



2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

METHODOLOGY ADOPTED

The process of CO and PO attainment is decentralized and done at department level. The Program Assessment Committee (PAC) evaluates CO, PO and PSO attainment. The PAC report is sent to the Department Advisory Board (DAB) and remedies for poor CO, PO and PSO attainment are suggested.

PO's and PSO's are to be attained through Core Courses and other activities in which all students participate. Each course COs are mapped with POs and PSOs. The correlation is established between CO's and PO's on the scale of 1, 2 and 3; 3 being substantial, 2 being moderate and 1 being low. A mapping matrix is prepared in this regard for every course of the programme.

Calculation of PO attainment is based on Direct Attributes like

- CO direct attainment
- Final Year Project

Indirect attributes like

- Placement,
- Higher studies
- Student exit survey
- Professional societies
- Co-curricular activities
- LBS
- Survey of courses and other activities.

PO attainment is done for a batch. Course Performance History, course exit survey, LBS, Professional societies and co-curricular activities are considered for the last 3 years of that batch. Final year project, Placement, higher studies and student survey are considered for the final year of that batch.

Course Outcome Attainment: Calculation of CO attainment is based on Direct attributes like End semester Examination results, internal assessment tests in the ratio of 60:40 respectively. Indirect attributes like Presentations, Quiz, SEL feedbacks and other activities are used for calculation of COs. For calculations current year data is considered. Three attainment levels as 1, 2 and 3 are defined.

Our Institute has been accredited by the National Board of Accreditation. We have gone through 3 cycles of accreditation. Institute is recently accredited from the year 2016 to June 2022. Hence COs, POs and PSOs are always there. The attainment and evaluation process of CO, PO and PSO is defined for all the departments and is followed for attainment calculation and evaluation.

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Since 1962

Vivekanand Education Society's Institute of Technology

(Affiliated to University of Mumbai, Approved by AICTE & Recognised by Govt. of Maharashtra)

Dr. (Mrs.) J. M. Nair

M. Tech., Ph.D. (IIT-B)
Principal

Ref. No.: VESIT/ JMN/1325/2023-24

Date: 26/10/2023

TO WHOM SO IT MAY CONCERN

I, Dr. (Mrs.) Jayalekshmi M Nair, Principal (HOI), Vivekanand Education Society's Institute of Technology, do hereby state that the documents uploaded on NAAC portal are duly signed by Principal (HOI).

The additional documents uploaded on Institute's website (<https://vesit.ves.ac.in/>) are also authentic and does not need any extra validation.


Dr. (Mrs) Jayalekshmi M Nair
Principal

Vivekanand Education Society's Institute of Technology
Hashu Advani Memorial Complex,
Collector's Colony
Chembur, Mumbai, Maharashtra 400074



1. Bachelor of Computer Engineering: CO-PO-PSO mapping and attainment.

Course Outcomes Attainment for AY 2022-23

 <p>Vivekanand Education Society's Institute Of Technology</p> <p>(Affiliated to University of Mumbai, Approved by AICTE & Recognized by Govt. of Maharashtra)</p> <p>Department of Computer Engineering</p> <p>Course/Lab Outcome Attainment Summary 2022-23 even sem</p> <p>Second Year</p>						
Subject	Faculty name	D7A	Faculty name	D7B	Faculty name	D7C
AM-IV	Dattatraya S. Game	2.85	Dattatraya S. Game	2.13	Dattatraya S. Game	2.81
AOA	Mrs.Sujata khandaskar	2.87	Mrs. Sunita Suralkar	2.59	Mrs. Vidya Zope	2.82
DBMS	Mrs. Yugchhaya Galphat	2.87	Mrs. Pallavi Saindane	2.71	Mrs. Manisha Mathur	2.79
OS	Richard Joseph	2.76	Abha Tewari	2.89	Mrs. Mannat Doultani	2.81
Python lab	Nusrat Ansari	2.80	Mannat Doultani	3.00	Sanjay Mirchandani	2.68
MP	Pallavi G	0.27	Mrs. Priyanka shah	1.23	Nusrat Ansari	0.46
AOA Lab	Sujata Khandasker	3.00	Sunita Suralkar	2.7	Sujata Khandasker	2.85
DBMS Lab	Mrs. Yugchhaya Galphat	3.00	Mrs. Pallavi Saindane	3.00	Mrs. Manisha Mathur	2.70
OS Lab	Richard Joseph	1.72	Abha Tewari	3.00	Mrs. Mannat Doultani	2.95
MP Lab	Pallavi G	2.53	Mrs priyanka shah	2.85	Nusrat Ansari	2.63

Third Year						
Subject	Faculty name	D12A	Faculty name	D12B	Faculty name	D12C
SPCC	Pallavi Saindane	2.92	Rupali Soni	2.5	Veena Trivedi	2.61
CSS	Dr.Rohini Temkar	2.47	Veena Trivedi	2.71	Sunita Suralkar	2.62
MC	Mrs. Priyanka Shah	2.84	Prashant Kanade	2.58	Geocey Shejy	2.76
AI	Dr.Sharmila S	2.81	Priya R.L	2.75	Lifna CS	2.92
IOT	Indu Dokare	2.84	Indu Dokare	2.85	Indu Dokare	2.85
QA	Sanjay Mirchandani	2.48	Sanjay Mirchandani	2.57	Geocey Shejy	2.34
SPCC Lab	Pallavi Saindane	2.9	Rupali Soni	2.9	Veena Trivedi	2.7
CSS Lab	Pallavi Gangurde	2.6	Manisha Mathur	2.9	Sunita Suralkar	2.7
MC Lab	Mrs. Priyanka Shah , Mrs Priti Joshi	2.5	Prashant Kanade	2.7	Geocey Shejy	3
AI Lab	Dr.Sharmila S	3	Priya R.L	3	Lifna CS	3
CC Lab	Richard Joseph	2.5	Indu Dokare	3	Yugchhaya Galphat	2.9
Mini project Lab		3		3		3

Final Year						
Subject	Faculty name	D17A	Faculty name	D17B	Faculty name	D17C
DC	Dr. Nupur giri	3	Dr Greaha Bhatia	2.77	Sunita Sahu	2.57
DL	Vidya Zope	2.95	Vidya Zope	2.33	Vidya Zope	3
ADS	Dr. Sujata Khedkar	2.84	Dr. Sujata Khedkar/Abha T	2.84	Abha Tewari	2.84
SMA	Dr. Dashrath Mane	2.89	Dr. Sujata Khedkar	2.95	Dr. Rohini Temkar	3
PM	Dr. Prashant Kanade	2.7	Dr. Prashant Kanade	1.42	Gauri Saboo	2.7
FM	Abhishek Chaudhari	2.55	Abhishek Chaudhari	2.7	Abhishek Chaudhari	2.7
ERDM	A Nagananda	0.7	-		-	
EM	Asawari D	2.7	-		Asawari D	2.62
DC Lab	Rupali Hande	3	Rupali Hande	3	Sunita Sahu	3
DL Lab	Vidya Zope	2.97	Vidya Zope	3	Vidya Zope	3
ADS Lab	Dr. Sujata Khedkar	3	Rupali Hande	3	Abha Tewari	3
SMA Lab	Dr. Dashrath Mane	3	Dr. Sujata Khedkar	3	Dr. Rohini Temkar	3
PRJ II		3		3		3

Computer Department PO Attainment for Batch 2022-23

Departmental PO Attainment for Batch 2019-2023																
Academic Year	Year	Semester	Attainment Goal	Weightage	PO1 (a)	PO2 (b)	PO3 (c)	PO4 (d)	PO5 (e)	PO6 (f)	PO7 (g)	PO8 (h)	PO9 (i)	PO10 (j)	PO11 (k)	PO12 (l)
2020-21	S.E.	PO Attainment through CO	50.00%	80.00%	3.00	3.00	2.99	2.99	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.99
2021-22	T.E.	PO Attainment through CO			2.79	2.79	2.80	2.79	2.78	2.81	2.81	2.82	2.84	2.81	2.85	2.80
2022-23	B.E.	PO Attainment through CO			2.73	2.75	2.77	2.77	2.76	2.72	2.71	2.73	2.75	2.70	2.76	2.76
Average PO Attainment through CO of S.E., T.E., B.E. (2019-2023)(Direct assessment)					2.84	2.84	2.86	2.85	2.85	2.84	2.84	2.85	2.86	2.84	2.87	2.85
PO Attainment through Student Portfolio for batch (2020-2023)			75.00%	20.00%	3	3	3	3	3	3	3	3	3	3	3	3
PO Attainment through Student Exit Forms			60.00%		3	3	3	3	3	3	3	3	3	3	3	3
PO Attainment through Placements			90.00%		3	3	3	3	3	3	3	3	3	3	3	3
PO Attainment through Higher Education			15.00%		3	3		3					3			3
Indirect Assessment					3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Departmental PO Attainment for Batch 2019-2023			≥=70%		2.87	2.87	2.88	2.88	2.88	2.87	2.87	2.88	2.89	2.87	2.90	2.88
Departmental PO Attainment for Batch 2019-2023 Attainment Level- 2.88																

Batch 2019-23: BE (2022-23) CO Attainment

BE CO ATTAINMENT														
Year	Courses	Program Outcome												
	SUB	PO1 (a)	PO2 (b)	PO3 (c)	PO4 (d)	PO5 (e)	PO6 (f)	PO7 (g)	PO8 (h)	PO9 (i)	PO10 (i)	PO11(k)	PO12 (l)	
BEODD	C401	ML	2.66	2.66	2.66	2.66	2.66	2.66	-	2.66	2.66	-	2.66	2.66
	C402	BDA	2.89	2.89	2.89	2.89	-	2.89	-	2.89	-	2.89	2.89	-
	C403	NLP	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83
	C404	BC	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
	C405	MIS	2.79	2.79	2.79	2.79	2.79	-	-	2.79	2.79	2.79	2.79	2.79
	C406	CSL	2.9	2.92	3	2.88	2.88	2.88	-	2.88	-	2.87	2.87	2.9
	C407	ML LAB	2.93	2.93	2.93	2.93	2.93	2.93	-	2.93	2.93	-	2.93	2.93
	C408	BDA Lab	-	-	2.95	2.95	2.95	-	-	-	2.95	-	2.95	2.95
	C409	NLP LAB	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	C410	BC LAB	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13
	C411	Project	3	3	3	3	3	3	3	3	3	3	3	3

BE Even	ILO8022	FM	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	ILO8021	EDM	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	CSC801	DC	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73
	CSDC801	DL	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97
	CSDC802	ADS	-	2.84	2.84	2.84	2.84	-	2.84	-	2.84	-	2.84	2.84
	CSDC8023	SMA	-	2.95	2.95	2.95	2.95	-	2.95	-	2.95	-	2.95	2.95
	CSDL801	DLL	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99
	CSDL8013	ADS L	-	-	3	3	3	-	-	-	3	-	3	3
	CSDL8023	SMA L	3	3	3	3	3	3	3	3	3	-	3	3
	CSL801	DC L	3	3	3	3	3	3	3	3	3	3	3	3
	Major Project		3	3	3	3	3	3	3	3	3	3	3	3
	ILO8021	PM	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
		EM						2.62	2.62	2.62	2.62	2.62	2.62	2.62
			2.73	2.75	2.77	2.77	2.76	2.72	2.71	2.73	2.75	2.70	2.76	2.76

Batch 2019-23: TE (2021-22) CO Attainment

TE CO ATTAINMENT														
Year	Courses	Program Outcome												
	SUB	PO1 (a)	PO2 (b)	PO3 (c)	PO4 (d)	PO5 (e)	PO6 (f)	PO7 (g)	PO8 (h)	PO9 (i)	PO10 (i)	PO11 (k)	PO12 (l)	
TE	C301	TCS	2.78	2.78	-	-	2.78	-	-	-	-	-	-	2.78
	C302	SE	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	C303	CN	3	3	3	3	3	3	-	3	3	3	3	3
	C304	DWDM	2.8	2.8	2.8	2.8	2.8	-	-	2.8	2.8	2.8	-	2.8
	C305	PGM	3	3	3	3	3	-	3	3	3	3	3	3
	C306	IP	2.89	2.89	2.89	2.89	-	-	-	-	-	-	-	2.89
	C307	SE Lab	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	C308	CN Lab	2.91	2.93	2.93	2.91	2.93	-	-	2.93	2.97	2.93	2.91	2.93
	C309	DWDM La	2.88	2.88	2.88	2.88	2.88	-	-	2.88	2.88	2.88		2.88
	C310	BCE	-	-	-	-	-	3	3	3	3	3	3	3
	C311	Mini Proje	3	3	3	3	3	3	3	3	3	3	3	3




TE	C312	SPCC	2.2	2.18	2.18	2.18	2.18	-	-	-	-	-	-	2.2
	C313	CSS	2.77	2.77	2.77	-	2.77	2.77	-	2.77	-	2.77	-	2.77
	C314	MC	2.78	2.78	-	2.78	-	2.78	2.78	2.78	-	2.78	-	2.78
	C315	AI	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
	C316	IOT	3	3	3	3	3	3	3	-	3	-	3	3
	C317	QA	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06
	C318	SPCC Lab	2.74	2.74	2.76	2.76	2.67	-	-	-	-	2.74	-	2.74
	C319	CSS Lab	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73
	C320	MC Lab	2.76	2.76	-	2.8	2.76	2.76	2.6	2.76		2.76	-	2.76
	C321	AI Lab	2.8	2.8	2.8	2.8	2.8	2.8	-	2.8	2.8	-	2.8	2.8
	C322	CC Lab	2.60	2.60	-	2.60	2.60	2.60	-	2.60	2.60	2.60	-	2.60
	C323	Mini Proje	3	3	3	3	3	3	3	3	3	3	3	3
			2.79	2.79	2.80	2.79	2.78	2.81	2.81	2.82	2.84	2.81	2.85	2.80

Batch 2019-23: SE (2020-21) CO Attainment

SE CO ATTAINMENT														
Year	Courses	Program Outcome												
		SUB	PO 1(a)	PO 2(b)	PO3 (c)	PO 4(d)	PO 5(e)	PO 6(f)	PO 7(g)	PO 8(h)	PO 9(i)	PO1 0(j)	PO1 1(k)	PO1 2(l)
SE odd	C201	AMIII	3	3	-	-	-	-	-	-	-	-	-	3.00
	C202	DSGT	3	3	-	-	-	-	-	-	-	-	-	3.00
	C203	DS	3	3	3	-	-	-	-	-	3	3	-	3.00
	C204	DLCA	3	3	-	3	3	-	-	-	3	-	-	-
	C205	CG	3	3	3	3	3	-	-	-	-	-	-	3.00
	C206	DS Lab	3	3	3	3	3	-	-	-	3	3	-	-
	C207	DLCA Lab	3	3	3		3	-	-	-	3	-	-	-
	C208	CG Lab	3	3	3	3	3	3	-	-	3	3	3	3.00
	C209	OOPJ Lab	3	3	3	3			-	-	3	3	3	3.00
	C210	Mini Project	3	3	3	3	3	3	3	3	3	3	3	3.00

SE EVEN	CSC401	AMIV	3	3	-	3	-	-	-	-	-	-	-	3.00
	CSC402	AOA	2.91	2.91	2.91	2.91	-	-	-	-	-	-	-	2.91
	CSC403	DBMS	3	3	3	3	3	3		3	3	3	3	3.00
	CSC404	OS	3	3	-	-	-	-	-	-	-	-	-	3.00
	CSC405	MP	3	3	3	3	3	-	-	-	3	3	-	
	CSL401	AOA Lab	3	3	3	3		-	-	-	-	3	-	3.00
	CSL402	DBMS Lab	3	3	3	3	3	-	-	3	3	3	3	3.00
	CSL403	OS Lab	3	3	3	3	3	-	-	3	3	3		3.00
	CSL404	MP Lab	3	3	3	3	3	3	3	3	3	3	3	3.00
	CSL405	Skill Based(pyth on) Lab	3	3	3	3	-	-	-	-	3	-	3	3.00
	CSM401	Mini Project Lab	3	3	3	3	3	3	3	3	3	3	3	3.00
			3.00	3.00	2.99	2.99	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.99

PSO Attainment Batch 2019-2023:

 <p style="text-align: center;">Vivekanand Education Society's Institute Of Technology (Affiliated to University of Mumbai, Approved by AICTE & Recognized by Govt. of Maharashtra)</p>						
Computer Department PSO Attainment for BE 2019-23 (CBSGS)						
Academic Year	Year	Semester	Attainment Goal	Weightage	PSO1	PSO2
2020-21	S.E.	PO Attainment through CO	50.00%	80.00%	3.0	3.0
2021-22	T.E.	PSO Attainment through CO			2.71	2.77
2022-23	B.E.	PSO Attainment through CO			2.88	2.88
Average PSO Attainment through B.E. (2017-21)(Direct Assessment)					2.86	2.88
PSO Attainment through Student Portfolio for batch(2020-2023)			75.00%	20.00%	3	3
PSO Attainment through Student Exit Forms			60.00%		3	3
PSO Attainment through Placements			90.00%		3	3
PSO Attainment through Higher Education			10.00%		3	3
Indirect Attainment					3	3
Departmental PSO Attainment for Batch 2018-2022 Attainment level- 2.78			>=70%		2.89	2.91
Departmental PSO Attainment for Batch 2019-2023 Attainment level- 2.90						

**2. Bachelor of Information Technology Engineering: CO-PO-PSO mapping and attainment.
CO Attainment:**

Average CO- PO-PSO Mapping for AY 22-23:

Average Mapping														
Sem	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
III Avg	2.5	2.5	2.7	2.6	3	2	2.2	2.3	2.2	2	2.1	2.7	2.8	2.6
IV Avg	2.5	2.6	2.4	2.3	2.7	2.8	2.3	1.0	2.3	2.0	2.4	2.4	2.9	2.3
V Avg	1.6	1.9	2.6	2.8	2.8	2.9	2.8	2.9	2.9	3.0	3.0	2.9	2.5	2.9
VI Avg	2.6	2.5	2.9	2.9	2.8	2.8	2.4	2.3	2.6	3.0	3.0	2.8	3.0	2.9
VII Avg	2.6	2.8	2.7	2.6	2.7	2.5	2.3	2.5	2.2	2.3	2.2	2.5	2.7	2.6
VIII Avg	2.4	2.8	2.5	2.5	2.9	2.8	2.8	2.9	2.8	2.4	2.4	2.5	2.8	2.8
Average	2.4	2.5	2.5	2.4	2.6	2.7	2.2	2.2	2.5	2.3	2.6	2.5	2.8	2.7

CO Attainment for 2022-23 Batch:

PC	CO1	3.97	4	4	3.73	4	3.8	3.9	3.4
	CO2	4	4	4	4	3	3.8	3.9	
	CO3	4	4	4	3.97	3	3.8	3.9	
	CO4	4	4	4	4	4	4	4	
	CO5	3.94	4	4	4	3	3.8	3.9	
	CO6		4	0.8		4	0.8	0.8	
LD	CO1	4	4	4	3.87	4	3.9	4	3.7
	CO2	3.7	3.5	3.7	3.78	3.5	3.7	3.7	
	CO3	3.71	4	3.8	3.77	4	3.8	3.8	
	CO4	3.88	4	3.9	3.78	4	3.8	3.9	
	CO5	2.8	3	2.8	2.8	3	2.8	2.8	
	CO6	4	3.5	3.9	3.93	3	3.7	3.8	

DBMS	CO1	4	4	4	3.8	4	3.8	3.9	3.9
	CO2	4	4	4	3.9	4	3.9	4	
	CO3	4	4	3.9	3.9	4	3.9	3.9	
	CO4	4	4	3.9	3.9	4	3.9	3.9	
	CO5	4	4	4	3.8	4	3.8	3.9	
	CO6	4	4	4	4	4	4	4	
CPPL LAB	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	3.97	3.5	3.9	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	2.8	2.5	2.7	3.4	
	LO6	4	4	4	2.8	3	2.8	3.4	
DS LAB	LO1	4	4	4	4	4	4	4	3.8
	LO2	3.6	3	3.5	3.8	3	3.6	3.6	
	LO3	3.9	4	3.9	3.9	4	3.9	3.9	
	LO4	3.8	4	3.8	3.9	3	3.7	3.8	
	LO5	3.9	4		3.9	4	3.9	3.9	

JPL	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	4	4	4	4	
	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	4	4	4	4	
	LO7	4	4	4	4	4	4	4	
L08	4	4	4	4	4	4	4		
L09	4	4	4	4	4	4	4		

SQL	LO1	4	4	4	4	4	4	4	3.9
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	2.8	4	3	3.5	
	LO6	4	4	4	4	4	4	4	
Average		3.9	4	3.9	3.8	3.8	3.8	3.8	3.8

Final CO attainment (AY2020-21) SEM-IV									
		D10A			D10B				
Subject	COs	Direct CO Attainment	Indirect CO Attainment	Final CO Attainment =0.8*Direct+0.2*Indirect	Direct CO Attainment	Indirect CO Attainment	Final CO Attainment =0.8*Direct+0.2*Indirect	Average	Average CO attainment for subject
AM-IV	CO1	3.8	4	3.8	4	4	4	3.9	3.6
	CO2	3.9	4	3.9	3.9	4	3.9	3.9	
	CO3	3.7	4	3.8	3.7	4	3.8	3.8	
	CO4	3.9	4	3.9	3.9	4	3.9	3.9	
	CO5	2.8	4	3	2.8	4	3	3	
	CO6	2.8	4	3	2.8	4	3	3	
AT	CO1	4	4	4	3.7	4	3.8	3.9	3.9
	CO2	3.9	4	3.9	3.9	4	3.9	3.9	
	CO3	3.6	4	3.7	3.7	4	3.8	3.8	
	CO4	3.9	4	3.9	3.9	4	3.9	3.9	

AM-IV	CO1	3.8	4	3.8	4	4	4	3.9	3.6
	CO2	3.9	4	3.9	3.9	4	3.9	3.9	
	CO3	3.7	4	3.8	3.7	4	3.8	3.8	
	CO4	3.9	4	3.9	3.9	4	3.9	3.9	
	CO5	2.8	4	3	2.8	4	3	3	
	CO6	2.8	4	3	2.8	4	3	3	
AT	CO1	4	4	4	3.7	4	3.8	3.9	3.9
	CO2	3.9	4	3.9	3.9	4	3.9	3.9	
	CO3	3.6	4	3.7	3.7	4	3.8	3.8	
	CO4	3.9	4	3.9	3.9	4	3.9	3.9	
OS	CO1	4	4	4	4	4	4	4	4
	CO2	4	4	4	4	4	4	4	
	CO3	4	4	4	4	4	4	4	
	CO4	4	4	4	4	4	4	4	
	CO5	4	4	4	4	4	4	4	
	CO6	4	4	4	4	4	4	4	

COA	CO1	4	4	4	4	4	4	4	4
	CO2	4	4	4	4	4	4	4	
	CO3	4	4	4	4	3	3.8	3.9	
	CO4	4	4	4	4	3	3.8	3.9	
	CO5	4	4	4	4	4	4	4	
	CO6	4	4	4	2.8	4	3	3.5	
CN	CO1	3.86	4	3.9	3.86	4	3.9	3.9	3.2
	CO2	1.2	4	1.8	1.2	4	1.8	1.8	
	CO3	4	4	4	4	4	4	4	
	CO4	4	4	4	4	4	4	4	
	CO5	3.44	4	3.6	3.44	4	3.6	3.6	
	CO6	1.2	4	1.8	1.2	4	1.8	1.8	
CN-LA B	CO1	3.55	4	3.6	3.55	4	3.6	3.6	3.6
	CO2	4	4	4	4	4	4	4	
	CO3	3.55	4	3.6	3.55	4	3.6	3.6	
	CO4	2.8	4	3	2.8	4	3	3	
	CO5	4	4	4	4	4	4	4	
	CO6	2.8	4	3	2.8	4	3	3	

PYTHO N LAB	LO1	3.8	4	3.8	4	4	4	3.9	3.7
	LO2	3.9	4	3.9	4	4	4	4	
	LO3	3.9	4	3.9	4	4	4	4	
	LO4	3.8	4	3.8	3.8	4	3.8	3.8	
	LO5	3.7	4	3.8	3.7	4	3.8	3.8	
	LO6	3.9	4	3.9	3.9	4	3.9	3.9	
UNIX LAB	LO1	4	4	4	4	4	4	4	4
	LO2	4	3	3.8	4	3	3.8	3.8	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	4	4	4	4	
MP LAB	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	4	4	4	4	
Average		3.7	4	3.8	3.7	3.9	3.8	3.8	3.8

Final CO attainment (AY2021-22) SEM-V									
Subject	COs	Direct CO Attainment	Indirect CO Attainment	Final CO Attainment =0.8*Direct+0.2*Indirect	Direct CO Attainment	Indirect CO Attainment	Final CO Attainment =0.8*Direct+0.2*Indirect	Average	Average CO attainment for subject
SE	CO1	4	4	4	4	4	4	4	4
	CO2	4	4	4	4	4	4	4	
	CO3	4	4	4	4	4	4	4	
	CO4	4	4	4	4	4	4	4	
	CO5	4	4	4	4	4	4	4	
IP	CO1	4	4	4	4	4	4	4	3.5
	CO2	4	4	4	3.6	4	3.7	3.9	
	CO3	4	4	4	3.9	4	3.9	4	
	CO4	4	4	4	3.6	4	3.7	3.9	
	CO5	1	4	1.6	3.8	4	3.8	2.7	

ADMT	CO1	3.91	3.91	3.9	3.91	3.91	3.9	3.9	3.6
	CO2	3.63	3.63	3.6	3.63	3.63	3.6	3.6	
	CO3	4	4	4	4	4	4	4	
	CO4	4	4	4	4	4	4	4	
	CO5	4	4	4	4	4	4	4	
	CO6	4	4	4	4	4	4	4	
CNS	CO1	3.6	4	3.7	4	4	4	3.9	3.6
	CO2	3.8	4	3.8	4	4	4	3.9	
	CO3	4	4	4	4	4	4	4	
	CO4	3.4	4	3.5	4	4	4	3.8	
	CO5	2.8	3	2.8	2.8	3	2.8	2.8	
	CO6	3.9	4	3.9	4	4	4	4	
ADSA A	CO1	4	4	4	4	4	4	4	4
	CO2	4	4	4	3.9	4	3.9	4	
	CO3	4	4	4	3.9	4	3.9	4	
	CO4	4	4	4	4	4	4	4	
	CO5	4	4	4	4	4	4	4	
	CO6	4	4	4	4	4	4	4	

ECONOMICS & BUSINESS	CO1	3.7	4	3.8	3.8	4	3.8	3.8	3.7
	CO2	4	4	4	4	4	4	4	
	CO3	3.7	4	3.8	3.6	4	3.7	3.8	
	CO4	2.8	4	3	4	4	4	3.5	
	CO5	3.8	4	3.8	3.8	4	3.8	3.8	
	CO6	3.9	4	3.9	3.7	4	3.8	3.9	
PCE	CO1	4	4	4	4	4	4	4	4
	CO2	4	4	4	4	4	4	4	
	CO3	4	4	4	4	4	4	4	
	CO4	4	4	4	4	4	4	4	
	CO5	4	4	4	4	4	4	4	
	CO6	4	4	4	4	4	4	4	
IP LAB	LO1	3	1	2.6	4	4	4	3.3	3.1
	LO2	3	4	3.2	4	4	4	3.6	
	LO3	3	4	3.2	4	4	4	3.6	
	LO4	3	4	3.2	4	4	4	3.6	
	LO5	3	4	3.2	4	4	4	3.6	
	LO6	3	4	3.2	4	4	4	3.6	

SECURITY LAB	LO1	3.8	4	3.8	4	4	4	3.9	3.9
	LO2	3.9	4	3.9	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	3.7	4	3.8	4	4	4	3.9	
	LO5	3.7	4	3.8	4	3	3.8	3.8	
	LO6	3.9	4	3.9	4	4	4	4	
DEVOPS	LO1	3.9	4	3.9	4	4	4	4	3.9
	LO2	4	4	4	4	4	4	4	
	LO3	3.6	4	3.7	4	4	4	3.9	
	LO4	3.7	4	3.8	4	4	4	3.9	
	LO5	3.7	4	3.8	4	4	4	3.9	
	LO6	3.9	4	3.9	4	4	4	4	
ADV. DEVOPS	LO1	2.5	4	2.8	3.6	4.0	3.7	3.3	3.6
	LO2	4	4	4	4	4.0	4	4	
	LO3	3	3	3	3.6	3.0	3.5	3.3	
	LO4	4	3	3.8	4	3.0	3.8	3.8	
	LO5	4	4	4	4	3.0	3.8	3.9	
	LO6	4	4	4	4	4.0	4	4	

IOT MINI PROJE CT	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	4	4	4	4	
	LO7	4	4	4	4	4	4	4	
	LO8	4	4	4	4	4	4	4	
	LO9	4	4	4	4	4	4	4	
Average		3.7	3.9	3.7	3.9	3.9	3.9	3.9	3.7

Final CO attainment (AY2021-22) SEM-VI									
Subject	COs	Direct CO Attainment	Indirect CO Attainment	Final CO Attainment =0.8*Direct+0.2*Indirect	Direct CO Attainment	Indirect CO Attainment	Final CO Attainment =0.8*Direct+0.2*Indirect	Average	Average CO attainment for subject
DMBI	CO1	3.6	4	3.7	4	4	4	3.9	3.9
	CO2	3.8	4	3.8	4	4	4	3.9	
	CO3	3.7	4	3.8	4	4	4	3.9	
	CO4	3.8	4	3.8	3.82	4	3.9	3.9	
	CO5	4	4	4	4	4	4	4	
	CO6	4	4	4	4	4	4	4	
WEB X.0	CO1	4	4	4	4	4	4	4	3.7
	CO2	3.89	4	3.9	4	4	4	4	
	CO3	3.5	4	3.6	4	4	4	3.8	
	CO4	3.85	4	3.9	4	4	4	4	
	CO5	3.6	4	3.7	4	4	4	3.9	
	CO6	2.8	4	3	4	4	4	3.5	

WT	CO1	4	4	4	4	4	4	4	4
	CO2	4	4	4	4	4	4	4	
	CO3	4	4	4	4	4	4	4	
	CO4	4	4	4	4	4	4	4	
	CO5	4	4	4	4	4	4	4	
	CO6	4	3	3.8	4	3	3.8	3.8	
AIDS-I	CO1	4	4	4	4	4	4	4	3.8
	CO2	3.9	4	3.9	3.9	4	3.9	3.9	
	CO3	4	4	4	4	4	4	4	
	CO4	3.6	4	3.7	3.7	4	3.8	3.8	
	CO5	4	4	4	4	4	4	4	
	CO6	2.8	4	3	2.8	4	3	3	
EHF	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	4	4	4	4	

BI LAB	LO1	4	4	4	3.85	4	3.9	4	4
	LO2	4	4	4	3.84	4	3.9	4	
	LO3	4	4	4	3.94	4	4	4	
	LO4	4	4	4	3.91	4	3.9	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	3.85	4	3.9	4	
WEB LAB	CO1	4	4	4	4	4	4	4	3.7
	CO2	3	4	3.2	4	4	4	3.6	
	CO3	4	4	4	4	4	4	4	
	CO4	3	4	3.2	4	4	4	3.6	
	CO5	4	4	4	4	4	4	4	
	CO6	4	4	4	4	4	4	4	
Sensor LAB	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	3	3.8	4	3	3.8	3.8	

MAD & PWA LAB	LO1	3.7	4	3.8	4	3	3.8	3.8	3.6
	LO2	3.4	4	3.5	4	4	4	3.8	
	LO3	3.4	4	3.5	4	3	3.8	3.7	
	LO4	3.4	4	3.5	4	4	4	3.8	
	LO5	3.4	4	3.5	4	4	4	3.8	
	LO6	3.4	4	3.5	4	4	4	3.8	
DS using Python Lab	LO1	3.1	4	3.3	3.1	4	3.3	3.3	3.5
	LO2	3.3	4	3.4	3.3	4	3.4	3.4	
	LO3	3.3	4	3.4	3.3	4	3.4	3.4	
	LO4	3.4	4	3.5	3.4	4	3.5	3.5	
	LO5	3.4	4	3.5	3.4	4	3.5	3.5	
	LO6	3.7	4	3.8	3.7	4	3.8	3.8	
Mini Project 2B	LO1	3.7	4	3.8	4	4	4	3.9	3.8
	LO2	3.7	4	3.8	4	4	4	3.9	
	LO3	3.7	4	3.8	4	4	4	3.9	
	LO4	3.7	4	3.8	4	4	4	3.9	
	LO5	3.7	4	3.8	4	4	4	3.9	
	LO6	3.7	4	3.8	4	4	4	3.9	
	LO7	3.7	4	3.8	4	4	4	3.9	
	LO8	3.7	4	3.8	4	4	4	3.9	
	LO9	3.7	4	3.8	4	4	4	3.9	
Average		3.8	4	3.8	3.9	3.9	3.9	3.9	3.8

Final CO attainment (AY2022-23) SEM-VII									
Subject	COs	Direct CO Attainment	Indirect CO Attainment	Final CO Attainment =0.8*Direct+0.2*Indirect	Direct CO Attainment	Indirect CO Attainment	Final CO Attainment =0.8*Direct+0.2*Indirect	Average	Average CO attainment for subject
AIDS -II	CO1	3.1	4	3.3	3.1	4	3.3	3.3	3.2
	CO2	2.7	4	3	2.7	4	3	3	
	CO3	3.2	4	3.4	3.2	4	3.4	3.4	
	CO4	3.1	4	3.3	3.1	4	3.3	3.3	
	CO5	2.9	4	3.1	2.9	4	3.1	3.1	
	CO6	2.7	4	3	2.7	4	3	3	
IOE	CO1	2	4	2.4	2	4	2.4	2.4	2.5
	CO2	2.1	4	2.5	2.1	4	2.5	2.5	
	CO3	2.2	4	2.6	2.2	4	2.6	2.6	
	CO4	2.3	4	2.6	2.3	4	2.6	2.6	
	CO5	2	4	2.4	2	4	2.4	2.4	
	CO6	2.2	4	2.6	2.2	4	2.6	2.6	

IS	CO1	2.2	4	2.6	2.2	4	2.6	2.6	2.6
	CO2	2.2	4	2.6	2.2	4	2.6	2.6	
	CO3	2.3	4	2.6	2.3	4	2.6	2.6	
	CO4	2.2	4	2.6	2.2	4	2.6	2.6	
	CO5	2.2	4	2.6	2.2	4	2.6	2.6	
	CO6	2.2	4	2.6	2.2	4	2.6	2.6	
STQA	CO1	3.9	4	3.9	3.9	4	3.9	3.9	3.9
	CO2	3.7	4	3.8	3.7	4	3.8	3.8	
	CO3	4	4	4	4	4	4	4	
	CO4	3.7	4	3.8	3.7	4	3.8	3.8	
	CO5	3.8	4	3.8	3.8	4	3.8	3.8	
	CO6	4	4	4	4	4	4	4	
AR-VR	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	4	4	4	4	

IRS	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	4	4	4	4	
MIS	CO1	3.58	3	3.5	3.58	3	3.5	3.5	3.5
	CO2	3.58	3	3.5	3.58	3	3.5	3.5	
	CO3	3.58	3	3.5	3.58	3	3.5	3.5	
	CO4	3.64	3	3.5	3.64	3	3.5	3.5	
	CO5	3.595	3	3.5	3.595	3	3.5	3.5	
CSL	CO1	4	4	4	4	4	4	4	4
	CO2	4	4	4	3.7	4	3.8	3.9	
	CO3	4	4	4	3.7	4	3.8	3.9	
	CO4	4	4	4	4	4	4	4	
	CO5	4	4	4	3.7	4	3.8	3.9	
	CO6	4	4	4	4	4	4	4	
DS LAB	LO1	3.7	4	3.8	3.7	4	3.8	3.8	3.7
	LO2	3.7	3	3.6	3.7	3	3.6	3.6	
	LO3	4	3	3.8	4	3	3.8	3.8	
	LO4	3.7	3	3.6	3.7	3	3.6	3.6	
	LO5	3.7	4	3.8	3.7	4	3.8	3.8	
	LO6	3.4	4	3.5	3.4	4	3.5	3.5	

IOE LAB	LO1	4	4	4	4	4	4	4	3.6
	LO2	3.4	4	3.5	3.4	4	3.5	3.5	
	LO3	3.4	4	3.5	3.4	4	3.5	3.5	
	LO4	3.4	4	3.5	3.4	4	3.5	3.5	
	LO5	3.6	4	3.7	3.6	4	3.7	3.7	
	LO6	3.5	4	3.6	3.5	4	3.6	3.6	
SAD LAB	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	4	4	4	4	
ROSPL	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	4	4	4	4	

MAJOR PROJECT I	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	4	4	4	4	
Average		3.5	3.9	3.6	3.5	3.9	3.6	3.6	3.6

Final CO attainment (AY2022-23) SEM-VIII

Subject	COs	Direct CO Attainment	Indirect CO Attainment	Final CO Attainment =0.8*Direct+0.2* Indirect	Direct CO Attainment	Indirect CO Attainment	Final CO Attainment =0.8*Direct+0.2* Indirect	Average	Average CO attainment for subject
BDLT	CO1	4	4	4	4	4	4	4	4
	CO2	4	4	4	4	4	4	4	
	CO3	4	4	4	4	4	4	4	
	CO4	4	4	4	4	4	4	4	
	CO5	4	4	4	4	4	4	4	
	CO6	4	4	4	4	4	4	4	
BDA	CO1	3.5	4	4	3.5	4	4	4	4
	CO2	3.6	4	4	3.6	4	4	4	
	CO3	3.9	4	4	3.9	4	4	4	
	CO4	3.6	4	4	3.6	4	4	4	
	CO5	3.8	4	4	3.8	4	4	4	
	CO6	4	4	4	4	4	4	4	

CCS	CO1	4	4	4	4	4	4	4	4
	CO2	3.85	4	4	3.85	4	4	4	
	CO3	4	4	4	4	4	4	4	
	CO4	4	4	4	4	4	4	4	
	CO5	3.75	4	4	3.75	4	4	4	
	CO6	2.4	4	4	2.4	4	4	4	
PM	CO1	4	4	4	4	4	4	4	4
	CO2	4	4	4	4	4	4	4	
	CO3	4	4	4	4	4	4	4	
	CO4	4	4	4	4	4	4	4	
	CO5	4	4	4	4	4	4	4	
	CO6	4	4	4	4	4	4	4	
FM	CO1	4	4	4	4	4	4	4	4
	CO2	4	4	4	4	4	4	4	
EVM	CO1	2.8	4	4	2.8	4	4	4	4
	CO2	2.8	4	4	2.8	4	4	4	
	CO3	2.8	4	4	2.8	4	4	4	

BLK CHAIN LAB	CO1	4	4	4	4	4	4	4	4
	CO2	4	4	4	4	4	4	4	
	CO3	4	4	4	4	4	4	4	
	CO4	4	4	4	4	4	4	4	
	CO5	4	4	4	4	4	4	4	
	CO6	4	4	4	4	4	4	4	
CC LAB	CO1	3.7	4	4	3.7	4	4	4	4
	CO2	3.9	4	4	3.9	4	4	4	
	CO3	3.7	4	4	3.7	4	4	4	
	CO4	3.7	4	4	3.7	4	4	4	
	CO5	3.7	4	4	3.7	4	4	4	
	CO6	3.9	4	4	3.9	4	4	4	
MAJOR PROJECT II	LO1	4	4	4	4	4	4	4	4
	LO2	4	4	4	4	4	4	4	
	LO3	4	4	4	4	4	4	4	
	LO4	4	4	4	4	4	4	4	
	LO5	4	4	4	4	4	4	4	
	LO6	4	4	4	4	4	4	4	
Average		3.8	4	4	3.8	4	4	4	4

Final CO Attainment (For the batch passed out in 2022-23)	
Sem	Final CO Attainment
III	3.8
IV	3.7
V	3.8
VI	3.8
VII	3.6
VIII	4
Average	3.8

4. PO-PSO attainment for 2022-23 Batch

Direct PO Attainment (For 2022-23 Pass out batch)														
Sem	POs													
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
III	3.2	3.1	3.4	3.4	3.8	2.8	2.6	3.1	2.7	3	2.4	3.4	3.5	3.4
IV	3.2	3.2	3.1	2.8	3.4	3.6	3.1	2.1	3	2.4	2.8	3	3.5	3.1
V	2.3	2.5	3.3	3.6	3.3	3.8	3.1	3.7	3.7	3.9	3.9	3.6	3.1	3.7
VI	3.2	3.2	3.8	3.7	3.4	3.5	2.6	2.7	3.3	4	3.8	3.6	3.7	3.7
VII	3.5	3.4	3.3	3	3.4	3	3.2	3.2	2.7	2.9	2.9	3.1	3.2	3.1
VIII	2.8	3.5	3.2	3.3	3.8	3.8	3.7	3.8	3.6	3	3.1	3.4	3.8	3.8
Average	3	3.2	3.4	3.3	3.5	3.4	3.1	3.1	3.2	3.2	3.2	3.4	3.5	3.5
Indirect PO attainment														
Sr. No	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Graduate Exit Survey	4	4	4	4	4	4	4	5	4	5	5	4	5	4
Co-Curricular	3.86	3.6	3.67	3.75	3.86	4	4	4	3.89	3.67	4	3.78	4	4
**Institute level Co-Curricular	3	3	3	3	3	3	3	3	3	3	3	3	3	3
***Extra Curricular	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Average AL	3.93	3.8	3.84	3.88	3.93	4	4	4.5	3.95	4.34	4.5	3.89	4.5	4
Final PO attainment= 0.8 * Direct + 0.2* Indirect														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
	3.2	3.3	3.5	3.4	3.6	3.5	3.3	3.4	3.3	3.4	3.5	3.5	3.7	3.6

**Institute level co-curricular activities include NPTEL ,Spoken Tutorials,Microsoft,Oracle certification tests,Looking Beyond syllabus,Cloudera,Praxis,Leading India,Technology day, Technical societies, Internships etc.

***Extra curricular activities include Sphoorti, Utsav , Musical and all other cultural events.

3. Masters of Computer Applications: CO-PO-PSO mapping and attainment.

PO-PSO Attainment

PO Attainment of Batch 2021-2023														
Sem	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
I Avg	2.99	2.99	3.00	2.98	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.99
II Avg	2.92	3.00	2.93	3.00	2.89	3.00	2.95	3.00	3.00	NA	3.00	NA	2.91	2.79
III Avg	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
IV Avg	Result is pending from University's end													
Average	2.97	3	2.98	2.99	2.96	3	2.98	3	3	3	3	3	2.97	2.93
1: Weak 2:Medium 3: Strong														