3.00	2.00	1.00												1.00	1.00				
27	KVE401	Universal Human Values											3.00				3.00						
28	KCS451	Operating System LAB		3.00	3.00	2.60	3.00	1.50						1.00			2.00	3.00	3.00				
29	KIT451	Web Design LAB		2.00	1.60	1.40	2.00	1.60						1.25	1.50	2.50	2.60	1.40	1.20				
30	KCS453	Python Programming LAB		2.80	2.80	2.80	2.00	2.60					2.00	1.00	1.00	2.00	2.60	2.00	2.40				
31		KCS058	Human Computer Interface	2.25	2.67	3.00		2.00									1.40	1.60					
32		KCS501	Database Management System	2.60	2.40	3.00	2.50	2.40					2.00	1.40	2.20	1.40	2.20	2.80	2.60	2.60			
33		KCS503	Design Analysis & Algorithms	3.00	2.40	3.00		2.60					2.00	1.00	2.00	2.00	3.00	3.00	2.60	2.40			

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34	2021-22	V	KIT052	Compiler Design	2.00	2.20	2.60	2.00	1.20					1.00	2.20	1.20	1.20		
35			KIT501	Web Technology	2.40	2.80	2.00	1.00	1.80			2.00		2.00	2.00	2.20	3.00	2.60	
36			KCS551	Database Management System LAB	2.00	2.80	2.80	2.00	3.00			2.00	2.00	1.00	1.00	2.00	2.20	2.00	
37			KCS553	Design Analysis & Algorithms LAB	2.00	3.00	3.00	2.00	3.00			2.00	1.00	1.00	1.00	2.00	3.00	3.00	
38			KIT553	Web TechnologyLAB	3.00	2.00	2.00	1.00	2.00				3.00	2.00	2.40	3.00	3.00	2.60	
39			KCS554	Industrial Training LAB	1.50	2.00	1.50	1.50	1.25	1.00		1.00	1.50	1.33	1.50	1.25	2.25	2.00	2.25
40			KCS064	Data Compression	2.40	2.20	2.60		1.00							2.00	1.60	1.60	
41		KCS601	Software Engg.	2.20	2.20	2.20	1.60	1.75	1.00			1.00		1.80	2.80	2.00	2.00		
42		KCS603	Computer Networks	2.20	2.00	2.40		3.00			2.00	1.20	2.00	2.00	2.60	2.60	2.60	2.40	
43		KIT601	Data Analytics	2.80	2.60	3.00	3.00	3.00	1.00	1.00	1.00	2.00	2.00	2.00	2.20	3.00	2.40		
44		KNC602	ICT									3.00	2.00			2.80			
45		KCS651	Software Engg. LAB	2.60	2.60	2.50	2.75	2.00		1.00	1.00	1.00	1.00	1.50	2.60	1.60	1.40		
46		KIT651	Data Analytics LAB	3.00	3.00	3.00	3.00	3.00							2.00	3.00	3.00		
47		KCS653	Computer Networks LAB	2.20	2.80	2.80		3.00			2.00	1.00	2.00	1.80	3.00	2.00	2.00	2.20	
48	2022-23	VII	KCS074	Cryptography & Network Security	2.33	2.67			2.33							2.25	2.00		
49			KHU701	Rural Development						1.60	2.00	1.60	2.00		1.00	1.60			2.00
50			KIT071	Software Project Management	2.25	2.67	3.00		2.00								1.40	1.60	
51			KOE076	Vision for Human Society					1.00	1.67	2.00	1.75		1.33		2.00	1.20	1.00	
52			KIT751A	Cryptography & Network Security LAB	2.60	2.80	3.00				2.50						1.20	1.20	
53		KIT752	Industrial Training LAB	1.40	1.80	2.20	1.80	2.00	1.60		1.60	1.80	1.50	1.60	1.60	2.20	1.80	2.00	
54		KIT753	PROJECT-I	1.60	2.20	2.25	1.80	1.40	1.00	1.00	1.00	1.80	1.00	2.25	2.00	2.20	2.00	2.40	
55		VIII	KHU802	Cloud Computing	2.67	2.00	3.00		2.50							1.67	2.33		
56			KOE094	Digital & Social Media Marketing	2.40	2.00	2.25	1.75	2.25	1.33	2.00	2.00	1.75	3.00	2.00	2.50	1.40	1.60	
57			KHU802	Project Management & Entrepreneurship	2.00	3.00				2.00	2.67	2.25	2.50				1.80	1.60	
58	KIT851		PROJECT-II	1.60	2.20	2.25	1.80	1.40	1.00	1.00	1.00	1.80	1.00	2.25	2.00	2.20	2.00	2.40	
WEIGHTED AVERAGE					2.39	2.42	2.40	2.00	2.07	1.43	1.70	1.80	1.68	1.78	1.80	2.24	2.05	1.95	2.10

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HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

AVERAGE OF FINAL ATTAINMENT (2019-23 Batch)

S NO.	SESSION	SEM	SUB CODE	SUB NAME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3		
1	2019-20	I	KAS103	Maths I	1.95	1.82	1.56									1.30					
2			KAS101	Physics	2.62	2.62					2.62						2.62				
3			KEE101	Basic Electrical Engineering	2.04	1.87	1.36														
4			KEE101P	EE Lab	1.69	1.86	1.54														
5			KAS101P	Physics Lab	2.12	1.93	1.21	1.21						2.89			1.93				
6			KWS201	Workshop Lab	0.15		0.15								0.15						
7		II	KAS203	Maths II	2.28	2.28	2.12										2.12				
8			KAS102	Chemistry	1.71		2.33					1.40					1.09				
9			KCS201	CCP	0.13	0.13	0.13										0.13				
10			KAS204	Professional English											1.13	1.13		1.13			
11			KCE201	Graphics Lab	1.71			1.71	2.57												
12			KAS102P	Chemistry Lab	0.93	1.85			0.93	0.93					0.93			0.93			
13			KCE201P	CCP Lab	2.61	2.61	2.61											2.61			
14	2020-21	III	KAS301	Technical Communication					1.37				0.68	2.06		1.37	0.82	0.68			
15			KAS302	MATHS-IV	1.15	1.24	0.71	1.18									0.89		0.89		
16			KCS301	Data Structure	2.36	2.36	2.36	2.04	1.89				1.26		1.42	2.04	2.36	2.04	2.36		
17			KCS302	COA	1.70	1.13	0.56											0.56	0.56		
18			KCS303	Discrete Structure & Theory of Logic	1.85	1.42	2.13	1.06	1.18								0.85	1.28	1.14		
19			KCS351	Data Structure LAB	2.28	2.09	2.28	2.28	2.28						2.66	2.28	2.47	2.85	2.85		
20			KCS352	Computer Organisation LAB	1.17	1.75	1.30											1.75	0.97		
21			KCS 353	Discrete Structure & Theory of Logic LAB	2.66	1.90	2.09	1.71	1.71								1.90	1.33	0.95		
22		KCS354	Industrial Training/Internship LAB	1.96	1.74	1.52	1.96	1.16					1.09		1.09	1.09	1.30	1.30	1.30		
23		IV	KCS401	Operating System	2.90	2.50	2.40	2.20					1.50		1.60		2.90	2.90	2.90		
24			KCS402	Theory & Formal Language	1.04	1.92	1.92	1.39									1.04	1.39	1.57	0.87	
25			KIT401	Web Design	1.69	1.69	2.45	1.13	1.88				1.88	1.88	1.88	1.88	2.07	2.45	1.88		
26			KOE048	Electronics Engg.	2.01	1.34	0.67											0.67	0.67		
27			KVE401	Universal Human Values										2.93				2.93			
28	KCS451		Operating System LAB	2.80	2.80	2.43	2.80	1.40					0.93				1.87	2.80	2.80		
29	KIT451	Web Design LAB	1.91	1.53	1.34	1.91	1.53					1.19	1.43	2.39	2.49	1.34	1.15				
30	KCS453	Python Programming LAB	2.55	2.55	2.55	1.82	2.37					1.82	0.91	0.91	1.82	2.37	1.82	2.19			
31			KCS058	Human Computer Interface	1.45	1.72	1.93		1.29								0.93	1.03			
32			KCS501	Database Management System	1.75	1.62	2.02	1.69	1.62				1.35	0.94	1.48	0.90	1.48	1.89	1.75	1.75	

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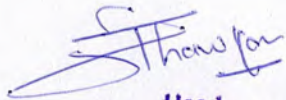
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33	2021-22	V	KCS503	Design Analysis & Algorithms	1.95	1.56	1.95		1.69			1.30	0.65	1.30	1.30	1.95	1.95	1.69	1.56	
34			KIT052	Compiler Design	1.26	1.38	1.64	1.26	0.75						0.63	1.38	0.75	0.75		
35			KIT501	Web Technology	1.09	1.28	0.91	0.45	0.82				0.91		0.91	0.91	1.00	1.37	1.18	
36			KCS551	Database Management System LAB	1.78	2.49	2.49	1.78	2.66				1.78	1.78	0.89	0.89	1.78	1.95	1.78	
37			KCS553	Design Analysis & Algorithms LAB	1.69	2.54	2.54	1.69	2.54				1.69	0.85	0.85	0.85	1.69	2.54	2.54	
38			KIT553	Web TechnologyLAB	2.62	1.75	1.75	0.87	1.75					2.62	1.75	2.09	2.62	2.62	2.27	
39			KCS554	Industrial Training LAB	1.25	1.67	1.25	1.25	1.04	0.83			0.83	1.25	1.11	1.25	1.04	1.88	1.67	1.88
40		VI	KCS064	Data Compression	1.96	1.79	2.12		0.81							1.63	1.30	1.30		
41			KCS601	Software Engg.	1.52	1.52	1.52	1.11	1.21	0.69			0.69			1.24	1.94	1.39	1.38	
42			KCS603	Computer Networks	1.24	1.13	1.35		1.69				1.13	0.67	1.13	1.13	1.47	1.47	1.47	1.35
43			KIT601	Data Analytics	1.92	1.78	2.05	2.05	2.05	0.68	0.68	0.68	1.37	1.37	1.37	1.37	1.51	2.05	1.64	
44			KNC602	ICT									2.16	1.44			2.02			
45			KCS651	Software Engg. LAB	2.54	2.54	2.44	2.68	1.95		0.97	0.97	0.97	0.97	0.97	1.46	2.54	1.54	1.36	
46			KIT651	Data Analytics LAB	2.81	2.81	2.81	2.81	2.81								1.87	2.81	2.81	
47	KCS653	Computer Networks LAB	2.05	2.61	2.61		2.79				1.86	0.93	1.86	1.67	2.79	1.86	1.86	2.05		
48	2022-23	VII	KCS074	Cryptography & Network Security	1.61	1.84			1.61								1.56	1.38		
49			KHU701	Rural Development						1.11	1.39	1.11	1.39			0.69	1.11			1.39
50			KIT071	Software Project Management	1.71	2.02	2.28		1.52									1.06	1.21	
51			KOE076	Vision for Human Society					0.61	1.03	1.23	1.08			0.82		1.23	0.74	0.61	
52			KIT751A	Cryptography & Network Security LAB	2.29	2.46	2.64						2.20					1.05	1.05	
53			KIT752	Industrial Training/Internship LAB	1.10	1.42	1.73	1.42	1.57	1.26		1.26	1.42	1.18	1.26	1.26	1.73	1.42	1.57	
54		KIT753	PROJECT-I	1.14	1.57	1.61	1.29	1.00	0.71	0.71	0.71	1.29	0.71	1.61	1.43	1.57	1.43	1.72		
55		VIII	KHU802	Cloud Computing	1.86	1.39	2.09		1.74								1.16	1.62		
56			KOE094	Digital & Social Media Marketing	1.09	0.90	1.02	0.79	1.02	0.60	0.90	0.90	0.79	1.36	0.90	1.13	0.63	0.72		
57			KHU802	Project Management & Entrepreneurship	1.18	1.74				1.18	1.58	1.33	1.48				1.07	0.95		
58	KIT851		PROJECT-II	1.36	1.87	1.92	1.53	1.19	0.85	0.85	0.85	1.53	0.85	1.92	1.70	1.87	1.70	2.05		
WEIGHTED AVERAGE					1.77	1.84	1.80	1.62	1.61	1.04	1.19	1.36	1.21	1.32	1.40	1.71	1.61	1.51	1.59	

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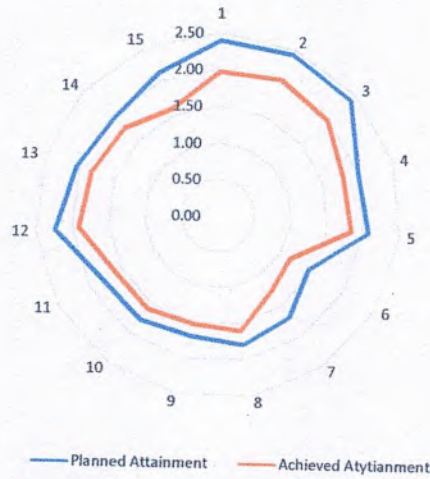

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OVERALL ATTAINMENT CALCULATIONS

Direct/Indirect Attainment	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Direct Attainment	1.77	1.84	1.80	1.62	1.61	1.04	1.19	1.36	1.21	1.32	1.40	1.71	1.61	1.51	1.59
Informal Attainment	2.71	2.86	2.71	2.43	2.71	1.57	1.57	2.57	2.71	2.71	2.43	2.71	2.71	2.71	1.57
80% of the Direct Attainment	1.42	1.47	1.44	1.30	1.29	0.83	0.95	1.09	0.97	1.05	1.12	1.37	1.29	1.21	1.27
20% of the Informal Attainment	0.54	0.57	0.54	0.49	0.54	0.31	0.31	0.51	0.54	0.54	0.49	0.54	0.54	0.54	0.31
Overall Attainment	1.96	2.05	1.98	1.78	1.83	1.15	1.27	1.60	1.51	1.60	1.60	1.91	1.83	1.75	1.59

Planned Attainment	2.39	2.42	2.40	2.00	2.07	1.43	1.70	1.80	1.68	1.78	1.80	2.24	2.05	1.95	2.10
Achieved Attytiament	1.96	2.05	1.98	1.78	1.83	1.15	1.27	1.60	1.51	1.60	1.60	1.91	1.83	1.75	1.59

**Overall Attainment Vs Planned Attainment
POs and PSOs for
BTech Information Technology Program
2019-2023**



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