

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING****PO/PSO ATTAINMENT - BATCH(2019-23)****PO Attainment - (Batch: 2019-2023)**

Course Code	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>FIRST SEMESTER</b>													
C101	Mathematics - I	3	2	2	2	-	-	1	-	-	-	-	2.9
C102	Physics	3	2.9	1	1	-	0.5	-	-	-	-	-	2.8
C103	Chemistry	2	2	2	-	-	1	2	-	-	-	1.7	2
C104	Basic Electrical and Electronics Engineering	2	1	-	-	0.3	-	-	-	-	-	0.4	-
C105	Engineering Thermodynamics	3	2	0.3	0.3	-	-	-	-	-	-	-	0.6
C106	Computer Programming	2.8	1	2	1	0.3	0.3	-	0.2	-	0.2	0.2	1
C107(P)	Computer Programming lab	3	3	3	3	3	-	-	-	-	-	-	3
C108(P)	Engineering Graphics	2	1	-	-	-	-	-	-	-	-	-	-
C109(P)	Basic Electrical & Electronics Laboratory	2	1	-	-	1	-	-	-	-	-	0.6	-
<b>SECOND SEMESTER</b>													
C110	Mathematics - II	3	2	2	-	-	-	-	-	-	-	-	1
C111	Material Science	2	0.5	-	-	-	-	0.2	-	-	0.2	-	1
C112	Environmental Science	2	-	-	-	-	2	3	-	-	-	-	3

<b>C113</b>	Basic Civil and Mechanical Engineering	1	0.2	0.2	0.2	-	1	0.4	-	-	0.4	-	0.4
<b>C114</b>	Engineering Mechanics	3	2	-	1.5	-	1	-	-	-	1.8	-	1.8
<b>C115</b>	Communicative English	-	-	-	-	-	-	-	1	0.2	2	-	3
<b>C116(P)</b>	Physics Laboratory	3	-	-	1	-	1	1	-	1	2	-	2
<b>C117(P)</b>	Chemistry Laboratory	3	-	-	-	-	1	1	-	2	1	-	2
<b>C118(P)</b>	Workshop Practice	-	-	1	-	-	-	-	-	-	-	-	-
<b>C119(P)</b>	NSS / NCC *	1	-	-	-	0.6	1.8	1.2	1.8	1.4	1.8	0.4	0.8

### THIRD SEMESTER

<b>C201</b>	Mathematics - III	3	3	3	-	-	1	-	-	-	-	-	2
<b>C202</b>	Electronics Devices and Circuits	3	-	-	3	-	-	-	-	-	-	2	3
<b>C203</b>	Object Oriented Programming and Design	2.56	1.38	1.19	0.89	0.39	-	-	-	-	-	0.59	1.38
<b>C204</b>	Digital System Design	2.76	2.56	2.36	1.37	-	-	-	-	-	-	-	1.96
<b>C205</b>	Data Structures	2.55	0.78	0.59	-	-	-	-	-	-	-	-	-
<b>C206</b>	Computer Organization and Architecture	2.17	1.54	-	-	-	-	-	-	-	-	-	-
<b>C207(P)</b>	Electronics Devices and Circuits Lab	3	-	2.24	-	1.94	1.45	-	-	-	-	-	-
<b>C208(P)</b>	Data Structures Laboratory	2.96	2.96	-	1.61	1.3	-	-	-	-	-	-	-

C209(P)	Digital system design Laboratory	2.96	2.96	2.47	1.647	-	-	-	-	-	-	-	1.98
<b>FOURTH SEMESTER</b>													
C210	Mathematics -IV	3	2	2	1	-	-	-	-	-	-	-	1
C211	Microprocessors and Microcontrollers	2.91	1.935	1.355	0.58	0.765	-	-	-	-	-	-	-
C212	Automata Languages and Computations	1.50	1.50	0.51		0.59	-	-	-	-	-	-	-
C213	Design and Analysis of Algorithms	2.88	2.88	-	0.57		-	-	-	-	-	-	-
C214	Object Oriented Programming	1.77	0.99	0.39	0.4	0.98	-	-	-	-	-	-	-
C215	Graphics and Image Processing	2.972	1.884	1.982	1.684	2.574	0.989	-	-	-	-	-	-
C216(P)	Microprocessor and Microcontrollers Laboratory	1.31	1.31	0.327	-	-	-	-	-	-	-	0.820	-
C217(P)	Design and Analysis of Algorithms Lab	3.00	2.94	-	1.65	1.29	-	-	-	-	-	-	-
C218(P)	Object Oriented Programming Languages	3	3.00	3.00	3	3.00	-	-	-	-	-	-	3.00
C219(P)	Physical Education*	1	0.4	0.4	0.4	0.6	0.8	-	1	1.6	1	1	0.8
<b>FIFTH SEMESTER</b>													
C301	Operating Systems	1.97	1.57	0.7	0.98	1.31	-	-	-	-	-	-	-

C302	Computer Networks	2.78	0.70	0.31	1.55	0.70	-	-	-	-	-	-	2.02
C303	Database Management Systems	1.5	1	0.6	1	0.6	-	-	-	-	0.2	-	1.2
C304	Language Translators	2.95	2.95	0.78	-	-	-	-	-	-	-	-	-
C305	Software Engineering	1.54	1.93	1.93	1.93	1.95	0.2	-	-	1.15	0.57	-	2.9
C306 (P)	Operating Systems Laboratory	3.0	3.0	2.00	1.00	-	-	-	-	-	-	-	-
C307(P)	Computer Networks Laboratory	3.0	2.3	0.6	0.6	1.0	-	-	-	-	-	-	1.0
C308(P)	Database Management Systems Lab	1.00	1.00	2.00	1.00	-	-	-	-	-	-	1.00	2.00
C309	General Proficiency - I	-	-	-	-	-	-	-	-	3	3	-	-
<b>SIXTH SEMESTER</b>													
C310	Enterprises Solution	0.96	1.37	-	0.2	0.40	-	-	-	-	-	-	-
C311	Embedded Systems	1.955	1.15	0.39	-	0.19	-	-	-	-	-	-	-
C312	Web Technology	1.37	-	1.55	-	0.54	0.365	-	-	-	0.78	0.876	1.38
C313	Elective-I OOAD	2.97	1.83	0.75	-	1.97	-	-	-	-	0.99	-	-
C314	Elective-II E-Business	1.36	1.555	1.95	0.775	1.755	-	-	-	-	-	-	1.955
C315(P)	Enterprises Solutions Laboratory	1.36	1.63	1.99	-	2.36	-	-	-	-	-	-	2.36
C316(P)	Embedded Systems Laboratory	2.49	2.49	2.46	-	2.49	-	-	-	-	-	-	-

C317(P)	Web Technology Laboratory	1.99	1.99	1.99	-	1.99	-	-	-	-	-	-	1.99
C318(P)	Industrial Visits/Training	3	3	3	3	3	3	2	2	3	3	3	3
C319(P)	General Proficiency-II	-	-	-	-	-	-	-	-	3	3	0.8	0.8
<b>SEVENTH SEMESTER</b>													
C401	Artificial Intelligence	2.54 5	0.78 5	0.585	-	-	-	-	-	-	-	-	-
C402	Computer Hardware and Network Troubleshooting	2.46	1.47	1.65	-	0.92	-	-	-	-	-	-	-
C403	Platform Technology	2.92	1.64	0.19	0.38	0.39	-	-	-	-	-	-	-
C404	Software Testing and Quality Assurance	1.74	1.74	2.34	1.16	-	-	-	-	-	-	-	-
C405(P)	Artificial Intelligence Laboratory	1.6	1.8	2.2	1	-	-	-	-	-	-	-	-
C406(P)	Troubleshooting Laboratory	2.64	1.98	0.67	-	0.67	-	-	-	-	-	-	0.66
C407(P)	Platform Technology Laboratory	3.00	2.00	2.00	1.00	2.00	-	-	-	-	-	2.00	1.00
C408(P)	Project Work (Phase I)	2.6	0.8	0.4	1	0.8	1.8	1.6	2.2	2.8	1.2	1.4	2.6
<b>EIGHTH SEMESTER</b>													
C409	Engineering Economics and Management	2.95	1.97	-	-	-	0.79	-	0.2 0	-	-	1.97	1.97
C410	Information Security	2.53	2.53	-	1.36	2.3 3	-	-	-	-	-	-	-

C411	Elective-V – Mobile Computing	2.55	0.78	0.19	-	0.39	-	-	-	-	-	-	-
C412	Elective-VI - Cloud Computing	2.65	2.24	1.21	-	-	-	-	-	-	-	-	1.77
C413(P)	Professional Ethics Practice	1	-	-	-	-	-	-	3	2	-	-	3
C414(P)	Seminar	3	-	1	-	-	-	-	-	1.6	2.4	-	2.4
C415(P)	Comprehensive Viva-Voce	2.4	2.8	1.8	1.6	0.8	1	1	0.6	-	0.2	2	2.8
C416(P)	Project Work (Phase-II)	2.6	0.8	0.4	1	0.8	1.8	1.6	2.2	2.8	1.2	1.4	2.6
Guest Lectures		2.92	2.78	2.77	2.77	-	2.77	2.73	2.77	-	2.83	2.73	2.77
Workshops		2.89	2.77	2.86	2.88	2.96	-	-	-	-	-	-	2.95
Industrial Visits		2.56	2.50	2.58	2.50	2.63	2.80	2.80	-	-	-	2.70	2.80
Mini Projects		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Value added Courses		2.7	2.8	2.5	2.6	2.7	-	-	-	-	-	-	2.8
Average of PO's(Direct)		2.29	1.61	1.13	0.83	0.77	0.35	0.32	0.27	0.38	0.42	0.41	1.31
Programme exit survey		2.37	2.53	2.67	2.64	2.6	2.52	2.68	2.53	2.7	2.53	2.67	2.6
Employer survey		2.87	2.67	2.53	2.67	2.64	2.88	2.69	2.87	2.58	2.65	2.89	2.85
Alumni survey		2.4	2.5	2.5	2.8	2.2	2.3	2.8	2.82	2.75	2.45	2.68	2.85
Average of PO's(InDirect)		2.55	2.57	2.57	2.70	2.48	2.57	2.72	2.74	2.68	2.54	2.75	2.77

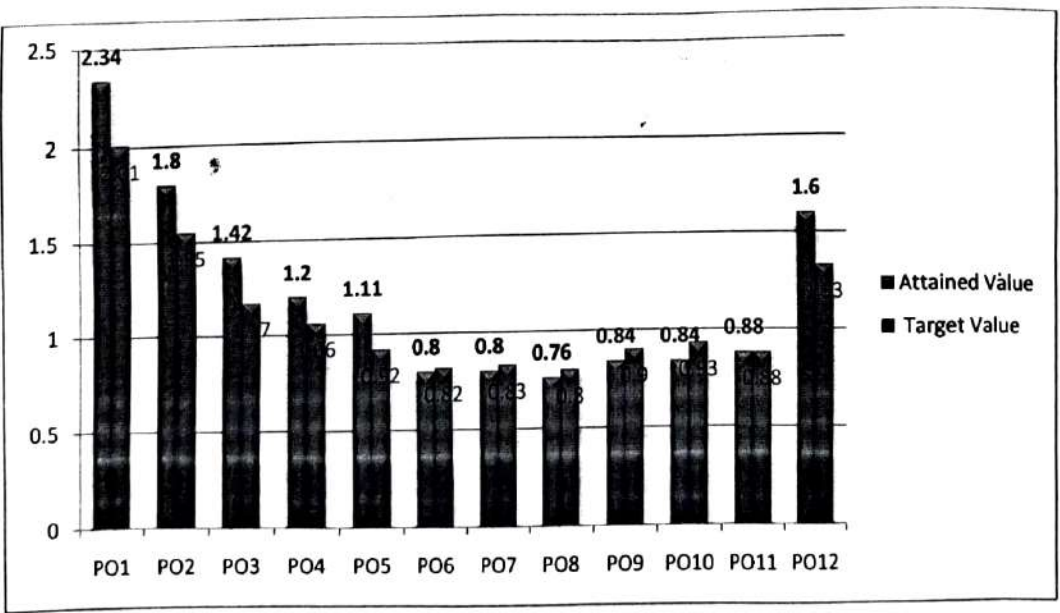
Overall PO Attainment Level

C411	Elective-V – Mobile Computing	2.55	0.78	0.19	-	0.39	-	-	-	-	-	-	-
C412	Elective-VI - Cloud Computing	2.65	2.24	1.21	-	-	-	-	-	-	-	-	1.77
C413(P)	Professional Ethics Practice	1	-	-	-	-	-	-	3	2	-	-	3
C414(P)	Seminar	3	-	1	-	-	-	-	-	1.6	2.4	-	2.4
C415(P)	Comprehensive Viva-Voce	2.4	2.8	1.8	1.6	0.8	1	1	0.6	-	0.2	2	2.8
C416(P)	Project Work (Phase-II)	2.6	0.8	0.4	1	0.8	1.8	1.6	2.2	2.8	1.2	1.4	2.6
Guest Lectures		2.92	2.78	2.77	2.77	-	2.77	2.73	2.77	-	2.83	2.73	2.77
Workshops		2.89	2.77	2.86	2.88	2.96	-	-	-	-	-	-	2.95
Industrial Visits		2.56	2.50	2.58	2.50	2.63	2.80	2.80	-	-	-	2.70	2.80
Mini Projects		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Value added Courses		2.7	2.8	2.5	2.6	2.7	-	-	-	-	-	-	2.8
Average of PO's(Direct)		2.29	1.61	1.13	0.83	0.77	0.35	0.32	0.27	0.38	0.42	0.41	1.31
Programme exit survey		2.37	2.53	2.67	2.64	2.6	2.52	2.68	2.53	2.77	2.53	2.67	2.6
Employer survey		2.87	2.67	2.53	2.67	2.64	2.88	2.69	2.87	2.58	2.65	2.89	2.85
Alumni survey		2.4	2.5	2.5	2.8	2.2	2.3	2.82	2.875	2.75	2.45	2.68	2.85
Average of PO's(Indirect)		2.55	2.57	2.57	2.70	2.48	2.57	2.72	2.74	2.68	2.54	2.75	2.77
<b>Overall PO Attainment Level</b>													

(DIRECT 80%)	1.83	1.29	0.91	0.66	0.61	0.28	0.25	0.21	0.30	0.33	1.04	
(INDIRECT 20%)	0.51	0.51	0.51	0.54	0.50	0.51	0.54	0.55	0.54	0.55	0.55	
Attained Value	2.34	1.80	1.42	1.20	1.11	0.80	0.80	0.76	0.84	0.84	0.88	1.60
Target Value	2.01	1.55	1.17	1.06	0.92	0.82	0.83	0.80	0.90	0.93	0.88	1.33

**PO Attainment -2019-23**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Attained Value	2.34	1.80	1.42	1.20	1.11	0.80	0.80	0.76	0.84	0.84	0.88	1.60
80% of Target Value	2.01	1.55	1.17	1.06	0.92	0.82	0.83	0.80	0.90	0.93	0.88	1.33
Overall Target Value	2.52	1.93	1.46	1.33	1.15	1.03	1.04	1.00	1.13	1.16	1.10	1.66



**PO Attainment Graph Batch -2019-23**

**Attainment of PSO – 2013 Regulation**

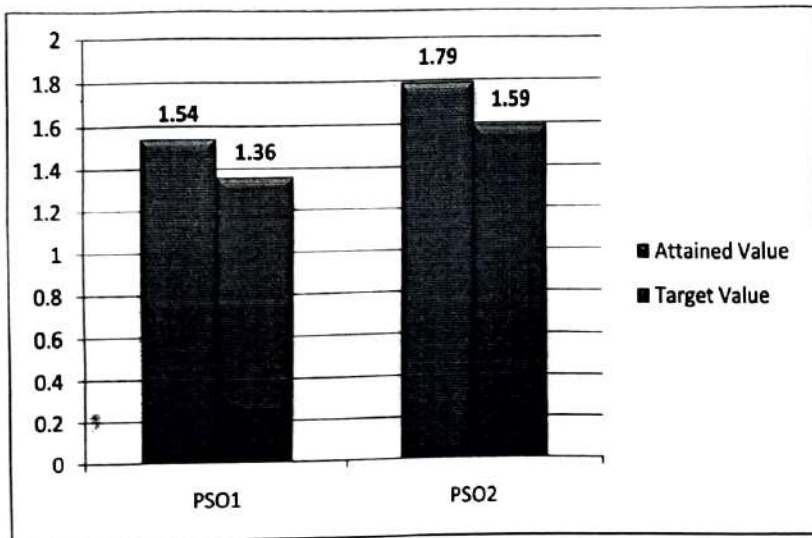
		<b>Batch 2019-23</b>	
<b>Course Code</b>	<b>Course Name</b>	<b>PSO1</b>	<b>PSO2</b>
C101	Mathematics – III	2	1
C102	Physics	1	0
C103	Chemistry	1	0
C106	Computer Programming	2	3
C107(P)	Computer Programming lab	2	2.5
C110	Mathematics – II	2.7	-
C201	Mathematics - III	2	1
C203	Object Oriented Programming and Design	0.988	1.972
C204	Digital System Design	2.96	2.86
C205	Data Structures	2.16	2.95
C206	Computer Organization and Architecture	2.93	2.93
C208(P)	Data Structures Laboratory	2.96	2.96
C209(P)	Digital system design Laboratory	2.29	1.97
C210	Mathematics -IV	3	1
C211	Microprocessors and Microcontrollers	0.795	0.895
C212	Automata Languages and Computations	0.98	-
C213	Design and Analysis of Algorithms	1.92	2.88
C214	Object Oriented Programming	1	2
C215	Graphics and Image Processing	2.973	2.973
C216(P)	Microprocessor and Microcontrollers Laboratory	0.98	0.984
C217(P)	Design and Analysis of Algorithms Lab	1.00	1.50
C218(P)	Object Oriented Programming Laboratory	3	3
C301	Operating Systems	1	1.5
C302	Computer Networks	0.50	2.40
C303	Database Management Systems	0.5	2
C304	Language Translators	2.95	-
C305	Software Engineering	2.5	2.8
C306(P)	Operating Systems Laboratory	1.00	1.00

C307(P)	Computer Networks Laboratory	2.0	2.0
C308(P)	Database Management Systems Lab	1.00	2.00
C310	Enterprises Solution	0.78	2.88
C311	Embedded Systems	2	2.8
C312	Web Technology	-	2.92
C313	Elective-I – OOAD	-	2.90
C314	Elective-II –E-Business	-	2.43
C315(P)	Enterprises Solutions Laboratory	-	1.50
C316(P)	Embedded Systems Laboratory	1.99	2.99
C317(P)	Web Technology Laboratory	1.0	2.0
C401	Artificial Intelligence	1.37	2.515
C402	Computer Hardware and Network Troubleshooting	0.95	1.89
C403	Platform Technology	0.96	2.92
C404	Software Testing and Quality Assurance	0.97	2.91
C405(P)	Artificial Intelligence Laboratory	1	2
C406(P)	Troubleshooting Laboratory	0.99	1.97
C407(P)	Platform Technology Laboratory	2.00	3.00
C408(P)	Project Work (Phase I)	3	3
C409	Engineering Economics and Management	1.18	-
C410	Information Security	-	2.92
C411	Elective-V –Mobile Computing	0.98	1.96
C412	Elective-VI - Cloud Computing	1.00	1.70
C416(P)	Project Work (Phase-II)	3	3
Guest Lectures		2.77	2.77
Workshops		2.8	2.78
Industrial Visits		2.45	2.36
Mini Projects		3	3
Value added Courses		3	3
<b>Average of PO's(Direct)</b>		1.20	1.51
Programme exit survey		2.94	2.88
Employer Surveys		2.88	2.92
Alumni survey		2.88	2.96
<b>Average of PO's(InDirect)</b>		2.90	2.92
<b>(DIRECT 80%)</b>		0.96	1.21

(INDIRECT 20%)	0.58	0.58
Attained Value	1.54	1.79
Target Value	1.36	1.59

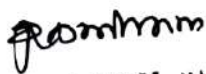
**PSO Attainment -2019-23**

	PSO1	PSO2
Attained Value	1.54	1.79
80% of Target Value	1.36	1.59
Overall Target Value	1.7	1.99



**PSO Attainment Graph Batch [2019-23 ]**



  
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