Department of Computer Science and Enginnering
Subjectwise Comparision from R13 to R16

1-1 SEMESTER

Programme Name	Course Name	R16	R13
BTECH/CSE	English – I	✓	✓
BTECH/CSE	Mathematics - I	✓	✓
BTECH/CSE	Mathematics – II (Mathematical Methods)	✓	✓
BTECH/CSE	Applied Physics	✓	✓
BTECH/CSE	Computer Programming	✓	X
BTECH/CSE	Engineering Drawing	✓	✓
BTECH/CSE	English - Communication Skills Lab - 1	✓	✓
BTECH/CSE	Applied / Engineering Physics Lab	✓	✓
BTECH/CSE	Applied / Engineering Physics – Virtual Labs– Assignments	✓	✓
BTECH/CSE	Computer Programming Lab	✓	X
BTECH/CSE	Fundamentals of Computer Science	X	✓
BTECH/CSE	IT Workshop	X	✓

1-2 SEMESTER

Programme Name	Course Name	R16	R13
BTECH/CSE	English – II	✓	✓
BTECH/CSE	Mathematics - III	✓	✓
BTECH/CSE	Applied Chemistry	✓	✓
BTECH/CSE	Object Oriented Programming through C++	✓	X
BTECH/CSE	Environmental Studies	✓	✓
BTECH/CSE	Engineering Mechanics	✓	X
BTECH/CSE	Applied / Engineering Chemistry Laboratory	✓	✓
BTECH/CSE	English - Communication Skills Lab – 2	✓	✓
BTECH/CSE	Object Oriented Programming Lab	✓	X
BTECH/CSE	Professional Ethics and Human Values	X	✓
BTECH/CSE	Engg.Workshop & IT Workshop	X	✓

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2-1 SEMESTER

Programme Name	Course Name	R16	R13
BTECH/CSE	Statistics with R Programming	✓	X
BTECH/CSE	Mathematical Foundations of Computer Science	✓	✓
BTECH/CSE	Digital Logic Design	✓	✓
BTECH/CSE	Python Programming	✓	X
BTECH/CSE	Data Structures through C++	✓	X
BTECH/CSE	Computer Graphics	✓	X
BTECH/CSE	Data Structures through C++Lab	✓	✓
BTECH/CSE	Python Programming Lab	✓	X
BTECH/CSE	Object Oriented Programming through C++	X	✓
BTECH/CSE	Data Structures	X	✓
BTECH/CSE	Object Oriented Programming Lab	X	✓
BTECH/CSE	Digital Logic Design Lab	X	✓
BTECH/CSE	Seminar	X	✓

2-2 SEMESTER

Programme Name	Course Name	R16	R13
BTECH/CSE	Software Engineering	✓	X
BTECH/CSE	Java Programming	✓	✓
BTECH/CSE	Advanced Data Structures	✓	X
BTECH/CSE	Computer Organization	✓	✓
BTECH/CSE	Formal Languages and Automata Theory	✓	✓
BTECH/CSE	Principles of Programming Languages	✓	X
BTECH/CSE	Advanced Data Structures Lab	✓	✓
BTECH/CSE	Java Programming Lab	✓	✓
BTECH/CSE	Probability and statistics	X	✓
BTECH/CSE	Advanced Data Structures	X	✓
BTECH/CSE	Free Open Source Software(FOSS) Lab	X	✓

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Subjectwise Comparision from R13 to R16
3-1 SEMESTER

Programme Name	Course Name	R16	R13
BTECH/CSE	Compiler Design	✓	✓
BTECH/CSE	Unix Programming	✓	X
BTECH/CSE	Object Oriented Analysis and Design using UML	✓	X
BTECH/CSE	Database Management Systems	✓	✓
BTECH/CSE	Operating Systems	✓	✓
BTECH/CSE	Unified Modeling Lab	✓	X
BTECH/CSE	Operating System & Linux Programming Lab	✓	✓
BTECH/CSE	Database Management System Lab	✓	✓
BTECH/CSE	Professional Ethics & Human Values	✓	X
BTECH/CSE	Data Communication	X	✓
BTECH/CSE	Principles of Programming Languages	X	✓
BTECH/CSE	Operating Systems	X	✓
BTECH/CSE	Compiler Design Lab	X	✓
BTECH/CSE	Operating System & Linux Programming Lab	X	✓
BTECH/CSE	Seminar	X	✓

3-2 SEMESTER

Programme Name	Course Name	R16	R13
BTECH/CSE	Computer Networks	✓	✓
BTECH/CSE	Data Warehousing and Mining	✓	✓
BTECH/CSE	Design and Analysis of Algorithms	✓	✓
BTECH/CSE	Software Testing Methodologies	✓	X
BTECH/CSE	Artificial Intelligence	✓	X
BTECH/CSE	Internet of Things	✓	X
BTECH/CSE	Cyber Security	✓	X
BTECH/CSE	Digital Signal Processing	✓	X
BTECH/CSE	Embbeded Systems	✓	X
BTECH/CSE	Robotics	✓	X
BTECH/CSE	Network Programming Lab	✓	✓
BTECH/CSE	Software Testing Lab	✓	X
BTECH/CSE	Data Warehousing and Mining Lab	✓	X
BTECH/CSE	Software Engineering	X	✓
BTECH/CSE	Web Technologies	X	✓
BTECH/CSE	Web Technologies Lab	X	✓
	Software Engineering Lab	X	✓
BTECH/CSE	IPR and Patents	X	✓

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4-1 SEMESTER

Programme Name	Course Name	R16	R13
BTECH/CSE	Cryptography and Network Security	✓	✓
BTECH/CSE	Software Architecture & Design Patterns	✓	X
BTECH/CSE	Web Technologies	✓	X
BTECH/CSE	Managerial Economics and Financial Analysis	✓	X
BTECH/CSE	Big Data Analytics	✓	X
BTECH/CSE	Information Retrieval Systems	✓	X
BTECH/CSE	Mobile Computing	✓	✓
BTECH/CSE	Cloud Computing	✓	✓
BTECH/CSE	Software Project Management	✓	✓
BTECH/CSE	Scripting Languages	✓	X
BTECH/CSE	Software Architecture& Design Patterns Lab	✓	X
BTECH/CSE	Web Technologies Lab	✓	✓
BTECH/CSE	UML & Design Patterns	X	✓
BTECH/CSE	Software Testing Methodologies	X	✓
BTECH/CSE	Simulation Modeling	X	✓
BTECH/CSE	Information Retrieval Systems	X	✓
BTECH/CSE	Artificial Intelligence	X	✓
BTECH/CSE	Multimedia Computing	X	✓
BTECH/CSE	High Performance Computing	X	✓
BTECH/CSE	Digital Forensics	X	✓
BTECH/CSE	Hadoop and Big Data	X	✓
BTECH/CSE	Machine Learning	X	✓
BTECH/CSE	Advanced Databases	X	✓
BTECH/CSE	UML & Design Patterns Lab	X	✓
BTECH/CSE	Mobile Application Development Lab	X	✓
BTECH/CSE	Software Testing Lab	X	✓
BTECH/CSE	Hadoop & BigData Lab	X	✓

4-2 SEMESTER

Programme Name	Course Name	R16	R13
BTECH/CSE	Distributed Systems	✓	X
BTECH/CSE	Management Science	✓	X
BTECH/CSE	Machine Learning	✓	X
BTECH/CSE	Concurrent and Parallel Programming	✓	X
BTECH/CSE	Artificial Neural Networks	✓	X
BTECH/CSE	Operations Research	✓	X
BTECH/CSE	Seminar	✓	X
BTECH/CSE	Project	✓	✓
BTECH/CSE	Human Computer Interaction	X	✓

BTECH/CSE	Advanced Operating Systems	X	✓
BTECH/CSE	Mobile Adhoc & Sensor Networks	X	✓
BTECH/CSE	Pattern Recognition	X	✓
BTECH/CSE	Digital Image Processing	X	✓
BTECH/CSE	Micro processers and Multi Core Systems	X	✓
BTECH/CSE	Embedded and Real Time Systems	X	✓
BTECH/CSE	Neural Networks & Soft Computing	X	✓
BTECH/CSE	Social Networks and the Semantic Web	X	✓
BTECH/CSE	Distributed Systems	X	✓
BTECH/CSE	Management Science	X	✓