



Kalyani Charitable Trust's
Late G. N. Sapkal College of Engineering
Kalyani Hills, Anjaneri, Trimbakeshwar Road,
Nashik – 422 213
Department of Computer Engineering
CO/PO/PSO Overall Mapping
A.Y.2023-24, SEM-I



S.E. Computer (2019 Course)

Sr. No.	Course/ Subject	Course Code Number
1	Discrete Mathematics	C201
2	Fundamental of Data Structure	C202
3	Object Oriented Programming	C203
4	Computer Graphics	C204
5	Digital Electronics & Logic Design	C205
6	Object Oriented Programming & Computer Graphics Lab	C206
7	Business Communication Skills	C207
8	Humanity & Social Science	C208

T.E. Computer (2019 Course)

Sr. No.	Course/ Subject	Course Code Number
1	Database Management Systems	C301
2	Theory of Computation	C302
3	System Programming & Operating System	C303
4	Computer Network & Security	C304
5	Elective I Software Project Management	C305D
6	LP-I (SPOS+SPM)	C306
7	Seminar and Technical Communication	C307



B.E. Computer (2019 Course)

Sr. No.	Course/ Subject	Course Code Number
1	Design & Analysis of Algorithm	C401
2	Machine Learning	C402
3	Block chain Technology	C403
4	Elective III Cyber Security & Digital Forensics	C404C
5	Elective IV Software Testing & Quality Assurance	C405D
6	Lab Practice -III (DAA+ ML+BT)	C406
7	Lab Practice -IV (OOMD+STQA)	C407
8	Project Stage I	C408



Table 1: Program level Course-PO matrix for all the courses

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C201	1.2	1.67	1.8	1.6	0	0	0	0	0	0	0	0
C202	1.17	1.4	1.2	1.25	1	0	0	0	0	0	0	0
C203	1.75	1.2	1.4	1.2	0	0	0	0	0	0	0	0
C204	1.8	1.5	1.2	1	0	0	0	0	0	0	0	1
C205	2	1.33	2	1	0	0	0	0	0	0	0	0
C206	1.5	1.4	1.8	1	0	0	0	0	0	0	0	0
C207	0	0	0	0	0	0	0	0	0	0	0	0
C208	0	0	0	0	0	0	0	0	2.5	2	1	1.66
C301	2	2	2.8	1.5	1	2	1	1	2	0	0	1
C302	2	1.33	2.5	0	2.33	1	1.33	0	3	1.33	1.33	2.66
C303	2	1.66	1.5	1.33	0	0	0	0	0	0	0	1
C304	2	1.33	2.5	0	2.16	1	1.5	1	3	1.33	1.33	1.25
C305D	0	0	1.5	1.5	1.33	0	0	0	1.66	1	3	0
C306	1	2	1.75	2	2.25	0	0	0	1.33	0	1	1
C307	1.5	1.25	1.75	1	0	0	0	0	0	0	0	0
C401	1.83	2.5	2	2	0	0	0	0	0	0	0	2.6
C402	2	1.75	2	1.17	1	1	1	1	1	1	1	1
C403	2.83	2.5	2	2	2	0	0	0	0	0	0	2
C404C	1.66	2.66	2.25	2.5	2.16	0	0	0	0	0	0	2.66
C405D	1.33	1.8	1.83	2.16	2.16	1	1	1.33	1.83	1.33	1.66	1
C406	3	2.67	2.67	1.75	1.67	1.33	0	1	2	0	2	2.5
C407	1.16	0	2	2	3	2	0	2	2	2	1.66	2
C408	1.5	1.5	1.67	1	1	0	1	1	1.33	1.33	1.5	1.2
Target level	1.53	1.45	1.74	1.26	1.00	0.41	0.38	0.45	1.03	0.54	0.72	1.14



Table 2: Program level Course-PSO matrix for all the courses

Course	PSO1	PSO2	PSO3
C201	1.14	1	1
C202	1.17	1	1
C203	1	1	1
C204	2	2	2
C205	1.16	1.16	0
C206	2	1.67	0
C207	1	0	0
C208	2	2	0
C301	1.33	1.5	2
C302	2	1	0
C303	1	1	0
C304	1.16	1.16	0
C305D	2	2	2
C306	0	1	1
C307	2	2	2
C401	1.16	1.16	0
C402	1.6	1	1
C403	2.66	2.16	1.5
C404C	1.16	1.16	0
C405D	2	1	0
C406	1.16	1.16	1.25
C407	1.5	1.66	1.33
C408	1.5	1.5	1.5
Target level overall PSOs	1.47	1.32	0.81



Course Outcome Attainment

Course	Theory (%)						Oral / Practical (%)						Term Work (%)					
	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6
C201	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C202	100	100	100	100	100	100	94.37	94.37	94.37	94.37	94.37	94.37	NA	NA	NA	NA	NA	NA
C203	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C204	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C205	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C206	NA	NA	NA	NA	NA	NA	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA
C207	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C301	84.06	84.06	84.06	84.06	84.06	84.06	86.95	86.95	86.95	86.95	86.95	86.95	NA	NA	NA	NA	NA	NA
C302	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C303	82.89	82.89	82.89	82.89	82.89	82.89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C304	100	100	100	100	100	100	91.3	91.3	91.3	91.3	91.3	91.3	NA	NA	NA	NA	NA	NA
C305D	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C306	NA	NA	NA	NA	NA	NA	73.68	73.68	73.68	73.68	73.68	73.68	NA	NA	NA	NA	NA	NA
C307	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C401	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C402	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C403	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C404C	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C405D	77.78	77.78	77.78	77.78	77.78	77.78	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C406	NA	NA	NA	NA	NA	NA	100	100	100	100	100	100	100	100	100	100	100	100
C407	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	100	100	100	100
C408	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	100	100	100	NA



Internal Assessment:

Internal Assessment:

Indirect Assessment:

Course	Course Exit Survey (%)					
	CO1	CO2	CO3	CO4	CO5	CO6
C201	99	95	89.33	96	97.33	96
C202	99	95	96	96	97.33	96
C203	96	95	89	95	97	97
C204	99	97	97	97	96	93
C205	96	97	95	97	99	99
C206	NA	NA	NA	NA	NA	NA
C207	NA	NA	NA	NA	NA	NA
C208	100	100	100	100	100	NA
C301	94.7	99	97	97	96	95
C302	97	100	100	100	100	100
C303	100	97	96	100	100	100
C304	96	94	94	97	96	96
C305D	100	100	99	97	96	96
C306	100	97	96	100	100	100
C307	NA	NA	NA	NA	NA	NA
C401	97	94	95	97	96	96
C402	97.22	97.22	97.22	98.61	98.61	98.61
C403	99	97	97	97	99	99
C404C	97.00	97.00	97.00	97.00	96.00	99.00
C405D	100	97	97	99	99	99
C406	97	94	95	97	96	96
C407	100	97	97	99	99	99
C408	98.61	95.83	93.06	100	97.22	NA



Overall CO Attainment A.Y 2023-24 Sem-I

Course	Direct CO Attainment		Indirect CO Attainment	Overall CO Attainment
	External	Internal		
C201	3	3	3	3
C202	3	2	3	2.82
C203	3	3	3	3
C204	3	3	3	3
C205	3	3	3	3
C206	3	3	NA	3
C207	NA	3	NA	3
C208	NA	3	3	3
C301	3	3	3	3
C302	3	3	3	3
C303	3	3	3	3
C304	3	3	3	3
C305D	1	3	3	1.56
C306	3	3	3	3
C307	NA	3	NA	3
C401	3	3	3	3
C402	3	2	3	2.82
C403	3	3	3	3
C404C	3	3	3	3
C405D	3	3	3	3
C406	3	NA	3	3
C407	3	NA	3	3
C408	3	NA	3	3



Table: 3 PO attainment values

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C201	1.2	1.67	1.8	1.6	0	0	0	0	0	0	0	0
C202	1.1	1.32	1.13	1.18	1.1	0	0	0	0	0	0	0
C203	1.75	1.2	1.4	1.2	0	0	0	0	0	0	0	1
C204	1.8	1.5	1.2	1	0	0	0	0	0	0	0	0
C205	2	1.33	2	1	0	0	0	0	0	0	0	0
C206	1.5	1.4	1.8	1	0	0	0	0	0	0	0	0
C207	0	0	0	0	0	0	0	0	2.5	2	1	1.66
C208	0	0	0	0	0	0	2	2	2	0	0	1
C301	2	2	2.8	1.5	1	2	1	1	2	1	1	2.66
C302	2	1.33	2.5	0	2.33	1	1.33	0	3	1.33	1.33	1.67
C303	2	1.66	1.5	1.33	0	0	0	0	0	0	0	1
C304	2	1.33	2.5	0	2.16	1	1.5	1	3	1.33	1.33	1.25
C305D	0	0	0.78	0.78	0.69	0	0	0	0.86	0.52	1.56	0
C306	1	2	1.75	2	2.25	0	0	0	1.33	0	1	1
C307	1.5	1.25	1.75	1	0	0	0	0	0	0	0	0
C401	1.83	2.5	2	2	0	0	0	0	0	0	0	2.6
C402	1.88	1.645	1.88	1.1	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
C403	2.83	2.5	2	2	2	0	0	0	0	0	0	2
C404C	1.66	2.66	2.25	2.5	2.16	0	0	0	0	0	0	2.66
C405D	1.33	1.8	1.83	2.16	2.16	1	1	1.33	1.83	1.33	1.66	1
C406	3	2.67	2.67	1.75	1.67	1.33	0	1	2	0	2	2.5
C407	1.16	0	2	2	3	2	0	2	2	2	1.66	2
C408	1.5	1.5	1.67	1	1	0	1	1	1.33	1.33	1.5	1.2
Direct PO Attainment	1.52	1.45	1.70	1.22	0.98	0.40	0.38	0.45	0.99	0.51	0.65	1.14
Indirect PO Attainment												
Overall PO Attainment	1.52	1.45	1.70	1.22	0.98	0.40	0.38	0.45	0.99	0.51	0.65	1.14

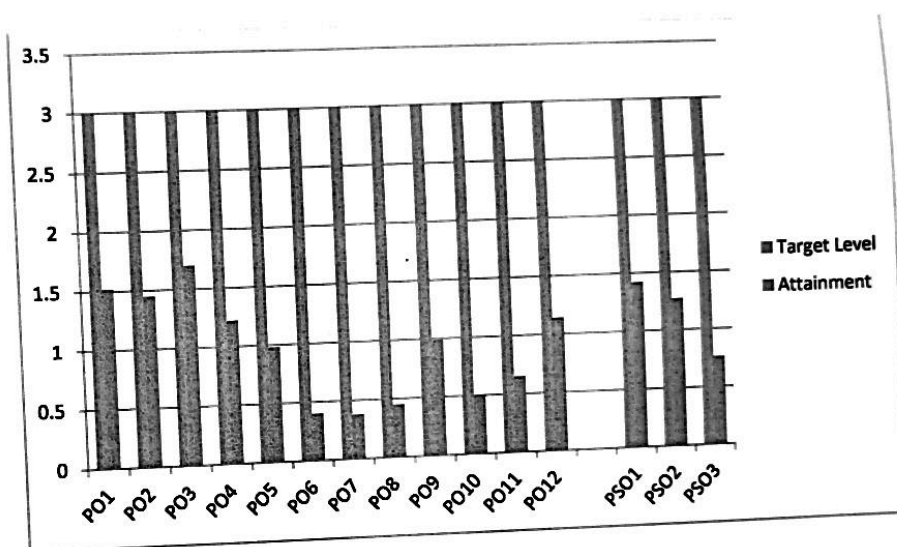


Table: 4 PSO attainment values

Course	PSO1	PSO2	PSO3
C201	1.14	1	1
C202	1.1	0.94	0.94
C203	1	1	1
C204	2	2	2
C205	1.16	1.16	0
C206	2	1.67	0
C207	1	0	0
C208	2	2	0
C301	1.33	1.5	2
C302	2	1	0
C303	1	1	0
C304	1.16	1.16	0
C305D	1.04	1.04	1.04
C306	0	1	1
C307	2	2	2
C401	1.16	1.16	0
C402	1.504	0.94	0.94
C403	2.66	2.16	1.5
C404C	1.16	1.16	0
C405D	2	1	0
C406	1.16	1.16	1.25
C407	1.5	1.66	1.33
C408	1.5	1.5	1.5
Direct PSO Attainment	1.42	1.27	0.76
Indirect PSO Attainment			
Overall PSO Attainment	1.42	1.27	0.76

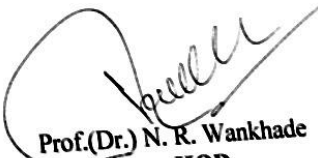


	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12		PSO1	PSO2	PSO3
Target Level	3	3	3	3	3	3	3	3	3	3	3	3		3	3	3
Attainment	1.52	1.45	1.70	1.22	0.98	0.40	0.38	0.45	0.99	0.51	0.65	1.14		1.42	1.27	0.76




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