

1.3.2 Value Added Courses
Department of CSE-AIDS

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S.No	Name of the value-added courses offered	Page No
1	CC & EC Activities I	1

Department of CSE-AI&DS

Minimum Credits to be earned: 160 (for Regular Students)

123 (for Lateral Entry Students)

S.No	Course Code	Course Name	POs	L	T	P	C
First Semester							
1	21HSX01	Communicative English	10, 12	2	-	-	2
2	21MAX01	Engineering Mathematics I	1	3	-	-	3
3	21PYX01 21CYX01	Engineering Physics / Engineering Chemistry	1 / 1	3/3	-	-	3/3
4	21BEX01 21BEX06	Basics of Engineering / IT Workshop	1,12/1,12	3/-	-	-/3	3/1.5
5	21BEX02	Problem Solving and Programming Skills	1, 12	3	-	-	3
6	21BEX03	Problem Solving and Programming Skills Lab	4	-	-	3	1.5
7	21BEX04/ 21BEX05	Engineering Drawing / Engineering Workshop	1,5,10/1,9,10	-	-	3/3	1.5/1.5
8	21PYX02/ 21CYX02	Engineering Physics Lab /Engineering Chemistry Lab	4/4	-	-	3/3	1.5
9	21HSX02/-	Communicative English Lab/-	10,12	-	-	3/-	1.5/-
			Total	14/11	-	12/12	20/17
Second Semester							
1.		Language Elective	10,12	2	-	-	2
2.	21MAX02	Engineering Mathematics II	1	3	-	-	3
3.	21CYX01/ 21PYX01	Engineering Chemistry /Engineering Physics	1/1	3/3	-	-	3/3
4.	21BEX01/ 21BEX06	Basics of Engineering/ IT Workshop	1,12/1,12	-/3	-	3/-	1.5/3
5.	21BEX07	Python Programming	1,12	3	-	-	3
6.	21BEX08	Python Programming Lab	4	-	-	3	1.5
7.	21BEX05/ 21BEX04	Engineering Workshop / Engineering Drawing	1,9,10/1,5,10	-	-	3/3	1.5/1.5
8.	21CYX02/ 21PYX02	Engineering Chemistry Lab/Engineering Physics Lab	4/4	-	-	3/3	1.5/1.5
9.	-/21HSX02	-/Communicative English Lab	-/10,12	-	-	-/3	-/1.5
			Total	11/14	-	12/12	17/20
Third Semester							
1	21MA304	Probability and Statistics using Python	1,4, 12	3	-	2	4
2	21ML302	Artificial Intelligence	1,2,3	3	-	-	3
3	21CS303	Data Structures	1,2,12	3	-	-	3
4	21CS304	Digital Logic Design	1, 4	3	-	2	4
5	21DS305	Mathematical Foundation for Computer Science and Data Science	1,12,PSO1	3	-	-	3
6	21CS306	Object Oriented Programming with JAVA	1,2,3	3	-	-	3
7	21CS307	Data Structures Lab	2,3,4,5	-	-	3	1.5
8	21CS308	JAVA Lab	2,3,4,5	-	-	3	1.5
9	21BEA01	Environmental Studies	1,7	-	-	-	-
10	21ESX01	Employability Skills I	1,2,5,8,10, 12	0	-	2	-
11	21HSX11	CC & EC Activities I	6,7, 9,10	-	-	1	-
			Total	18	-	13	23
Fourth Semester							
1	21IT304	Database Management Systems	1,4,12	3	-	-	3
2	21IT403	Operating Systems	1,12	3	-	-	3
3	21CS403	Computer Organization and	1,12	3	-	-	3

		Architecture					
4	21CS404	Design and Analysis of Algorithms	2,3	3	-	2	4
5	21DS405	Foundations of Data Science	2, 3, PSO1, PSO2	3	-	-	3
6	21IT308	Database Management Systems Lab	4	-	-	3	1.5
7	21DS407	Foundations of Data Science Lab	4,5,8	-	-	3	1.5
8	21ESX01	Employability Skills I	1,2,5,8,10, 12	0	-	2	2
9	21HSX11	CC & EC Activities I	6,7, 9,10	-	-	1	1
		Total		15	-	11	22
Fifth Semester							
1	21IT405	Web Technologies (Integrated)	3,5,PSO1	3	-	2	4
2	21DS502	Deep Learning for Data Science	1,2,4,5,12	3	-	-	3
3	21DS503	Data Analytics & Visualization Techniques (Integrated)	1,4,PSO1	3	-	2	4
4	21ML504	Computer Networks	1, 2,3	3	-	-	3
5		Elective I (Professional Elective)		3	-	-	3
6		Elective II (Open Elective I)		3	-	-	3
7	21DS507	Deep Learning Lab		-	-	3	1.5
8	21TPX01	Term Paper	1,4,10,12	-	-	3	1.5
9	21ESX02	Employability Skills II	1,2,5,8,10,12	0	-	2	-
10	21HSX12	CC & EC Activities II	6,7, 9,10	-	-	1	-
11	21SIX01	Summer Internship I	1,2,8,10,12	-	-	-	1
		Total		18	-	12	24
Six Semester							
1.	21DS601	Optimization Techniques for ML	2,3,PSO1,PSO2	3	-	-	3
2.	21IT602	Automata and Compiler Design	1,2,3	3	-	-	3
3.	21CS603	Software Engineering	4,5,8,11, PSO1	3	-	-	3
4.		Elective III (Professional Elective)		3	-	2	4
5.		Elective IV (Open Elective II)		3	-	-	3
6.	21DS606	Optimization Techniques for ML Lab	4, 5	-	-	3	1.5
7.	21MPX01	Mini Project	4, 5,08	-	-	3	1.5
8.	21ESX02	Employability Skills II	All Pos & PSOs	0	-	2	2
9.	21HSX12	CC & EC Activities II	1,2,3,5,6,8,10,12	-	-	1	1
10.	21ATX01	Environmental Studies	6,7,9,10	-	-	-	-
11.	21ATX02	Professional Ethics and Human Values	1,7	-	-	-	-
12.	21ATX---	Audit Course	----	-	-	-	-
		Total		15	-	8	22
Seventh Semester							
1		Elective V (Professional Elective)		3	-	-	3
2		Elective VI (Professional Elective)		3	-	-	3
3		Elective VII (Open Elective III)		3	-	-	3
4		Summer Internship II	1,2,5,6,10,12	-	-	-	1
5		Project	All POs& PSOs	-	-	16	8
		Total		9	-	16	18
Eighth Semester							
1		Elective VIII (Professional Elective)		-	-	-	3
2		Elective IX (Open Elective IV)		-	-	-	3
3	21FIX01	Full Semester Internship (FSI)	1,2,5,8,9,10, PSO1,PSO2	-	-	-	8
		Total		6	-	-	14