

B.Tech. (CSE) Course Scheme

Academic Year 2020-2021

Wef. January, 2021



*Department of Computer Science &
Engineering*

School of Engineering and Technology

Central University of Rajasthan

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Structure of B.Tech(CSE)

First Year

SEMESTER I						
Sr. No	Course Code	Course Name	L	T	P	Credits
			Hours/week			
1	IMM111	Mathematics I (Calculus-I)	3	1	0	4
2	PHY101	Physics (Mechanics)	3	0	0	3
3	ICHT101	Chemistry (Inorganic Chemistry-I)	3	0	0	3
4	EN101	English (Language and Communication Skills-I)	2	0	0	2
5	CSE101	Basic Electrical Engineering	3	0	2	4
6	CSE102	Engineering Graphics & Design	2	0	3	4
7	ICHP101	Inorganic Chemistry Lab-I	0	0	2	1
Total Credit						21

SEMESTER II						
Sr. No	Course Code	Course Name	L	T	P	Credits
			Hours/week			
1	IMM121	Mathematics II (Calculus-II)	3	1	0	4
2	PHY102	Physics (Basic Electronics)	2	0	0	2
3	ICHT201	Chemistry (Organic Chemistry-I)	3	0	0	3
4	EN102	English (Language and Communication Skills-II)	2	0	0	2
5	CSE105	Introduction to Programming	3	0	2	4
6	CSE106	Workshop Practice	2	0	3	4
7	PHY103	Physics Lab-I	0	0	4	2
8	ICHP201	Organic Chemistry Lab-I	0	0	2	1
Total Credit						22

Second Year

SEMESTER III						
Sr. No	Course Code	Course Name	L	T	P	Credits
			Hours/week			
1	CSE201	Discrete Mathematics	3	1	0	4
2	CSE202	Computer Organization	3	1	0	4
3	CSE203	Theory of Computation	3	1	0	4
4	CSE204	Programming Methodology	3	1	0	4
5	CSE205	Data Structures and Algorithms	3	0	0	3
6	CSE206	IT Workshop	1	0	2	2
7	CSE207	Data Structures and Algorithm Lab	0	0	2	1
Total Credit						22

SEMESTER IV						
Sr. No	Course Code	Course Name	L	T	P	Credits
			Hours/week			
1	CSE208	Principles and Practices of Management	3	0	0	3
2	CSE209	Design and Analysis of Algorithms	3	0	0	3
3	CSE210	Operating Systems	3	0	0	3
4	CSE211	Object Oriented Programming	3	0	0	3
5	CSE212	Digital Systems Design	3	0	0	3
6	CSE213	Operating Systems Lab	0	0	2	1
7	CSE214	OOP Lab	0	0	2	1
8	CSE215	Digital Systems Design Lab	0	0	2	1
9	CSE216	Design and Analysis of Algorithms Lab	0	0	2	1
Total Credit						19

Third Year

SEMESTER V						
Sr. No	Course Code	Course Name	L	T	P	Credits
			Hours/week			
1	CSE301	Environmental Studies	3	0	0	3
2	CSE302	Computer Networks	3	0	0	3
3	CSE303	Compiler Design	3	0	0	3
4	CSE304	Computer Vision	3	0	0	3
5	CSE305	Database Management Systems	3	0	0	3
6	CSE306	Computer Networks Lab	0	0	2	1
7	CSE307	Computer Vision Lab	0	0	2	1
8	CSE308	Compiler Design Lab	0	0	2	1
9	CSE309	DBMS Lab	0	0	2	1
Total Credit						19

SEMESTER VI						
Sr. No	Course Code	Course Name	L	T	P	Credits
			Hours/week			
1	CSE310	Managerial Economics	3	0	0	3
2	CSE311	Data Communication	3	1	0	4
3	CSE312	Cryptography and Network Security	3	0	0	3
4	CSE313	Software Engineering	3	1	0	4
5	CSE314	Artificial Intelligence & Machine Learning	3	0	0	3
6	CSE315	Cryptography and Network Security Lab	0	0	2	1
7	CSE316	Web Programming Lab	0	0	2	1
8	CSE317	Minor Project	0	0	6	3
Total Credit						22

Fourth Year

SEMESTER VII						
Sr. No	Course Code	Course Name	L	T	P	Credits
			Hours/week			
1	CSE401	GUI Programming	3	0	0	3
2	CSE402	Project Design	3	0	2	4
3	--	Program elective 1	3	1	0	4
4	--	Program elective 2	3	1	0	4
5	--	Open elective I	3	0	0	3
6	CSE403	GUI Programming Lab	0	0	2	1
7	CSE404	Project – I	0	2	4	4
8	CSE405	Industrial Training	-	-	-	2
Total Credit						25

SEMESTER VIII						
Sr. No	Course Code	Course Name	L	T	P	Credits
			Hours/week			
1	--	Program elective 3	3	1	0	4
2	--	Open Elective-II	3	0	0	3
3	--	Open Elective-III	3	0	0	3
4	CSE406	Project -II	0	2	20	12
Total Credit						22

Total Credits are: 21+22+22+19+19+22+25+22=172

Note:

List of electives is enclosed and can be chosen from. New electives may be added as per requirement. Detailed syllabus of each course shall be circulated separately.

List of electives/open electives

1. CSE431 Data warehousing and Data Mining
2. CSE432 Advanced Computer Architecture
3. CSE433 Advanced Database Management Systems
4. CSE434 Security Audit
5. CSE435 Digital Forensics
6. CSE436 Advanced Software Engineering
7. CSE437 Big Data Analytics
8. CSE438 Cloud Computing
9. CSE439 Embedded System Design
10. CSE440 Artificial Neural Networks
11. CSE441 Software Testing Techniques
12. CSE442 Delay Tolerant Networks
13. CSE443 Network Simulations
14. CSE444 Human Computer Interaction
15. CSE445 Wireless and Ad Hoc Networks
16. CSE446 Language Processors
17. CSE447 Parallel Computing
18. CSE448 Soft Computing
19. CSE449 Machine Learning
20. CSE450 Security Engineering
21. CSE451 Information Retrieval Systems
22. CSE452 Distributed Systems
23. CSE453 System Programming
24. CSE454 Security and Privacy
25. CSE455 Unix Network Programming
26. CSE456 Computer Graphics
27. CSE457 Operation Research
28. CSE458 Graph Theory
29. CSE459 E-Commerce
30. CSE460 Pattern Recognition
31. CSE461 Number Theory
32. CSE462 Advanced Topics in Compiler Design
33. CSE463 Advanced Topics in Computer Architecture