

**GOVERNMENT OF RAJASTHAN
BOARD OF TECHNICAL EDUCATION RAJASTHAN
JODHPUR**

SEMESTER SCHEME-2020-21

(SESSION 2021-2022 & ONWARDS)



**TEACHING AND EXAMINATION SCHEME
AND SYLLABUS**

COMPUTER SCIENCE ENGINEERING

(CS)

Curriculum Development Cell
Board of Technical Education, Rajasthan
W-6 Residency Road,
Jodhpur

GOVERNMENT OF RAJASTHAN
BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR
TEACHING AND EXAMINATION SCHEME
(SEMESTER SCHEME-2020-21)
FOR DIPLOMA III SEMESTER (COMPUTER SCIENCE AND ENGINEERING) (CS)
SESSION 2021-2022 & ONWARDS

Subject Category	Subject Code	Subjects	Distribution of Time				Distribution of Max. Marks/Duration										Total Marks	Credits
			Hours per week				End Semester Exam					Internal Assessment						
			L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU/Assi	PR(S)	CT	TU/Assi	PR(S)		
PC	*CS 3001	Computer Programming	4	--	--	4	60	3	--	20	20	--	100	4				
PC	CS 3002	Scripting Language (Python)	4	--	--	4	60	3	--	20	20	--	100	4				
PC	*CS 3003	Data Structures	2	--	--	2	60	3	--	20	20	--	100	2				
PC	**CS 3004	Computer System Organisation	3	1	--	4	60	3	--	20	20	--	100	4				
PC	\$CS 3005	Algorithms	3	1	--	4	60	3	--	20	20	--	100	4				
PC	*CS 3006	Computer Programming Lab	--	--	4	4	--	--	40	3	--	60	2					
PC	CS 3007	Scripting Language(Python) Lab	--	--	4	4	--	40	3	--	60	2						
PC	*CS 3008	Data Structures Lab	--	--	2	2	--	40	3	--	60	1						
SI	CS 3009	Summer Internship – I (4 weeks after II Sem.)	--	--	--	--	--	--	100	--	--	100	2					
VS	+CS 3333	Anandam (Joy of Giving)	--	--	1	1	--	--	--	--	--	100	2					
		Students Centered Activities	0	0	3	3	--	--	--	--	--	--	--					
		Total	16	2	14	32	300	--	220	--	100	100	280	27				
		Grand Total :											1000	27				

- L : Lecture
- T : Tutorial
- P : Practical
- TH : Marks for End Semester Exam for Theory

- PR : Marks for End Semester Exam for Practical
- CT : Marks for class tests (Internal Assessment)
- TU/Assi : Marks for tutorials/Assignment (Internal Assessment)
- PR(S) : Marks for practical and viva (Internal Assessment)

- +CS 3333 is same in all branches of Engineering
- *CS 3001, *CS 3003, CS *3006, *CS 3008 are same as CB/CI/IT 3001, CB/CI/IT 3003, CB/CI/IT 3006, CB/CI/IT 3008 respectively
- \$CS 3005 is Same as IT 3005
- **CS 3004 is same as CB/CI 3004

Student Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

GOVERNMENT OF RAJASTHAN
TEACHING AND EXAMINATION SCHEME
FOR DIPLOMA IV SEMESTER (COMPUTER SCIENCE AND ENGINEERING) (CS)
(SEMESTER SCHEME-2020-21)
SESSION 2021-2022 & ONWARDS

Subject Category	Subject Code	Subjects	Distribution of Time					Distribution of Max. Marks/Duration					Total Marks	Credits		
			Hours per week					End Semester Exam							Internal Assessment	
			L	T	P	Tot	TH	PR	Hrs.	CT	TU/Assi	PR(S)				
PC	*CS 4001	Operating Systems	3	--	--	3	60	3	--	--	20	20	--	100	3	
PC	**CS 4002	Introduction to DBMS	3	--	--	3	60	3	--	--	20	20	--	100	3	
PC	*CS 4003	Computer Networks	2	--	--	2	60	3	--	--	20	20	--	100	2	
PC	***CS 4004	SSAD/Software Engineering	3	--	--	3	60	3	--	--	20	20	--	100	3	
PC	^CS 4005	Web Technologies	2	--	--	2	60	3	--	--	20	20	--	100	2	
PE		Programme Elective-I														
	CS 4006	***CS 40061- Information Security CS 40062- Network Forensics	3	1	--	4	60	3	--	--	20	20	--	100	4	
PC	**CS 4007	Operating Systems Lab	--	--	2	2	--	40	3	--	--	--	60	100	1	
PC	**CS 4008	Introduction to DBMS Lab	--	--	2	2	--	40	3	--	--	--	60	100	1	
PC	**CS 4009	Computer Networks Lab	--	--	2	2	--	40	3	--	--	--	60	100	1	
PC	^CS 4010	Web Technologies Lab	--	--	2	2	--	40	3	--	--	--	60	100	1	
PR	CS 4011	Minor Project	--	--	4	4	--	40	--	--	--	--	60	100	2	
AU	+CS 4222	Essence of Indian Knowledge and Tradition	2	--	--	2	--	--	--	--	--	--	--	--	--	
VS	+CS 4444	Anandam (Joy of Giving)	--	--	1	1	--	--	--	--	--	--	100	100	2	
		Students Centered Activities	0	0	3	3	--	--	--	--	--	--	--	--	--	
		Total	18	1	16	35	360	--	20	0	120	120	400	1200	25	
														Grand Total :	1200	25

1. L : Lecture
2. T : Tutorial
3. P : Practical

4. TH : Marks for End Semester Exam for Theory
1. +CS 4222 and +CS 4444 are same in all branches of Engineering

2. ^CS 4001 is same as CB/IT 4001,

3. **CS 4002, **CS 4007, **CS 4008 and *CS 4009 are same as CI/IT 4002, CI/IT 4007, CI/IT 4008 and CI/IT 4009 respectively

4. ^CS 4003 is same as CB/CI/IT 4003,

5. ***CS 4004 and **CS 4006 are same as IT 4004, IT 4006 respectively

6. ^CS 4005 and ^CS 4010 are same as CB/CI 4005 and CB/CI 4010 respectively

Student Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

Note: Students will go for 6 Weeks Summer Internship in the Summer Vacations after Fourth Semester. The assessment of the Summer Internship will be done in Fifth Semester

5. PR : Marks for End Semester Exam for Practical
6. CT : Marks for class tests (Internal Assessment)
7. TU/Assi : Marks for tutorials/Assignment (Internal Assessment)
8. PR(S) : Marks for practical and viva (Internal Assessment)

GOVERNMENT OF RAJASTHAN
BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR
TEACHING AND EXAMINATION SCHEME
FOR DIPLOMA V SEMESTER (COMPUTER SCIENCE AND ENGINEERING) (CS)
(SEMESTER SCHEME-2020-21)
SESSION 2022-2023 & ONWARDS

Subject Category	Subject Code	Subjects	Distribution of Time					Distribution of Max. Marks/Duration					Total Marks	Credits		
			Hours per week					End Semester Exam							Internal Assessment	
			L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU/Assi			PR(S)	
PC	*CS 5001	Introduction to e-Governance	2	1	-	3	60	3	--	20	20	--	100	3		
PC	**CS 5002	Internet of Things	2	1	-	3	60	3	--	20	20	--	100	3		
OE	+CS 5100	Open Elective-I *CS 51001- Economic Policies in India +CS 51002- Engineering Economics & Accountancy	3	--	-	3	60	3	--	20	20	--	100	3		
PE	CS 5003	Programme Elective - II **CS5003I- Data Sciences: Data Warehousing and Data Mining CS 50032- Fundamentals of AI	3	--	-	3	60	3	--	20	20	--	100	3		
PE	CS 5004	Programme Elective - III *CS5004I - Advance Computer Networks CS 50042- Mobile Computing	3	--	-	3	60	3	--	20	20	--	100	3		
PE	CS 5005	Programme Elective – II Lab *CS5005I- Data Sciences: Data Warehousing and Data Mining Lab CS 50052- Fundamentals of AI Lab	--	--	-	2	--	--	40	3	--	60	100	1		
SI	CS 5006	Summer Internship – II (6 weeks after IV Sem.)	--	--	-	--	--	--	100	--	--	--	100	3		
PR	CS 5007	Major Project	--	--	-	2	--	--	--	--	--	--	--	--		
VS	+CS 5555	Anandam (Joy of Giving)	--	--	-	1	--	--	--	--	--	100	100	2		
		Students Centered Activities	0	0	3	3	--	--	--	--	--	--	--	--		
		Total	13	2	8	23	300	140	100	100	160	160	800	21		
													800	21		

Grand Total :

- L : Lecture
- T : Tutorial
- P : Practical
- TH : Marks for End Semester Exam for Theory
- PR : Marks for End Semester Exam for Practical
- CT : Marks for class tests (Internal Assessment)
- TU/Assi : Marks for tutorials/Assignment (Internal Assessment)
- PR(S) : Marks for practical and viva (Internal Assessment)

- +CS 51001, +CS 51002 and +CS 5555 are same in all branches of Engineering
- *CS 5001, *CS 50041 and *CS 50051 are sma as IT 5001, IT50041 and IT50051 respectively
- **CS 5002 and **CS5003I are sma as IT/CI 5002 and IT/CI50031 respectively

Student Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

Note: Major Project will be continued and Assesed in VI Semester

GOVERNMENT OF RAJASTHAN
BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR
TEACHING AND EXAMINATION SCHEME
(SEMESTER SCHEME-2020-21)

FOR DIPLOMA VI SEMESTER (COMPUTER SCIENCE AND ENGINEERING) (CS)

SESSION 2022-2023 & ONWARDS

Category	Subject Code	Subjects	Distribution of Time				Distribution of Max. Marks/Duration						Total Marks	Credits	
			Hours per week				End Semester Exam			Internal Assessment					
			L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU/Assi.			PR(S)
HS	+CS 6111 +CS 6200	+Entrepreneurship and Start-ups Open Elective-II +CS 62001- Project Management +CS 62002- Renewable Energy Technologies	3	1	--	4	60	3	--	--	20	20	--	100	4
OE	+CS 6300	Open Elective-III +CS 63001- Product Design +CS 63002- Disaster Management	3	--	--	3	60	3	--	--	20	20	--	100	3
AU	+CS 6333	Indian Constitution	2	--	--	2	--	--	--	--	--	--	--	--	--
PE	CS 6001	Programme Elective IV CS 60011-Multimedia Technologies *CS 60012- Software Testing	3	--	--	3	60	3	--	--	20	20	--	100	3
PE	CS 6002	Programme Elective IV-Lab CS 60021 Multimedia Technologies Lab *CS 60022- Software Testing Lab	--	--	2	2	--	--	40	--	--	--	60	100	1
PR	CS 6003	Major Project	--	--	6	6	--	--	40	--	--	--	60	100	4
SE	CS 6004	Seminar	1	--	--	1	--	--	--	--	--	--	100	100	1
VS	+CS 6666	Anandam (Joy of Giving)	--	--	1	1	--	--	--	--	--	--	100	100	2
		Students Centered Activities	0	0	3	3	--	--	--	--	--	--	--	--	--
		Total	15	1	12	28	240	40	80	80	80	80	320	800	21
		Grand Total :												800	21

1. L : Lecture
2. T : Tutorial
3. P : Practical
4. TH : Marks for End Semester Exam for Theory

5. PR : Marks for End Semester Exam for Practical
6. CT : Marks for class tests (Internal Assessment)
7. TU/Assi: Marks for tutorials/Assignment (Internal Assessment)
8. PR(S) : Marks for practical and viva (Internal Assessment)

1. +CS 6111, +CS 62001, +CS 62002, +CS 63001, +CS 63002, +CS 6333 and +CS 6666 are same in all branches of Engineering

2. *CS 60012 and *CS 60022 are same as IT 60012 and IT 60022 respectively

Student Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.