Chhattisgarh Swami VivekanandTechnical University (CSVTU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech Honours (Data Science) (First Semester)

S.N	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Electronics and Telecommunication	Foundations of Electronics Engineering	A000171(028)	2	1	-	100	20	20	140	3
2.	Basic Science	Engineering Mathematics-I	A000172(014)	2	1	-	100	20	20	140	3
3.	Computer Science Engineering	Learning Programming Concept with C	A000173(022)	2	1	-	100	20	20	140	3
4.	Basic Science	Fundamentals of Computational Biology	A000174(028)	2	1	-	100	20	20	140	3
5.	Civil Engineering	Environmental Science	A000175(020)	2	1	-	100	20	20	140	3
6.	Humanities	Professional Ethics and Life Skills	A000176(046)	2	-	-	50	20	20	90	2
7.	Humanities	Language & Writing Skills	A000177(046)	2	-	-	50	20	20	90	2
8.	Electronics and Telecommunication	Foundations of Electronics Engineering Lab	A000191(028)	-	-	2	40		20	60	1
9.	Computer Science Engineering	Learning Programming Concept with C Lab	A000192(022)			2	40		20	60	1
			Total	14	5	4	680	140	180	1000	21

L – Lecturer ,T – Tutorial, P – Practical , CT –ClassTest ESE – End Semester Exam TA – Teacher's Assessment

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Chhattisgarh Swami VivekanandTechnical University (CSVTU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech Honours (Data Science) (Second Semester)

S.N	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Basic Science	Engineering Mathematics-II	A000271(014)	2	1	-	100	20	20	140	3
2.	Computer Science Engineering	Data Structure Using C	A000272(022)	2	1	-	100	20	20	140	3
3.	Computer Science Engineering	Object Oriented Programming	A000273(022)	2	1	-	100	20	20	140	3
4.	Electronics and Telecommunication	Digital Logic & Design	A000274(028)	2	1	-	100	20	20	140	3
5.	Computer Science Engineering	Python for Data Science	A000275(022)	2	1	-	100	20	20	140	3
6	Humanities	Entrepreneurship	A000276(046)	2	-	-	40	-	20	60	2
7	Computer Science Engineering	Data Structure Using C Lab	A000291(022)	-	-	2	40	-	20	60	1
8.	Computer Science Engineering	Object Oriented Programming Lab	A000292(022)		-	2	40	-	20	60	1
9	Computer Science Engineering	Python for Data Science Lab	A000293(022)		-	2	40	-	20	60	1
10	Electronics and Telecommunication	Digital Logic & Design Lab	A000294(028)			2	40		20	60	1
			Total	12	5	8	700	100	200	1000	21

L – Lecturer ,T – Tutorial, P – Practical , CT –Class Test ESE – End Semester Exam TA – Teacher's Assessment

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Chhattisgarh Swami Vivekanand Technical University (CSVTU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech Honours (Data Science) (Third Semester)

S.N	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Computer Science Engg.	Probability and Statistics	B127371(022)	2	1	-	100	20	20	140	3
2.	Computer Science Engg.	Analysis & Design of Algorithm	B127372(022)	2	1	-	100	20	20	140	3
3.	Computer Science Engg.	Computer Organization and Architecture	B127373(022)	2	1	-	100	20	20	140	3
4.	Computer Science Engg.	Discrete Structure	B127374(022)	2	1	-	100	20	20	140	3
5.	Computer Science Engg.	Database Management System	B127375(022)	2	1	-	100	20	20	140	3
6.	Computer Science Engg.	Analysis & Design of Algorithm Lab	B127391(022)	-	-	2	40	-	20	60	1
7.	Computer Science Engg.	Database Management System Lab	B127392(022)	-	-	2	40	-	20	60	1
8.	Computer Science Engg.	Independent Project	B127393(022)	-	-	8	120	-	40	160	4
9.	Non Credit Course	Personality Development	B127394(022)	-	-	2	-	-	20	20	-
Total				**10**	**5**	**14**	**700**	**100**	**200**	**1000**	**21**

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Chhattisgarh Swami Vivekanand Technical University (CSVTU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech Honours (Data Science) (Fourth Semester)

S.N	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Computer Science Engg.	Computer Network	B127471(022)	2	1	-	100	20	20	140	3
2.	Computer Science Engg.	Artificial Intelligence: Principles and Applications	B127472(022)	2	1	-	100	20	20	140	3
3.	Computer Science Engg.	Operating System	B127473(022)	2	1	-	100	20	20	140	3
4.	Computer Science Engg.	Theory of Computation	B127474(022)	2	1	-	100	20	20	140	3
5.	Computer Science Engg.	R for Data Science	B127475(022)	2	1	-	100	20	20	140	3
6	Computer Science Engg.	Data Visualization	B127476(022)	2	1	-	80	20	20	120	3
7	Computer Science Engg.	Computer Network Lab	B127491(022)	-	-	2	40	-	20	60	1
8.	Computer Science Engg.	Data Visualization Lab	B127492(022)	-	-	2	40	-	20	60	1
9.	Computer Science Engg.	R for Data Science Lab	B127492(022)	-	-	2	40	-	20	60	1
Total				**12**	**6**	**6**	**700**	**120**	**180**	**1000**	**21**

L – Lecturer, T – Tutorial, P – Practical, CT –Class Test, ESE – End Semester Exam, TA – Teacher's Assessment

Chhattisgarh Swami Vivekanand Technical University (CSVTU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech Honours (Data Science) (Fifth Semester)

S.N	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Computer Science Engg.	Pattern Recognition and Machine Learning	C128571(022)	3	1	-	100	20	20	140	4
2.	Computer Science Engg.	Intelligent Data Analysis	C128572(022)	3	1	-	100	20	20	140	4
3.	Computer Science Engg.	Cryptography and Network Security	C127573(022)	3	1	-	100	20	20	140	4
4.	Computer Science Engg.	Natural Language Processing	C128574(022)	3	1	-	100	20	20	140	4
5.	*Professional Elective – I*			3	1	-	100	20	20	140	4
6.	Computer Science Engg.	Pattern Recognition and Machine Learning (Lab)	C128591(022)	-	-	2	40	-	20	60	1
7.	Computer Science Engg.	Intelligent Data Analysis (Lab)	C128592(022)	-	-	2	40	-	20	60	1
8.	Computer Science Engg.	Natural Language Processing (Lab)	C128593(022)	-	-	2	40	-	20	60	1
9	Computer Science Engg.	Minor Project-I based on Industrial Training	C128594(022)	-	-	10	80	-	40	120	5
Total				**15**	**4**	**14**	**700**	**100**	**200**	**1000**	**28**

L – Lecturer, T – Tutorial, P – Practical, CT –Class Test, ESE – End Semester Exam, TA – Teacher's Assessment

Table – I (Professional Elective – I)

S.N.	Board of Studies	Course Code	Subject
1	Computer Science Engineering	C127531(022)	Advanced Computer Network
2	Computer Science Engineering	C127532(022)	Computational Complexity
3	Computer Science Engineering	C127533(022)	Distributed Computing

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future Examinations.

Chhattisgarh Swami Vivekanand Technical University (CSVTU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech Honours (Data Science) (Sixth Semester)

S.N	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1	Computer Science Engg.	Project Based on Internship	C128691(022)	--	-	36	600	-	400	1000	18
Total						**36**	**600**		**400**	**1000**	**18**

L – Lecturer, T – Tutorial, P – Practical, CT –Class Test, ESE – End Semester Exam, TA – Teacher's Assessment