



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

SCHEME OF TEACHING AND EXAMINATION

B.Tech (Third Semester – Computer Science and Technology) (3141)

Sl.No.	Board of Studies (BOS)	Subject	Subject Code	Period per Week			Scheme of Examination			Total Marks	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Basic Science	Applied Mathematics - III	B141311(014)	3	1	-	100	20	30	150	4
2.	Computer Science & Engg.	Digital Electronics	B141312(022)	3	1	-	100	20	30	150	4
3.	Computer Science & Engg.	Data Structure & Algorithms	B141313(022)	2	1	-	100	20	30	150	3
4.	Computer Science & Engg.	Object Oriented Programming with C++	B141314(022)	2	1	-	100	20	30	150	3
5.	Computer Science & Engg.	Operating Systems	B141315(022)	2	1	-	100	20	30	150	3
6.	Computer Science & Engg.	Digital Electronics (Lab)	B141321(022)	-	-	2	40	-	20	60	1
7.	Computer Science & Engg.	Data Structure & Algorithms (Lab)	B141322(022)	-	-	2	40	-	20	60	1
8.	Computer Science & Engg.	Object Oriented Programming with C++ (Lab)	B141323(022)	-	-	2	40	-	20	60	1
9.	Computer Science & Engg.	Python Programming (Lab)	B141324(022)	-	-	2	40	-	20	60	1
10.	Humanities	Personality Development	B000306(046)	-	-	2	-	-	10	10	-
Total Marks				12	05	10	660	100	240	1000	21

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



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

SCHEME OF TEACHING AND EXAMINATION

B.Tech (Fourth Semester – Computer Science and Technology) (3141)

Sl.No.	Board of Studies (BOS)	Subject	Subject Code	Period per Week			Scheme of Examination			Total Marks	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Basic Science	Discrete Mathematical Structure	B141411(014)	3	1	-	100	20	30	150	4
2.	Computer Science & Engg.	Computer Organization & Architecture	B141412(022)	2	1	-	100	20	30	150	3
3.	Computer Science & Engg.	Database Management Systems	B141413(022)	2	1	-	100	20	30	150	3
4.	Computer Science & Engg.	Java Programming	B141414(022)	3	1	-	100	20	30	150	4
5.	Computer Science & Engg.	Theory of Computation	B141415(022)	2	1	-	100	20	30	150	3
6.	Computer Science & Engg.	Computer Organization & Architecture (Lab)	B141421(022)	-	-	2	40	-	20	60	1
7.	Computer Science & Engg.	Database Management Systems (Lab)	B141422(022)	-	-	2	40	-	20	60	1
8.	Computer Science & Engg.	Java Programming (Lab)	B141423(022)	-	-	2	40	-	20	60	1
9.	Computer Science & Engg.	Mini Project - I	B141424(022)	-	-	2	40	-	20	60	1
10.	Humanities & Social Sciences	Environmental Sciences (Constitution of India)	B000406(046)	-	-	2	-	-	10	10	-
Total Marks				12	05	10	660	100	240	1000	21
Internship-I to be completed after fourth semester exam and its evaluation to be done in fifth semester											

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



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

SCHEME OF TEACHING AND EXAMINATION

B.Tech (Fifth Semester – Computer Science and Technology) (3141)

Sl. No.	Board of Studies (BOS)	Subject	Subject Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Computer Science & Engineering	Design and Analysis of Algorithms	C141511(022)	3	1	-	100	20	30	150	4
2.	Computer Science & Engineering	Compiler Design	C141512(022)	3	1	-	100	20	30	150	4
3.	Computer Science & Engineering	Computer Networks	C141513(022)	3	1	-	100	20	30	150	4
4.	Computer Science & Engineering	Software Engineering and Project Management	C141514(022)	2	1	-	100	20	30	150	3
5.	Professional Elective - I (Refer Table - I)			2	0	-	100	20	30	150	2
6.	Computer Science & Engineering	Operating Systems Lab (Linux)	C141521(022)	-	-	2	40	-	20	60	1
7.	Computer Science & Engineering	Computer Networks (Lab)	C141522(022)	-	-	2	40	-	20	60	1
8.	Computer Science & Engineering	Data Analytics (Lab)	C141523(022)	-	-	2	40	-	20	60	1
9.	Computer Science & Engineering	Minor Project-I Based on Summer Internship	C141524(022)	-	-	2	40	-	20	60	1
10.	Civil Engg.	Environmental Studies	C000506(020)	-	-	2	-	-	10	10	-
Total Marks				13	4	10	660	100	240	1000	21

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

- Note:-The students have to attend the four weeks industrial training/summer internship in B.Tech program after fourth semester, which will be evaluated in fifth semester.

Table - I (Professional Elective - I)

S.N.	Board of Studies	Subject Code	Subject
1.	Computer Science Engineering	C141532(022)	Graph Theory
2.	Computer Science Engineering	C022531(022)	Computer Graphics
3.	Computer Science Engineering	C022533(022)	Digital Image Processing
4.	Computer Science Engineering	C141534(022)	Information Theory & Coding

- 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 future examinations.



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

SCHEME OF TEACHING AND EXAMINATION

B.Tech (Sixth Semester – Computer Science and Technology) (3141)

Sl. No.	Board of Studies (BOS)	Subject	Subject Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Computer Science Engg.	Artificial Intelligence & Expert Systems	C022613(022)	3	1	-	100	20	30	150	4
2.	Computer Science Engg.	Cryptography and Network Security	C141611(022)	3	1	-	100	20	30	150	4
3.	Computer Science Engg.	Machine Learning	C141612(022)	3	1	-	100	20	30	150	4
4.	Professional Elective - II (Refer Table - I)			2	1	-	100	20	30	150	3
5.	Open Elective - I (Refer Table - III)			2	0	-	100	20	30	150	2
6.	Computer Science Engg.	Artificial Intelligence & Machine Learning (Lab)	C141621(022)	-	-	2	40	-	20	60	1
7.	Computer Science Engg.	Mobile App Development (Lab)	C141622(022)	-	-	2	40	-	20	60	1
8.	Professional Elective – II (Lab) (Refer Table - II)			-	-	2	40	-	20	60	1
9.	Computer Science Engg.	Minor Project - II	C141627(022)	-	-	2	40	-	20	60	1
10.	Non-Credit	Technical Communication and Soft Skill	C000601(046)	-	-	2	-	-	10	10	-
Total Marks				13	4	10	660	100	240	1000	21

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

Table - I (Professional Elective–II) (Theory)

S.N.	Board of Studies	Subject	Subject Code
1.	Computer Science Engg.	Block Chain Technologies	C141631(022)
2.	Computer Science Engg.	Internet of Things	C141632(022)
3.	Computer Science Engg.	Soft Computing	C022633(022)
4.	Computer Science Engg.	Network Programming	C022634(022)

Table - II (Professional Elective–II) (Lab)

S.N.	Board of Studies	Subject	Subject Code
1.	Computer Science Engg.	Block Chain Technologies (Lab)	C141623(022)
2.	Computer Science Engg.	Internet of Things (Lab)	C141624(022)
3.	Computer Science Engg.	Soft Computing (Lab)	C141625(022)
4.	Computer Science Engg.	Network Programming (Lab)	C141626(022)

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 (Seventh Semester – Computer Science and Technology) (3141)

Sl. No.	Board of Studies (BOS)	Subject	Subject Code	Period per Week			Scheme of Examination			Total Mark	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Computer Science Engg.	Big Data Analytics	D141711(022)	3	1	-	100	20	30	150	4
2.	Computer Science Engg.	Cloud Computing	D141712(022)	2	1	-	100	20	30	150	3
3.	Computer Science Engg.	Deep Learning	D141713(022)	2	1	-	100	20	30	150	3
4.	Professional Elective-III (Refer to Table-I)			1	1	-	100	20	30	150	2
5.	Open Elective-II (Refer to Table-II)			2	0	-	100	20	30	150	2
6.	Computer Science Engg.	Big Data Analytics Lab	D141721(022)	-	-	2	40	-	20	60	1
7.	Computer Science Engg.	Deep Learning Lab	D141722(022)	-	-	2	40	-	20	60	1
8.	Computer Science Engg.	Major Project- I	D141723(022)	-	-	6	60	-	40	100	3
9.	Computer Science Engg.	Industrial Training	D141724(022)	-	-	2	-	-	20	20	1
10	Humanities	Universal Human Values 2	D000701(046)	-	-	2	-	-	10	10	-
Total Marks				10	4	14	640	100	260	1000	20

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

- Note:-The students have to attend the four weeks industrial training/summer internship in B.Tech program after sixth semester, which will be evaluated in seventh semester.

Table - I (Professional Elective - III)

S.No.	Board of Studies	Subject Code	Subject
1.	Computer Science Engg.	D141731(022)	High Performance Computing
2.	Computer Science Engg.	D022732(022)	Cyber Security
3.	Computer Science Engg.	D022733(022)	Quantum Computing
4.	Computer Science Engg.	D141734(022)	Natural Language Processing

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 (C.G.) (CSVTU, NEWAI)

SCHEME OF TEACHING AND EXAMINATION

B.Tech (Eight Semester – Computer Science and Technology) (3141)

Sl. No.	Board of Studies (BOS)	Subject	Subject Code	Period per Week			Scheme of Examination			Total Mark	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Computer Science Engineering	Cyber Law and Intellectual Property	D022811(022)	3	1	-	100	20	30	150	4
2.	Professional Elective–IV (Refer to Table–I)			2	1	-	100	20	30	150	3
3.	Open Elective–III (Refer to Table–III)			2	0	-	100	20	30	150	2
4.	Computer Science Engineering	Next Generation Data Base (Lab)	D141821(022)	-	-	2	40	-	20	60	1
5.	Computer Science Engineering	Web Development using Full Stack (Lab)	D141822(022)	-	-	2	40	-	20	60	1
6.	Computer Science Engineering	Major Project-II	D141823(022)	-	-	14	350	-	80	430	7
Total Marks				7	2	18	730	60	210	1000	18

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

Table–I (Professional Elective – IV)

S.No.	Board of Studies	Subject Code	Subject
1	Computer Science Engineering	D141831(022)	Introduction to Game Development
2	Computer Science Engineering	D141832(022)	R Programming
3	Computer Science Engineering	D022833(022)	Multimedia & Computer Vision
4	Computer Science Engineering	D022834(022)	Augmented & Virtual Reality

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.