

Department of Computer Engineering

CO-PO mapping and attainment 2021-22 Sem-II

Program: - Computer Engineering										Class: - S.E.			Div.: NA		
Course Name: - Engineering Mathematics-III										Course Code: - 207003			Course -2019 Course		
Subject Teacher: - Prof. S. R. Shinde										A.Y.: -21-22			SEM-4		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12			
CO1	2	2	--	--	2	2	2	2	--	2	2	2			
CO2	--	2	2	1	1	2	2	2	--	2	2	2			
CO3	3	2	1	2	2	2	2	2	--	2	2	2			
CO4	3	2	2	1	--	2	2	2	2	2	2	2			
CO5	3	2	1	2	1	2	2	2	2	2	2	2			
CO	2.33	2	1.16	1.33	1.16	2	2	2	1	2	2	2			

Program: - Computer Engineering										Class: - S.E.			Div.: NA		
Course Name: -Data Structure and Algorithm										Course Code: - 210252			Course -2019 Course		
Subject Teacher: - Prof. J. P. Kakad										A.Y.: - 21-22			SEM-IV		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12			
CO1	2	1	2	1	2	2	2	2	--	--	2	--			
CO2	1	2	--	--	3	2	1	2	--	--	--	2			
CO3	2	--	--	--	3	1	2	1	--	--	--	2			
CO4	--	2	--	1	2	2	2	2	--	--	--	--			
CO5	1	--	1	1	2	1	1	1	2	1	--	2			
CO6	2	1	1	1	2	2	1	1	2	3	--	2			
CO	1.6	1.5	1.33	1	2.33	1.66	1.5	1.5	2	2	2	2			

Program: - Computer Engineering						Class: - SE				Div.: NA		
Course Name: - Software Engineering						Course Code: - 210253				Course -2019 Course		
Subject Teacher: - Prof. S. N. Botekar						A.Y.: - 21-22 SEM-IV						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	-	2	-	-	-	-	-	-	-	-	-	-
CO2	1	-	-	-	-	-	-	-	-	-	-	-
CO3	-	-	2	-	-	2	2	2	-	-	-	-
CO4	-	2	2	-	-	2	-	-	-	-	-	-
CO5	-	2	2	-	-	-	-	-	-	-	-	-
CO6	-	2	2	-	-	-	-	-	-	-	-	-
CO	1	2	2	-	-	2	2	2	-	-	-	-

Program: - Computer Engineering						Class: - S.E.				Div.: - NA		
Course Name: - Microprocessor						Course Code: - 210254				Course -2019 Pattern		
Subject Teacher: - Prof. J. V. Shinde						A.Y.: - 21-22 SEM-IV						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	2	2	--	--	--	--	--	--	--	--
CO2	2	--	1	--	--	--	--	--	--	--	--	--
CO3	2	--	2	--	--	--	--	--	--	--	--	--
CO4	2	--	2	--	--	--	--	--	--	--	--	--
CO5	2	--	2	--	--	--	--	--	--	--	--	--
CO6	2	1	--	--	--	--	--	--	--	--	--	--
CO7	2	1	1	1	--	--	--	--	--	--	--	--
CO	2	1.33	1.66	1.5	--	--	--	--	--	--	--	--



Program: - Computer Engineering										Class: - SE (2021-22)			Div.: NA		
Course Name: - Principles of Programming Language(PPL)										Course Code: - 210255			Course - 2019 Course		
Subject Teacher: - Prof. S. V. Nirgide										A.Y.: -2021-22 SEM-IV					
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12			
CO1	2	2	2	2	-	-	-	-	-	-	-	-			
CO2	2	-	1	-	-	-	-	-	-	-	-	-			
CO3	2	-	2	-	-	-	-	-	-	-	-	-			
CO4	2	-	2	-	-	-	-	-	-	-	-	-			
CO5	2	-	2	-	-	-	-	-	-	-	-	-			
CO6	2	1	-	-	-	-	-	-	-	-	-	-			
CO	2	1.5	1.8	2	-	-	-	-	-	-	-	-			

Program: - Computer Engineering										Class: - S.E.			Div.: - NA		
Course Name: -Project Based Learning II										Course Code: - 210258			Course -2019 Pattern		
Subject Teacher: - Prof. D.B.Vaidya										A.Y.: - 2021-22 SEM-IV					
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12			
CO1	2	--	--	--	--	--	--	--	--	--	--	--			
CO2	--	2	--	--	--	--	--	--	--	--	--	--			
CO3	--	--	--	3	--	--	--	--	--	--	--	--			
CO4	--	--	--	--	2	--	--	--	--	--	--	--			
CO5	--	--	--	--	--	3	--	--	--	--	--	--			
CO6	--	--	--	--	--	--	--	--	--	--	--	2			
CO	2	2	--	3	2	3	--	--	--	--	--	2			



Program: - Computer Engineering							Class: - S.E.			Div.: - NA		
Course Name: -Code of Conduct							Course Code: - 210259			Course -2019 Pattern		
Subject Teacher: - Prof. Prof. J. P. Kakad										A.Y.: - 2021-22 SEM-IV		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	--	--	--	--	--	--	2	2	--	--	--	--
CO2	--	--	--	--	--	--	2	2	--	--	--	--
CO3	--	--	--	--	--	--	3	2	--	--	--	--
CO4	--	--	--	--	--	--	2	3	--	--	--	--
CO5	--	--	--	--	--	--	--	--	--	--	--	--
CO6	--	--	--	--	--	--	--	--	--	--	--	--
CO	--	--	--	--	--	--	2.25	2.25	--	--	--	--

Program: - Computer Engineering							Class: - T.E.			Div.: NA		
Course Name: - Data Science and Big Data Analytics							Course Code: - 310251			Course -2019 Pattern		
Subject Teacher: Prof. M. F. Gaikwad										A.Y.: - 21-22 SEM-VI		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	1	2	1	1	-	-	-	-	-	-	-
CO2	-	2	1	1	1	-	-	-	1	-	-	-
CO3	2	-	2	3	-	1	-	-	-	-	1	1
CO4	1	3	1	1	2	1	1	1	-	-	-	-
CO5	1	1	2	2	3	-	-	1	-	1	-	-
CO6	2	1	-	-	1	1	1	1	-	-	-	1
CO	1.4	1.6	1.6	1.6	1.6	1	2	1	1	1	1	2

Program: - Computer Engineering						Class: - TE				Div.: NA		
Course Name: -Web Technology						Course Code: - 310252				Course -2019 Pattern		
Subject Teacher: - Prof. S.V.Nirgide						A.Y.: - 2021-22 Sem-VI						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	1	2	1	1	-	-	-	-	-	-	-
CO2	-	2	1	3	1	-	-	-	1	-	-	-
CO3	2	-	2	1	-	1	-	-	-	-	1	-
CO4	1	3	1	2	2	1	-	1	-	-	-	1
CO5	1	1	2	-	3	-	1	1	-	1	-	-
CO6	2	1	-	2	1	1	-	1	-	-	-	-
CO	1.4	1.6	1.6	1.8	1.6	1	1	1	1	1	1	1

Program: - Computer Engineering						Class: - TE				Div.: -NA		
Course Name: - Artificial Intelligence						Course Code: - 310253				Course -2019 Course		
Subject Teacher: - Prof. D. D. Sharma						A.Y.: - 2021-22 SEM-VI						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	2	2	1	-	-	1	3	-	2	-	-
CO2	1	3	3	2	3	1	-	3	1	2	-	-
CO3	3	2	2	2	1	1	1	-	-	2	-	-
CO4	1	2	2	1	-	-	1	3	1	2	-	-
CO5	1	2	2	1	-	-	1	3	1	2	-	-
CO6	1	2	2	1	-	-	1	3	1	2	-	-
CO	1.33	2.16	2.16	1.66	2	1	1	3	1	2	-	-

Program: - Computer Engineering										Class: - T.E.			Div.: - NA		
Course Name: - Cloud Computing(EL-II)										Course Code: - 310254C			Course -2019 Pattern		
Subject Teacher: - Prof. D. B. Vaidya										A.Y.: - 21-22 SEM-VI					
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12			
CO1	1	2	1	-	-	-	-	-	-	-	-	1			
CO2	1	2	1	-	-	-	-	-	-	-	-	-			
CO3	1	2	1	-	2	-	-	-	-	-	-	-			
CO4	1	2	2	1	-	-	-	-	-	-	-	1			
CO5	1	2	2	2	-	-	-	-	-	-	-	-			
CO6	1	2	2	1	1	-	-	-	-	-	-	1			
CO	1	2	1.5	1.33	1.5	-	-	-	-	-	-	1			

Program: - Computer Engineering										Class: - TE (2021-22)			Div.: NA		
Course Name: - Internship										Course Code: - 310255			Course - 2019 Course		
Subject Teacher: - Prof. D. D. Sharma										A.Y.: - 2021-22 SEM-VI					
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12			
CO1	2	2	2	2	3	1	1	1	1	2	1	1			
CO2	1	2	2	2	3	2	1	1	1	2	2	1			
CO3	-	-	-	-	-	1	-	-	2	2	1	1			
CO4	2	-	-	-	-	2	2	3	-	1	-	2			
CO5	-	-	-	-	-	1	2	1	1	1	2	1			
CO6	-	-	-	-	-	1	-	-	2	1	-	1			
CO	1.66	2	2	2	3	1.33	1.5	1.5	1.4	1.5	1.5	1.16			

Program: - Computer Engineering							Class: - TE				Div.: -NA	
Course Name: - Laboratory Practice II							Course Code: - 310258				Course -2019 Course	
Subject Teacher: - Prof. D. D. Sharma										A.Y.: - 2021-22 SEM-VI		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	-	2	-	3	-	-	2	2	2	1	2
CO2	1	-	2	2	3	2	-	2	2	2	1	2
CO3	1	-	2	2	3	2	-	2	2	2	2	2
CO4	1	-	2	-	3	-	-	2	2	2	2	2
CO5	1	-	2	-	3	-	-	2	2	2	2	2
CO6	1	-	2	-	3	-	-	2	2	2	2	2
CO	1.16	-	2	2	3	2	-	2	2	2	1.66	2

Program: - Computer Engineering							Class: - BE				Div.: NA	
Course Name: - Machine Learning (ML)							Course Code: - 410250				Course – 2015 Pattern	
Subject Teacher: - Prof. D.D. Sharma										A.Y.: - 2021-22 SEM-VIII		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	-	-	2	-	-	1	1	1	1	1	1
CO2	2	1	-	1	1	1	1	1	1	1	1	1
CO3	2	2	2	1	1	1	1	1	1	1	1	1
CO4	2	2	2	1	1	1	1	1	1	1	1	1
CO5	2	2	2	1	1	1	1	1	1	1	1	1
CO	2	1.75	2	1.2	1	1	1	1	1	1	1	1



Program: - Computer Engineering						Class: - BE				Div.: - NA		
Course Name: - Information & Cyber Security						Course Code: - 410251				Course - 2015 Pattern		
Subject Teacher: - Prof. (Dr.) N. R. Wankhade						A.Y.: - 2021-22 Sem-VIII						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	2	2	-	2	-	1	-	-	-	1
CO2	3	3	2	3	-	2	-	-	-	-	-	-
CO3	3	3	2	3	-	2	-	-	-	1	-	-
CO4	3	3	2	2	-	-	1	-	-	-	-	-
CO	3	3	2	2.5	-	2	1	1	-	1	-	1

Program: - Computer Engineering						Class: - B.E.				Div.: -NA		
Course Name: -Embedded And Real time Operating System(EL - III)						Course Code: - 410252 C				Course -2015 Pattern		
Subject Teacher: - Prof. A. S. Gaikwad						A.Y.: - 21-22 SEM-8						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	--	1	--	2	2	--	--	2	--
CO2	3	1	2	--	2	--	2	2	--	--	--	2
CO3	3	2	2	--	1	--	2	2	--	--	--	2
CO4	--	--	3	--	2	--	2	3	--	--	--	--
CO5	--	--	--	--	1	--	2	--	2	1	--	2
CO6	--	2	--	--	2	--	2	--	2	3	--	2
CO	3	1.75	2.25	--	1.5	--	2	2.25	2	2	2	2





Program: - Computer Engineering										Class: - B.E.			Div.: - NA		
Course Name: - Cloud Computing(EL-IV)										Course Code: - 410253C			Course -2015 Pattern		
Subject Teacher: - Prof. D. B. Vaidya										A.Y.: - 2021-22SEM-VIII					
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12			
CO1	1	2	2	1	-	-	1	3	-	2	-	1			
CO2	1	3	3	2	3	1	-	3	1	2	-	1			
CO3	3	2	2	2	1	1	1	-	-	2	-	3			
CO4	1	2	2	1	-	-	1	3	1	2	-	1			
CO5	1	2	2	1	-	-	1	3	1	2	-	1			
CO6	1	2	2	1	-	-	1	3	1	2	-	1			
<b>CO</b>	<b>1.33</b>	<b>2.16</b>	<b>2.16</b>	<b>1.66</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>-</b>	<b>1.33</b>			

Program: - Computer Engineering										Class: - BE			Div.: NA		
Course Name: - LP - III ( Machine Learning & Information And Cyber Security)										Course Code: - 410254			Course -2015 Pattern		
Subject Teacher: - Prof. A. S. Gaikwad										A.Y.: - 21-22 SEM-VIII					
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12			
CO1	2	-	2	-	-	-	-	-	-	-	-	-			
CO2	2	1	2	-	-	-	-	-	-	-	-	-			
CO3	2	1	2	-	-	-	-	-	-	-	-	-			
CO4	2	-	2	1	-	-	-	-	-	-	-	-			
CO5	2	2	-	-	-	-	-	-	-	-	-	-			
<b>CO</b>	<b>2</b>	<b>1.33</b>	<b>2</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>			





Kalyani Charitable Trust's  
**Late G. N. Sapkal College of Engineering**

Kalyani Hills, Anjaneri, Trimbakeshwar Road,  
 Nashik – 422 213



Program: - Computer Engineering						Class: - BE(2021-22)				Div.: - NA		
Course Name: - Laboratory Practice IV						Course Code: - 410255				Course -2015 Course		
Subject Teacher: - Prof. S. N. Botekar						A.Y.: - 21-22 SEM-VIII						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	0	0	0	2	0	0	0	0	0	0	0
CO2	0	2	0	0	0	0	0	0	0	0	0	0
CO3	0	0	0	2	0	0	0	0	3	0	0	0
CO4	2	0	2	0	0	3	0	0	0	0	0	0
CO	2	2	2	2	2	3	0	0	3	0	0	0

Program: - Computer Engineering						Class: - B.E.				Div.: - NA		
Course Name: - Project Work Stage II						Course Code: - 410256				Course -2015 Pattern		
Subject Teacher: - Prof. A.S.Gaikwad						A.Y.: - 2021-22 SEM-VIII						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	--	--	--	2	--	--	--	2	--	--	--	--
CO2	1	2	1	--	--	--	--	--	1	--	--	--
CO3	1	1	2	--	--	1	--	--	--	--	--	--
CO4	2	--	--	2	--	--	--	--	--	--	--	2
CO5	1	1	1	1	1	1	1	1	1	2	2	2
CO6	1	1	1	2	1	1	2	1	1	1	2	2
CO	1.2	1.25	1.25	1.75	1	1	1	1.5	1.33	1.5	2	2



**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	3	1.6	0	1	1	0	0	0	0	0	0	2
C202	1.6	1.5	1.33	1	2.33	1.66	1.5	1.5	2	2	2	2
C203	1	2	2	0	0	2	2	2	0	0	0	0
C204	2	1.33	1.66	1.5	0	0	0	0	0	0	0	0
C205	2	1.5	1.8	2	0	0	0	0	0	0	0	0
C206	2	2	0	3	2	3	0	0	0	0	0	2
C207	0	0	0	0	0	0	2.25	2.25	0	0	0	0
C301	1.4	1.6	1.6	1.6	1.6	1	2	1	1	1	1	2
C302	1.4	1.6	1.6	1.8	1.6	1	1	1	1	1	1	1
C303	1.33	2.16	2.16	1.66	2	1	1	3	1	2	0	0
C304C	1	2	1.5	1.33	1.5	0	0	0	0	0	0	1
C305	1.66	2	2	2	3	1.33	1.5	1.5	1.4	1.5	1.5	1.16
C306	1.16	0	2	2	3	2	0	2	2	2	1.66	2
C401	2	1.75	2	1.2	1	1	1	1	1	1	1	1
C402	3	3	2	2.5	0	2	1	1	0	1	0	1
C403C	3	1.75	2.25	0	1.5	0	2	2.25	2	2	2	2
C404C	1.33	2.16	2.16	1.66	2	2	1	3	1	2	0	0
C405	2	1.33	2	1	0	0	0	0	0	0	0	0
C406	2	2	2	2	2	3	0	0	3	0	0	0
C407	1.2	1.25	1.25	1.75	1	1	1	1.5	1.33	1.5	2	2
Target level overall POs	1.70	1.63	1.57	1.45	1.28	1.10	0.86	1.15	0.84	0.85	0.61	0.96

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

Course	PSO1	PSO2	PSO3
C201	3	0	0
C202	1.66	0	2
C203	1.66	1.66	0
C204	1.33	1.66	2
C205	1.83	1.33	0
C206	1.66	1.66	2
C207	1.66	0	2
C301	2.16	2.66	1
C302	2.16	2.1	1
C303	2.66	2.66	2.5
C304C	2	2.16	2.16
C305	1.5	1.4	2.8
C306	2.66	2.66	2.5
C401	1.5	2.33	0
C402	2.5	2.25	1
C403C	1.66	0	2
C404C	2.66	2.66	2.5
C405	1.8	2	2
C406	1.66	1.66	1
C407	1.5	1	2
<b>Target level overall PSOs</b>	<b>1.96</b>	<b>1.59</b>	<b>1.52</b>



**Course Outcome Attainment**

Course	Theory (%)						Oral / Practical (%)						Term Work (%)					
	CO 1	CO 2	CO 3	CO 4	CO 5	CO 6	CO 1	CO 2	CO 3	CO 4	CO 5	CO 6	CO 1	CO 2	CO 3	CO 4	CO 5	CO 6
C201	100	100	100	100	100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	N/A	N/A
C202	84.42	84.42	84.42	84.42	84.42	84.42	81.58	81.58	81.58	81.58	81.58	81.58	N/A	NA	NA	NA	N/A	N/A
C203	97.4	97.4	97.4	97.4	97.4	97.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	N/A	N/A
C204	90.91	90.91	90.91	90.91	90.91	90.91	85.33	85.33	85.33	85.33	85.33	85.33	N/A	NA	NA	NA	N/A	N/A
C205	100	100	100	100	100	100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	N/A	N/A
C206	NA	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	N/A	N/A
C207	NA	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	N/A	N/A
C301	92.77	92.77	92.77	92.77	92.77	92.77	75.9	75.9	75.9	75.9	75.9	75.9	N/A	NA	NA	NA	N/A	N/A
C302	84.33	84.33	84.33	84.33	84.33	84.33	92	92	92	92	92	92	N/A	NA	NA	NA	N/A	N/A
C303	90.91	90.91	90.91	90.91	90.91	90.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	N/A	N/A
C304	94.05	94.05	94.05	94.05	94.05	94.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	N/A	N/A
C305	NA	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	N/A	N/A
C306	NA	NA	NA	N/A	N/A	N/A	100	100	100	100	100	100	N/A	NA	NA	NA	N/A	N/A
C401	93.58	93.58	93.58	93.58	93.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	N/A	N/A
C402	96.15	96.15	96.15	96.15	96.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	N/A	N/A
C403	91.03	91.03	91.03	91.03	91.03	91.03	100	100	100	100	100	100	N/A	NA	NA	NA	N/A	N/A
C404	98.7	98.7	98.7	98.7	98.7	98.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	N/A	N/A
C405	NA	NA	NA	N/A	N/A	N/A	100	100	100	100	100	100	100	100	100	100	100	100
C406	NA	NA	NA	N/A	N/A	N/A	100	100	100	100	100	100	100	100	100	100	100	100
C407	NA	NA	NA	N/A	N/A	N/A	100	100	100	100	100	100	100	100	100	100	100	100

**Internal Assessment:**

Course	Unit Test (%)						Term work (%)					
	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6
C201	88.31	94.81	92.21	90.91	93.51	NA	100	100	100	100	100	NA
C202	97.4	98.7	96.1	98.7	100	100	100	100	100	100	100	100
C203	97.4	98.7	96.1	97.4	100	100	NA	NA	NA	NA	NA	NA
C204	94.81	94.81	98.7	96.1	96.1	96.1	84.4	84.4	84.4	84.4	84.4	84.4
C205	97.4	96.1	94.81	98.7	96.1	97.4	NA	NA	NA	NA	NA	NA
C206	NA	NA	NA	NA	NA	NA	100	100	100	100	100	100
C207	NA	NA	NA	NA	NA	NA	100	100	100	100	100	100
C301	94.81	94.81	98.7	96.1	96.1	96.1	100	100	100	100	100	100
C302	96.39	98.8	96.39	97.59	100	100	92.77	92.77	92.77	92.77	92.77	92.77
C303	91.67	96.72	93.98	91.67	88.1	94.05	NA	NA	NA	NA	NA	NA
C304C	90.48	95.24	94.05	91.67	88.1	94.05	NA	NA	NA	NA	NA	NA
C305	NA	NA	NA	NA	NA	NA	100	100	100	100	100	100
C306	NA	NA	NA	NA	NA	NA	91.76	91.76	91.76	91.76	91.76	91.76
C401	96.15	98.72	96.15	97.44	100	NA	NA	NA	NA	NA	NA	NA
C402	96.15	97.44	94.87	97.44	NA	NA	NA	NA	NA	NA	NA	NA
C403C	97.44	98.12	96.15	97.44	100	100	NA	NA	NA	NA	NA	NA
C404C	94.87	98.72	94.8	94.87	96.15	97.44	NA	NA	NA	NA	NA	NA
C405	NA	NA	NA	NA	NA	NA	100	100	100	100	100	NA
C406	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C407	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA



**Indirect Assessment:**

Course	Course Exit Survey (%)					
	CO1	CO2	CO3	CO4	CO5	CO6
C201	94	92	96	95	83	NA
C202	100	97	96	100	100	84
C203	100	97	96	100	100	100
C204	100	97	96	100	100	100
C205	76.88	75.84	76.1	77.4	76.36	74.55
C206	100	97	96	100	100	84
C207	100	97	96	100	100	84
C301	99	94	94	96	99	96
C302	99	94	94	96	99	96
C303	100	97	96	100	100	100
C304C	99	96	96	99	99	95
C305	76.39	77.11	76.87	77.95	77.47	76.02
C306	100	97	96	100	100	100
C401	99	96	94	99	99	NA
C402	99	97	95	100	NA	NA
C403C	100	97	96	100	100	85
C404C	100	97	96	100	100	100
C405	100	97	97	96	100	NA
C406	76.41	75.9	76.92	78.85	NA	NA
C407	100	97	96	100	100	100



Overall CO Attainment A.Y 2021-22

Course	Direct CO Attainment		Indirect CO Attainment	Overall CO Attainment
	External	Internal		
C201	3	3	3	3
C202	3	3	3	3
C203	3	3	3	3
C204	3	3	3	3
C205	3	3	3	3
C206	NA	3	3	3
C207	NA	3	3	3
C301	3	3	3	3
C302	3	3	3	3
C303	3	3	3	3
C304C	3	3	3	3
C305	NA	3	3	3
C306	3	3	3	3
C401	3	3	3	3
C402	3	3	3	3
C403C	3	3	3	3
C404C	3	3	3	3
C405	3	3	3	3
C406	3	NA	3	3
C407	3	NA	3	3





**Table: 3 PO attainment values**

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C201	3	1.6	0	1	1	0	0	0	0	0	0	2
C202	1.6	1.5	1.33	1	2.33	1.66	1.5	1.5	2	2	2	2
C203	1	2	2	0	0	2	2	2	0	0	0	0
C204	2	1.33	1.66	1.5	0	0	0	0	0	0	0	0
C205	2	1.5	1.8	2	0	0	0	0	0	0	0	0
C206	2	2	0	3	2	3	0	0	0	0	0	2
C207	0	0	0	0	0	0	0.63	0.63	0	0	0	0
C301	1.23 2	1.40 8	1.40 8	1.58 4	1.40 8	0.88	0.88	0.88	0.88	0.88	0.88	0.88
C302	1.4	1.6	1.6	1.8	1.6	1	1	1	1	1	1	1
C303	1.33	2.16	2.16	1.66	2	1	1	3	1	2	0	0
C304C	1	2	1.5	1.33	1.5	0	0	0	0	0	0	1
C305	1.66	2	2	2	3	1.33	1.5	1.5	1.4	1.5	1.5	1.16
C306	1.16	0	2	2	3	2	0	2	2	2	1.66	2
C401	2	1.75	2	1.2	1.2	1	1	1	1	1	1	2
C402	3	3	2	2.5	0	2	1	1	0	1	0	1
C403C	3	1.75	2.25	0	1.5	0	2	2.25	2	2	2	2
C404C	1.33	2.16	2.16	1.66	2	2	1	3	1	2	0	0
C405	2	1.33	2	1	0	0	0	0	0	0	0	0
C406	2	2	2	2	2	3	0	0	3	0	0	0
C407	1.2	1.25	1.25	1.75	1	1	1	1.5	1.33	1.5	2	2
<b>Direct PO Attainment</b>	<b>1.70</b>	<b>1.62</b>	<b>1.56</b>	<b>1.45</b>	<b>1.28</b>	<b>1.09</b>	<b>0.73</b>	<b>1.06</b>	<b>0.83</b>	<b>0.84</b>	<b>0.60</b>	<b>0.95</b>
<b>Indirect PO Attainment</b>	<b>2.16</b>	<b>2.52</b>	<b>2.28</b>	<b>2.4</b>	<b>2.2</b>	<b>2.36</b>	<b>2.32</b>	<b>2.4</b>	<b>2.36</b>	<b>2.76</b>	<b>2.6</b>	<b>2.48</b>
<b>Overall PO Attainment</b>	<b>1.79</b>	<b>1.80</b>	<b>1.70</b>	<b>1.64</b>	<b>1.46</b>	<b>1.35</b>	<b>1.04</b>	<b>1.33</b>	<b>1.14</b>	<b>1.23</b>	<b>1.00</b>	<b>1.26</b>

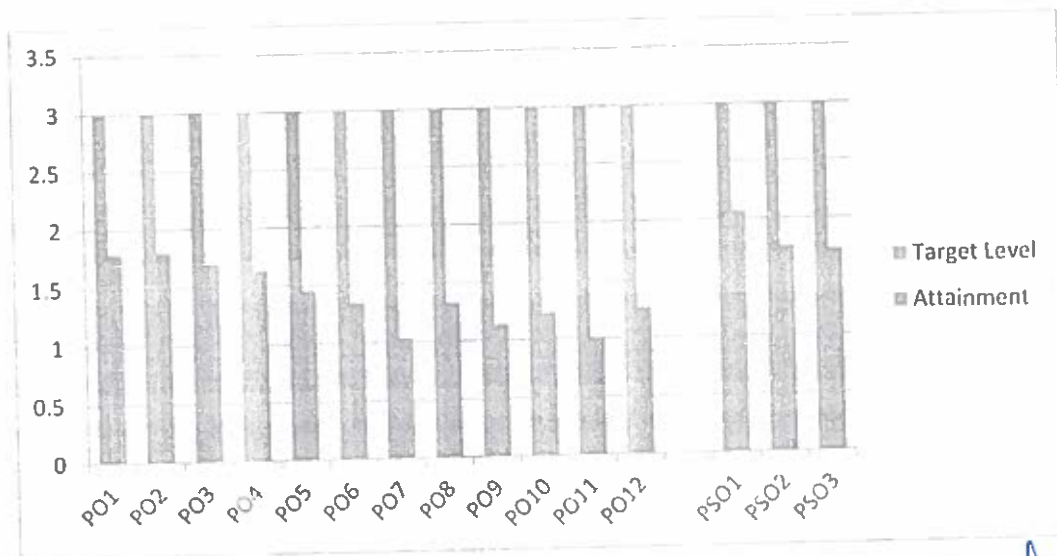
**Table: 4 PSO attainment values**

Course	PSO1	PSO2	PSO3
C201	3	0	0
C202	1.66	0	2
C203	1.66	1.66	0
C204	1.33	1.66	2
C205	1.83	1.33	0
C206	1.66	1.66	2
C207	1.66	0	2
C301	1.9	2.34	0.88
C302	2.16	2.1	1
C303	2.66	2.66	2.5
C304C	2	2.16	2.16
C305	1.5	1.4	2.8
C306	2.66	2.66	2.5
C401	1.5	2.33	0
C402	2.5	2.25	1
C403C	1.66	0	2
C404C	2.66	2.66	2.5
C405	1.8	2	2
C406	1.66	1.66	1
C407	1.5	1	2
<b>Direct PSO Attainment</b>	<b>1.95</b>	<b>1.58</b>	<b>1.52</b>
<b>Indirect PSO Attainment</b>	<b>2.56</b>	<b>2.48</b>	<b>2.56</b>
<b>Overall PSO Attainment</b>	<b>2.07</b>	<b>1.76</b>	<b>1.73</b>

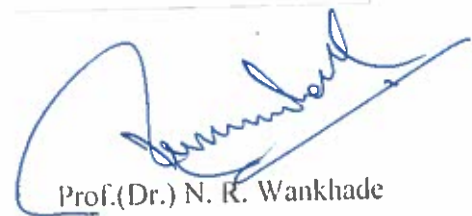


	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12
Target Level	3	3	3	3	3	3	3	3	3	3	3	3
Attainment	1.79	1.80	1.70	1.64	1.46	1.35	1.04	1.33	1.14	1.23	1.00	1.26

	PSO1	PSO2	PSO3
Target Level	3	3	3
Attainment	2.07	1.76	1.73




Prof. D. D. Sharma  
Department Criteria Coordinator



Prof. (Dr.) N. R. Wankhade  
H.O.D. of Computer Department




Prof. (Dr.) Sahebrao B. Bagal  
Principal  
Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 213