


 MANJARA CHARITABLE TRUST
 RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI
 Department of Computer Engineering

CO-PO Attainment for 2019-2020 to 2022-2023

DIRECT ATTAINMENT OF PROGRAM OUTCOMES (Considering all Subjects)

CO-PO-PSO Direct Attainment Matrix (R-19 C Scheme)																
Sem	Course Code	Name of Course	Program Outcomes												Program Specific	
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO1	POS2
I	FEC101	Engineering Mathematics-I	1.49	0.75	0.75	0.75	0.75	—	—	—	—	—	—	0.75	—	—
	FEC102	Engineering Physics-I	2.05	1.46	0.88	—	—	—	—	—	—	—	—	1.32	—	—
	FEC103	Engineering Chemistry-I	0.93	—	0.94	—	0.93	—	—	—	—	—	—	1.71	—	—
	FEC104	Engineering Mechanics	1.83	0.91	0.91	0.91	—	—	—	—	—	0.91	—	—	—	—
	FEC105	Basic Electrical Engineering	1.33	0.66	—	—	—	—	—	—	—	—	—	—	—	—
	FEL103	Engineering Mechanics Lab	1.23	0.62	0.62	0.62	—	—	—	—	—	0.62	—	—	—	—
	FEL104	Basic Electrical Engineering Lab	1.99	1.99	—	—	—	—	—	0.99	3	—	—	—	—	—
	FEL105	Basic Workshop Practice - I	1.99	1.44	0.89	—	1.81	1.81	—	0.89	—	1.81	—	1.44	—	—
II	FEC201	Engineering Mathematics-II	1.74	0.87	0.87	0.87	0.87	—	—	—	—	—	—	0.87	—	—
	FEC202	Engineering Physics-II	1.63	1.19	—	—	—	—	—	—	1.78	—	—	1.04	—	—
	FEC203	Engineering Chemistry-II	1.4	1.57	0.93	—	—	2.86	2.21	—	—	—	—	0.93	—	—
	FEC204	Engineering Graphics	0.97	—	—	—	—	—	—	—	—	0.97	—	—	—	—
	FEC205	C Programming	2.07	1.58	1.16	1.93	1.69	—	—	—	—	—	—	1.52	1.74	1.16
	FEC206	Professional Communication and Ethics-I	—	—	—	—	—	—	—	0.76	0.76	0.76	—	0.76	0.76	—
	FEL203	Engineering Graphics Lab	0.97	—	—	—	—	—	—	—	—	0.97	—	—	—	—
	FEL206	Basic Workshop Practice -II	1.46	1.3	0.99	—	—	—	—	—	—	0.9	—	1.02	—	—
III	CSC301	Engineering Mathematics-III	1.12	0.96	--	0.96	0.96	--	--	--	--	--	--	0.96	--	--
	CSC302	Discrete Structures and Graph Theory	2.27	2.43	1.61	1.77	--	--	--	--	--	--	--	--	0.97	--


 MANJARA CHARITABLE TRUST
RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI
 Department of Computer Engineering

III	CSC303	Data Structure	1.92	1.94	1.15	2.03	2.18	--	--	--	--	--	--	2.07	1.33	1.77
	CSC304	Digital Logics and Computer Architecture	1.46	1.13	1.16	1.35	0.97	--	--	--	--	--	--	--	--	--
	CSC305	Computer Graphics	1.85	1.57	1	-	-	-	-	-	-	-	-	0.8	1.57	-
	CSL301	Data Structure lab	2.37	2.2	0.94	1.88	2.86	--	--	--	--	--	--	2.2	1.64	1.88
	CSL303	Computer Graphics Lab	1.69	1.95	0.98	--	0.98	--	--	--	--	--	--	0.98	1.96	--
	CSL304	Skill base Lab Course Object Oriented Programming in Java	2.48	1.82	1.49	2.15	1.99	--	--	--	2.98	2.98	--	1.24	1.98	2.31
	CSM 301	Mini Project 1A	1.75	1.75	1.67	1.29	1.5	2.25	1	1.67	2.5	2	1	1.25	1.75	2.17
IV	CSC401	Engineering Mathematics-IV	2.25	0.96	--	0.96	0.96	--	--	--	--	--	--	0.96	--	--
	CSC402	Analysis of Algorithms	1.99	2.49	1.66	1.82	1.66			0.66	1.66	0.83	1.66	1.99	1.99	
	CSC403	Database Management System	2.6	1.78	0.97	1.95	0.97	2.43	0.97	--	--	2.83	0.97	0.97	1.85	1.93
	CSC404	Operating System	1.97	1.64	0.99	1.58	0.99	--	--	--	--	--	--	1.97	1.97	2.99
	CSC405	Microprocessor	1.96	1.14	0.97	0.98	0.98	--	--	--	--	--	--	0.99	--	--
	CSL401	Analysis of Algorithms Lab	1.98	1.65	1.65	1.65	1.98	--	--	--	0.99	1.65	0.99	1.65	1.98	1.98
	CSL402	Database Management System Lab	2.41	1.85	0.93	2.04	0.94	1.85	0.95	--	--	2.83	0.93	0.95	1.85	1.83
	CSL403	Operating System Lab	1.86	1.55	0.93	1.49	0.93							1.86	0.93	1.86
	CSL405	Skill Base Lab Course: Python Programming.	2.82	1.97	1.81	2.31	2.31	--	--	--	2.99	2.99	--	1.32	1.97	2.31
	CSM 401	Mini Project 1B	1.75	1.75	1.67	1.29	1.5	2.25	1	1.67	2.5	2	1	1.25	1.75	2.17
V	CSC501	Theoretical Computer Science	1.61	1.61	0.98	0.98	0.98	--	--	--	--	--	--	--	--	--
	CSC502	Software Engineering	2.17	1.97	1.64	1.38	1.77	1.97	0.98	2.99	2.99	1.97	1.97	0.98	-	1.96
	CSC503	Computer Network	1.94	1.62	1.79	1.77	1.71	1.95	--	--	--	--	--	--	0.97	1.93
	CSC504	Data Warehousing and Mining	2.27	2.08	0.91	1.7	1.85	--	0.94	--	--	0.94	--	0.94	1.41	2.52


 MANJARA CHARITABLE TRUST
RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI
 Department of Computer Engineering

V	CSDLO5 012	Internet Programming	0.97	1.95	2.78	1.95	2.95	2.95	0.97	2.95	2.95	0.97	--	2.95	2.1	1.95
	CSDLO5 013	Advance Database Management System	1.3	1.2	1.2	1.2	1	-	-	-	1.31	-	-	-	1	1
	CSL501	Software Engineering Lab	1.97	1.97	1.97	1.48	1.64	1.97	-	2.99	2.99	1.97	1.97	0.98	0.98	1.97
	CSL502	Computer Network Lab	2.06	1.43	1.74	1.22	1.84	1.84	--	--	--	--	--	--	0.61	1.83
	CSL503	Data Warehousing and Mining Lab	2.58	2.58	1.63	2.11	2.19	--	0.93	--	--	--	--	0.92	1.84	2.49
	CSL504	Professional Commucation & Ethics II	--	--	--	--	--	--	--	3	1.75	1.75	--	1	1	--
	CSM 501	Mini Project 2A	1.73	1.73	1.78	2.32	1.24	1.99	1.32	2	2.66	2.19	1.49	1.74	1.33	2.24
VI	CSC601	System Programming and Compiler Construction	1.6	1.6	-	1.39	0.88	-	-	-	-	-	-	0.87	0.87	-
	CSC602	Cryptography & System Security	1.65	0.9	0.9	1.57	1.79	--	--	--	--	--	--	1.78	0.9	1.79
	CSC603	Mobile Computing	1.64	1.63	1.57	1.79	1.8	2.96	0.99	0.98	2.97	--	1.23	1.31	1.3	1.96
	CSC604	Artificial Intelliegence	2.65	1.65	1.86	0.94	--	--	--	--	--	--	--	0.93	1.96	--
	CSDLO 6011	Internet of Things	1.3	1.95	2.95	-	-	-	-	-	-	-	-	-	2.96	-
	CSDLO 6012	Digital Signal and Image Processing	2.74	1.65	1.08	1.81	0.9	--	--	0.9	--	--	--	0.9	1.27	2.28
	CSDLO 6013	Quantitative Analysis	2.37	1.47	0.88	1.77	0.88	--	--	0.88	--	--	--	1.42	1.18	2.06
	CSL601	System Programming and Compiler Construction Lab	1.8	1.8	-	1.8	1	-	-	-	-	-	-	1	1	-
	CSL604	Artificial Intelliegence Lab	2.68	1.61	1.92	0.96	-	-	-	-	-	-	-	0.96	1.93	-
	CSL605	Skill Based Lab Course Cloud Computing Lab	1.5	1.66	1.99	1.99	1.99	2.49	--	--	--	--	--	--	1.5	1.99
CSM 601	Mini Project Lab 2B	1.7	1.7	1.75	2.28	1.22	1.96	1.3	1.96	2.62	2.16	1.46	1.71	1.3	2.2	


 MANJARA CHARITABLE TRUST
RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI
 Department of Computer Engineering

VII	CSC701	Machine Learning	2.07	1.43	1.75	1.9	1.14	--	--	--	1.44	--	1.91	1.27	1.53	1.91
	CSC702	Big Data Analysis	2.05	1.57	1.41	1.57	0.94	-	-	-	1.65	1.4	-	0.96	0.94	1.88
	CSDC 7011	Machine Vision	2.46	2.16	1.47	2.78	1.38	--	--	--	--	2.73	--	2.78	1.84	1.83
	CSDC 7013	Natural Language Processing	2.13	1.41	1.02	2.04	1.71	--	--	0.85	--	--	--	0.85	1.36	2.21
	CSDC 7022	Blockchain	1.77	1.06	0.88	1.77	0.88	1.77	0.88	--	2.65	2.65	--	--	1.77	1.77
	ILO 7013	Management Information System	1.44	--	0.96	0.95	0.96	1.9	1.445	1.9	--	--	0.96	1.93	1.93	2.88
	ILO 7016	Cyber Security and Laws	1.17	1.48	1.36	1.9	1.52	2.26	1.68	--	--	--	--	--	1.39	1.52
	ILO 7017	Disaster Management and Mitigation Measures	1.72	1.03	1.29	--	--	2.6	2.31	1.72	0.86	1.87	1.94	1.43	0.88	0.86
	CSL701	Machine Learning Lab	2.31	1.96	1.96	2.3	0.98	--	--	--	--	--	--	--	1.96	1.96
	CSL702	Big Data Analysis Lab	2.13	1.73	1.35	1.54	0.96	-	-	-	1.94	1.28	-	0.96	0.96	1.93
CSP701	Major Project - I	1.73	1.73	1.78	2.32	1.24	2.49	0.99	2	2.49	1.98	1.49	1.66	1.66	2.32	
VIII	CSC801	Distributed Computing	1.95	1.8	1.35	1.43	1.8	0.9	--	--	--	--	--	--	--	1.8
	CSDC 8013	Applied Data Science	1.83	1.53	0.91	1.98	1.38	1.81	--	--	--	0.92	--	0.91	1.53	2.14
	CSDC 8023	Social Media Analytics	1.8	1.37	0.98	1.37	1.99	2.95	--	0.97	--	--	--	--	1.97	--
	ILO 8028	Digital Business Management	1.57	2.27	1.57	1.57	1.8	2.73	1.81	1.81	2.73	1.81	1.79	0.9	0.89	1.81
	ILO 8029	Environmental Management	1.06	0.7	--	--	--	0.7	2.13	2.13	--	2.13	--	2.13	1.18	--
	CSL 801	Distributed Computing Lab	2.05	1.9	1.42	1.51	1.89	0.94	--	--	--	--	--	--	--	1.89
	CSDL 8013	Applied Data Science Lab	2.63	1.97	1.96	1.63	2.3	--	--	--	--	--	--	--	2.3	2.47
	CSDL 8023	Social Media Analytics Lab	1.79	1.36	0.97	1.36	1.96	2.95	-	0.97	--	--	--	--	1.95	--
CSP801	Major Project-II	1.74	1.66	1.65	1.82	1.82	1.48	2	2.99	1.99	1.79	0.99	1.65	1.49	2.31	
Direct Attainment			1.86	1.59	1.35	1.61	1.46	2.11	1.34	1.74	2.17	1.76	1.35	1.31	1.51	2
80% Direct attainment			1.48	1.27	1.08	1.29	1.17	1.69	1.07	1.39	1.73	1.41	1.08	1.05	1.21	1.6


 MANJARA CHARITABLE TRUST
RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI
 Department of Computer Engineering

Indirect Attainment

Tools	PO1	PO2	PO3	PO4	PO5	PO6	PO7	P08	P09	P10	P11	P12	PSO1	PSO2
Program Exit Survey	1.94	1.92	1.93	1.92	1.86	2.02	2.02	2.05	1.94	2.02	1.89	2.08	2.05	2.02
Employer Feedback	1.94	1.86	1.85	1.86	1.82	2	2	2.05	1.94	2	1.83	2.04	2.02	2
Alumni Feedback	1.94	1.92	1.86	1.92	1.84	2.07	2.07	2	1.84	1.93	1.89	2.16	2.12	2.07
Parents Feedback	1.94	1.93	1.93	2.02	1.94	2.08	2.08	2.08	2.03	2.12	1.98	2.13	2.1	2.08
Professional Bodies	2	1	2	-	1	1	-	2	-	-	-	2.13	1.38	1.75
Average	1.95	1.73	1.91	1.93	1.69	1.83	2.04	2.04	1.94	2.02	1.9	2.11	1.93	1.98
20% of Indirect Attainment	0.39	0.35	0.38	0.39	0.34	0.37	0.41	0.41	0.39	0.4	0.38	0.42	0.39	0.4

Overall PO Attainment

Program Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	P08	P09	P10	P11	P12	PSO 1	PSO 2
Direct Attainment	1.48	1.28	1.10	1.31	1.17	1.66	1.07	1.38	1.70	1.41	1.08	1.05	1.21	1.59
Indirect Attainment	0.39	0.35	0.38	0.39	0.34	0.37	0.41	0.41	0.39	0.4	0.38	0.42	0.39	0.4
Overall attainment	1.87	1.63	1.48	1.70	1.51	2.03	1.48	1.79	2.09	1.81	1.46	1.47	1.60	1.99