

West Bengal State Council of Technical &  
Vocational Education and Skill  
Development  
(Technical Education Division)



Curriculum Structure  
of

Diploma in Computer Science and  
Technology [CST], Computer Science and  
Engineering [CSE], Computer Software  
Technology [CSWT] & Information  
Technology [IT]

Part-II (3<sup>rd</sup> & 4<sup>th</sup> Semester) and Part-III (5<sup>th</sup>  
& 6<sup>th</sup> Semester)

Revised 2022



## West Bengal State Council of Technical & Vocational Education and Skill Development (Technical Education Division)

Semester-wise Detailed Curriculum Structure for Semester III, IV, V and VI of Computer Science and Technology, Computer Science and Engineering, Computer Software Technology & Information Technology

### Semester III

Sl. No	Category	Code No.	Course Title	Hours per week			Total contact hrs/week	Credits
				L	T	P		
1.	Program core course	COPC201	Computer Programming	2	0	0	2	2
2.	Program core course	COPC203	Scripting Languages (Python, Perl, etc – any one)	2	0	0	2	2
3.	Program core course	COPC205	Data Structures	2	1	0	3	3
4.	Program core course	COPC207	Computer System Organisation	3	1	0	4	4
5.	Program core course	COPC209	Algorithms	3	1	0	4	4
6.	Summer Internship-I (4 weeks)	SI201	Summer Internship-1					1
7.	Program core course	COPC211	Computer Programming Lab	0	0	2	2	1
8.	Program core course	COPC213	Scripting Languages Lab	0	0	4	4	2
9.	Program core course	COPC215	Data Structures Lab	0	0	4	4	2
<b>Total Credits</b>								<b>21</b>



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### Semester IV

Sl. No	Category	Code No.	Course Title	Hours per week			Total contact hrs/week	Credits
				L	T	P		
1.	Program core course	COPC202	Operating Systems	2	1	0	3	3
2.	Program core course	COPC204	Introduction to DBMS	2	1	0	3	3
3.	Program core course	COPC206	Computer Networks	2	1	0	3	3
4.	Program core course	COPC208	SSAD/Software Engineering	3	0	0	3	3
5.	Program core course	COPC210	Object Oriented Programming Using Java.	3	0	0	3	3
7.	Minor Project	Proj.202	Minor Project	0	0	4	4	2
8.	Program core course	COPC212	Operating Systems Lab	0	0	2	2	1
9.	Program core course	COPC214	Introduction to DBMS Lab	0	0	2	2	1
10.	Program core course	COPC216	Computer Networks Lab	0	0	2	2	1
11.	Program core course	COPC218	Object Oriented Programming Lab using Java	0	0	2	2	1
<b>Total Credits</b>								<b>21</b>



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## Semester V

Sl. No	Category	Code No.	Course Title	Hours per wee			Total contact hrs/ week	Credits
				L	T	P		
1.	Program core course	COPC301	Microprocessor & Microcontroller (based on 8086 & 8051)	3	0	0	3	3
2.	Program core course	COPC303	IoT	3	1	0	3	4
3.	Program Elective Course	COPE304 / ***	Program Elective-1 (any one) i) Mobile Computing ii) Advanced Computer Network	3	1	0	4	4
4.	Program Elective course	COPE305 / ***	Program Elective-2 (any one) i) Theory of Automata ii) Fundamentals of AI	3	1	0	4	4
5.	Open Elective	OE301/* **	Open Elective-1 (Any one) i) Engineering Economics and Project Management	3	0	0	3	3
6.	Program core course		Microprocessor & Microcontroller Lab using simulator/debug	0	0	2	2	1
7.	Summer Internship-II (4 to 6 weeks)	SI301	Summer Internship-2					1
8.	Major Project	PR302		0	0	4	4	^
	Total Credits							<b>20</b>



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### Semester VI

Sl. No	Category	Code No.	Course Title	Hours per			Total contact hrs/ week	Credits
				L	T	P		
1.	Program Elective course	COPE306/ ***	Program Elective-3 (any one) i) Information Security ii) FOSS (Free & Open Source Software)	3	1	0	4	4
2.	Program Elective course	COPE307/ ***	Program Elective-4 (any one) i) Data Sciences: Data Warehousing & Data Mining, ii) Cloud Computing.	3	1	0	4	4
3.	Humanities and Social Science course	HS302	Entrepreneurship and Start-ups	3	1	0	4	4
4.	Open Elective	OE302/**	Open Elective-2 (any one) i) Industrial Management ii) Environmental Engineering and Sciences	3	0	0	3	3
5.	Major Project	PR302		0	0	5	5	4 <sup>^</sup>
6.	Seminar	SE302		1	0	0	1	1
<b>Total Credits</b>								<b>20</b>

\*\*\* Will be mentioned by the subject name.

<sup>^</sup>1 credit is carried forward from the V<sup>th</sup> semester major project evaluation.

Total Credit Point = 82 (Sem 3,4,5,6)