Zagdu Singh Charitable Trust's (Regd.)

THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

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Estd. in 2001

F.Y. Semester –I B. Voc (Software Development)
Choice Based Credit Grading Scheme (CBCGS 2023)
TCET Autonomy Scheme (w.e.f. A.Y. 2023-24)

Sr. No.	Course Code	Course Title	Teaching Scheme (Academic) Modes of Teaching / Learning / Weightage — Hours Per Week					Examination scheme (Academic) Modes of Continuous Assessment / Evaluation				Total
			Instruction Based Practice	Tutorial	Practical/ Capstone Project	Contact Hours	Credits	Continuous Assessment (CA)	ESE	PR / OR	TW	
								Instruction Based Practice (100) 50	50	Practical/ Capstone project / Oral/ Presentation (25)	Term Work (25)	
General Education Component												
1	BV- DA - GE11	IT Foundation & Programming Concepts	3	-	-	3	3	50	50	-	-	100
2	BV- DA - GE12	Programming in C	3	-	-	3	3	50	50	-	-	100
3	BV- DA - GE13	Presentation and Communication Skills	2	-	-	2	2	50	50	25(OR)	25	150
Non Credit Course												
1	BV- DA - NC11	Induction Training	**2**			**2**	**-**				25	25
		Total	**10**	**-**	**-**	**10**	**8**			**Total marks**		**375**
Skill Component												
5	BV- DA -SC11	C Programming Lab			4	4	2	-	-	25(PR)	25	50
6	BV- DA -SC12	Computer Assembling & Peripheral Installation	-	-	2	2	1	-	-	25(Oral)	25	50
8	BV- DA-SC13	Office Automation		-	8	8	4	-	-	25(PR)	25	50
9	BV- DA -SC14	Web Developer(SSC/Q0503), Software Programmer QP (SSC/Q0510)	2	-	6	8	5	-	-	-	50	50
		Total	**2**	**-**	**20**	**22**	**12**			**Total marks**		**200**
		Total	**12**	**-**	**20**	**32**	**20**			**Grand Total marks**		**570**

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F.Y. Semester –II B. Voc (Software Development)
Choice Based Credit Grading Scheme (CBCGS 2023)
TCET Autonomy Scheme (w.e.f. A.Y. 2023-24)

Sr. No.	Course Code	Course Title	Instruction Based Practice	Tutorial	Practical/ Capstone Project	Contact Hours	Credits	Continuous Assessment (CA)	ESE	PR / OR	TW	Total
General Education Component												
1	BV- DA -GC21	Database Management System	3	-	-	3	3	50	50	-	-	100
2	BV- DA -GC22	Data Structures	3	-	-	3	3	50	50	-	-	100
3	BV- DA -GC23	Aptitude Building and Soft Skill Development	2	-	-	2	2	50	50	25(OR)	25	150
		Total	8	-	-	8	8			Total marks		350
Skill Component												
1	BV- DA -SC21	SQL for Data Analysis Lab	-	-	2	2	1			25(PR)	25	50
2	BV- DA -SC22	Data Structures Lab	-	-	2	2	1			25(PR)	25	50
3	BV- DA -SC23	Web Development – Front End	-	-	6	6	3			25(PR)	25	50
4	BV- DA -SC24	Internship			4	4	2				-	50	50
5	BV- DA –SC25	Web Developer(SSC/Q0503), Software Programmer QP (SSC/Q0510)	2	-	6	8	5	-	100	-	-	100
		Total	2	-	20	22	12			Total marks		300
		Total	10	-	20	30	20			Grand Total marks		650

Note: The table header groups are: Course Description (Sr. No., Course Code, Course Title); Teaching Scheme (Academic) — Modes of Teaching / Learning / Weightage — Hours Per Week (Instruction Based Practice, Tutorial, Practical/Capstone Project, Contact Hours, Credits); Examination scheme (Academic) — Modes of Continuous Assessment / Evaluation — Instruction Based Practice (100): Continuous Assessment (CA) 50, ESE 50; Practical/Capstone project / Oral/ Presentation (25): PR / OR; Term Work (25): TW; Total.

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S.Y. Semester –III B. Voc (Software Development)
Choice Based Credit Grading Scheme (CBCGS 2023)
TCET Autonomy Scheme (w.e.f. A.Y. 2023-24)

Sr. No.	Course Code	Course Title	Hours Per Week - Instruction Based Practice	Tutorial	Practical/ Capstone Project	Contact Hours	Credits	Continuous Assessment (CA) 50	ESE 50	PR / OR (25)	TW (25)	Total
General Education Component												
1	BV- DA –GC31	OOP's with Java Programming	3	-	-	3	3	50	50	-	-	100
2	BV- DA –GC32	Software Engineering	2	-	-	2	2	50	50	-	-	100
3	BV- DA –GC33	Indian Knowledge System	3	-	-	3	3	50	50	-	-	100
		Total	**8**	**-**	**-**	**8**	**8**			**Total marks**		**300**
Skill Component												
5	BV- DA –SC31	OOP's with Java Programming Lab	-	-	4	4	2	-	-	25(PR)	25	50
6	BV- DA –SC32	Linux Operating System Lab	-	-	2	2	1	-	-	25(PR)	25	50
7	BV- DA –SC33	Dashboard Development	-	-	8	8	4	-	-	25(PR)	25	50
8	BV- DA –SC34	Software Engineering Lab			2	2	1			25(PR)	25	50
9	BV- DA – SC35	Application Developer - Web & Mobile QP (SSC/Q8403)	2	-	4	6	4	-	-	-	50	50
		Total	**2**	**-**	**20**	**22**	**12**			**Total marks**		**250**
		Total	**10**	**-**	**20**	**30**	**20**					**550**

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S.Y. Semester –IV B. Voc (Software Development)
Choice Based Credit Grading Scheme (CBCGS 2023)
TCET Autonomy Scheme (w.e.f. A.Y. 2023-24)

Sr. No.	Course Code	Course Title	Instruction Based Practice	Tutorial	Practical/ Capstone Project	Contact Hours	Credits	Continuous Assessment (CA)	ESE	PR / OR	TW	Total
General Education Component												
1	BV- DA –GC41	Computer Networks with Cryptography & Network Security	3	-	-	3	3	50	50	-	-	100
2	BV- DA –GC42	Project Management	3	-	-	3	3	50	50	-	-	100
3	BV- DA –GC43	Mobile App Development	2	-	-	2	2	50	50	-	-	100
		Total	**8**	**-**	**-**	**8**	**8**			**Total marks**		**300**
Skill Component												
4	BV- DA –SC41	Mobile App Development Lab	-	-	8	8	4	-	-	25(PR)	25	50
6	BV- DA –SC43	Web Development II- Backend Web Development	-	-	8	8	4	-	-	25(PR)	25	50
7	BV- DA –SC44	Internship			4	4	2			-	50	50
8	BV- DA –SC45	Application Developer - Web & Mobile QP (SSC/Q8403)	2	-	4	6	4	-	100	-	-	100
		Total	**2**	**-**	**20**	**22**	**12**			**Total marks**		**350**
		Total	**10**	**-**	**20**	**30**	**20**					**650**

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T.Y. Semester –V B. Voc (Software Development)
Choice Based Credit Grading Scheme (CBCGS 2023)
TCET Autonomy Scheme (w.e.f. A.Y. 2023-24)

Sr. No.	Course Code	Course Title	Instruction Based Practice	Tutorial	Practical/ Capstone Project	Contact Hours	Credits	Continuous Assessment (CA)	ESE	PR / OR	TW	Total
	Course Description		**Teaching Scheme (Academic)**					**Examination scheme (Academic)**				
			Modes of Teaching / Learning / Weightage					**Modes of Continuous Assessment / Evaluation**				
			Hours Per Week					**Instruction Based Practice (100)**		**Practical/ Capstone project / Oral/ Presentation (25)**	**Term Work (25)**	**Total**
								50	**50**			
			Hours Per Week									
			Instruction Based Practice	**Tutorial**	**Practical/ Capstone Project**	**Contact Hours**	**Credits**	**Continuous Assessment (CA)**	**ESE**	**PR / OR**	**TW**	
General Education Component											
1	BV- DA –GC51	.NET Programming	3	-	-	3	3	50	50	-	-	100
2	BV- DA –GC52	Python Programming	3	-	-	3	3	50	50	-	-	100
3	BV- DA –GC53	Artificial Intelligence	2	-	-	2	2	50	50	-	-	100
		Total	**8**	**-**	**-**	**8**	**8**		**Total marks**			**300**
Skill Component											
4	BV- DA –SC51	.NET Programming Lab		-	6	6	3	50	50	25(PR)	25	50
5	BV- DA –SC52	Python Programming Lab	-	-	4	4	2			25(PR)	25	50
6	BV- DA –SC53	Artificial Intelligence Lab	-		2	2	1			25(PR)	25	50
8	BV-SD –SC56	Product Manager - Web & Mobile QP(SSC/Q8401)	2	-	8	10	6	100				100
		Total	**2**	**-**	**20**	**22**	**12**		**Total marks**			**250**
		Total	**10**	**-**	**20**	**30**	**20**		**Grand Total marks**			**550**

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T.Y. Semester –VI B. Voc (Software Development)
Choice Based Credit Grading Scheme (CBCGS 2023)
TCET Autonomy Scheme (w.e.f. A.Y. 2023-24)

Sr. No.	Course Code	Course Title	Instruction Based Practice	Tutorial	Practical/ Capstone Project	Contact Hours	Credits	Continuous Assessment (CA)	ESE	PR / OR	TW	Total
			Hours Per Week					Instruction Based Practice (100)		Practical/ Capstone project / Oral/ Presentation (25)	Term Work (25)	
								50	50			
General Education Component											
1	BV- DA –GC61	Machine Learning	3	-	-	3	3	50	50	-	-	100
2	BV- DA –GC62	Software Testing and Automation	3	-	-	3	3	50	50	-	-	100
3	BV- DA –GC63	Cloud Computing	2	-	-	2	2	50	50	-	-	100
		Total	8	-	-	8	8			Total marks		300
	Skill Component											
4	BV- DA –SC61	Machine Learning Lab	-	-	4	4	2			25(PR)	25	50
5	BV- DA –SC62	Software Testing and Automation Lab	-	-	4	4	2			25(PR)	25	50
6	BV- DA –SC63	AI and Machine Learning with Cloud Computing Lab			4	4	2			25(PR)	25	50
7	BV- DA –SC64	Desktop Application Development			4	4	2			25(PR)	25	50
9	BV-SD –SC66	Product Manager - Web & Mobile QP(SSC/Q8401)	2	-	4	6	4	100				100
		Total	2	-	20	22	12			Total marks		300
		Total	10	-	20	30	20			Grand Total marks		600

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Final Year Semester –VII B. Voc (Software Development)
Choice Based Credit Grading Scheme (CBCGS 2023)
TCET Autonomy Scheme (w.e.f. A.Y. 2023-24)

Sr. No.	Course Code	Course Title	Hours Per Week — Instruction Based Practice	Tutorial	Practical/ Capstone Project	Contact Hours	Credits	Continuous Assessment (CA)	ESE	PR / OR	TW	Total
		Course Description						**Instruction Based Practice (100)** — 50	50	**Practical/ Capstone project / Oral/ Presentation (25)**	**Term Work (25)**	
			Teaching Scheme (Academic) — Modes of Teaching / Learning / Weightage — Hours Per Week					**Examination scheme (Academic)** — Modes of Continuous Assessment / Evaluation				
		General Education Component										
-		**Total**	0	-	-	0	0				**Total marks**	-
		Skill Component										
1	BV- DA –SC71	Project on Front End Web Development	-	-	8	8	4				50	50
2	BV- DA –SC72	Project on Back End Web Development	-	-	8	8	4				50	50
3	BV- DA –SC73	Project on Desktop Application Development	-	-	8	8	4				50	50
4	BV- DA –SC74	Project on Mobile Application Development	-	-	8	8	4				50	50
5	BV- DA –SC75	Project on Cloud Computing	-	-	8	8	4				50	50
		Total	0	-	40	40	20			**Total marks**		250
		Total	0	-	40	40	20			**Grand Total marks**		250

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Final Year Semester –VIII B. Voc (Software Development)
Choice Based Credit Grading Scheme (CBCGS 2023)
TCET Autonomy Scheme (w.e.f. A.Y. 2023-24)

Course Description			Teaching Scheme (Academic)					Examination scheme (Academic)					
			Modes of Teaching / Learning / Weightage					Modes of Continuous Assessment / Evaluation					
Sr. No.	Course Code	Course Title	Hours Per Week			Contact Hours	Credits	Instruction Based Practice (100)		ESE	Practical/ Capstone Project /Oral/ Presentation (25)	Term Work (50)	Total
								50	50				
			Instruction Based Practice	Tutorial	Practical/ Capstone Project			Continuous Assessment		ESE	PR / OR	TW	
								CFA	IE				
	Course Description		Contact Hrs. during the Semester									Non-Grant Term Work (based on the presentation and Report)	
1		On Job Training	-	-	-	600	**20**	-	-	-	-	200	**200**

- The certification level will lead to Diploma/Advanced Diploma/B.Voc. Degree/ B. S Or B.Voc with Honours in Data Analytics and will be offered by respective affiliating University/Board of Technical education.
- Students may be awarded Level Certificate/Diploma/Advance Diploma/degree as outlined in the table below.

Award	Duration after class XII	Corresponding NSQF Level/OJT
Diploma	1 Year	5
Advanced Diploma	2 Year	6
B.Voc. Degree	3 Year	7

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B.S/ B.Voc. Degree with Honours	4 Year	OJT