

# Annual Curriculum and Pedagogical Plan (ACPP) - Class IV Computer Science

Subject: Computer Science (Digital/Cyber/Coding/AI)

Class: IV

Academic Year: [Insert Year Here]

Chapter No.	Chapter Name	Theme	Month	Periods Allocated (Approx.)	Teaching Strategy & Activities	Learning Outcomes (LOs)	Assessment	Interdisciplinary & Life Skills (21st Century)
<b>Semester 1 (April - August)</b>								
1	Data Storage and Memory	Digital World	April	16	<b>Lecture-Cum-Demonstration:</b> Use physical items (pendrive, hard disk) as analogies for storage. <b>Activity: Storage Hunt</b> —students list storage devices at home/school.	<b>LO1:</b> Define data and information. <b>LO2:</b> Differentiate between primary and secondary memory. <b>LO3:</b> Identify different storage units (\text{KB}, \text{MB}, \text{GB}).	Written Test (Short/Long Answers), Concept Mapping Activity.	<b>Maths:</b> Understanding units (\text{KB}, \text{MB}). <b>Life Skills:</b> Organizing and managing information (Digital Literacy, Critical Thinking).
2	Managing Digital	Digital	May	16	<b>Hands-</b>	<b>LO1:</b>	Practical	<b>Art-Integr</b>



	g Files and Folders in Windows 10	World			on Practice (Lab): Guide students to create, rename, and move	Perform basic file and folder operation s (create, rename, delete,	Exam (Perform file operation s), Observati on during	ation: Organizin g digital art/pictur e files in folders. Life
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					folders and files. <b>Activity:</b> <i>Folder Hierarchy</i> —student s create a folder structure for their school subjects.	move). <b>LO2:</b> Understa n d the concept of file organizati on (hierarchy).	lab session .	<b>Skills:</b> Systemati c Organizati on, Digital Citizenshi p.



3	More on MS Word 2016	Digital World	June	18	<b>Step-by-Step Tutorial:</b> Demonstrate features like WordArt, inserting pictures/tables. <b>Activity:</b> <i>Each student</i> use WordArt and pictures to design a greeting card.	<b>LO1:</b> Use advanced formatting features (WordArt). <b>LO2:</b> Insert and format tables and images in a document. <b>LO3:</b> Select, delete, and merge cells in a table.	Practical Test (Create a formatted table with a picture), Worksheet on table functions (Splitting/Merging cells).	<b>Language Arts:</b> Creating a story with WordArt titles. <b>Life Skills:</b> Attention to Detail, Written Communication Skills.
4	PowerPoint 2016	Digital World	July	18	<b>Project-Based Learning:</b> Students create a short presentation on a	<b>LO1:</b> Start and navigate PowerPoint. <b>LO2:</b> Insert pictures, WordArt,	Project Submission (5-slide presentation), Viva-Voce (on component)	<b>Science / EVS:</b> Creating a presentation on 'Our Environment'. <b>Life Skills:</b>

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					favorite topic, focusing on slide layout, pictures, and transitions. . <b>Activity:</b> <i>Present and Review</i> —Peer review of simple presentations.	and new slides. <b>LO3:</b> View a presentation using different methods.	nts of PowerPoint window).	Oral Communication, Creativity, Technology Use.
August	Review and Periodic Assessment 1			16	<b>Revision of Chapters 1-4.</b> Remedial and enrichment activities based on student performance.	<b>LOs 1-3:</b> Consolidation of digital literacy and application skills.	Periodic Assessment 1 (Pen & Paper), Lab-Based Assessment.	<b>Life Skills:</b> Time Management (for examination preparation).
September	Half-Yearly Examinations		Sept	0	Fully occupied with Examination and Result Analysis.		Half-Yearly Exam (Written and Practical)	
Semester 2 (October - February)								



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5	More about the Internet	Cyber World	October	16	<b>Inquiry-Based Learning:</b> Discuss 'History of the Internet' and common terms. <b>Activity:</b> <i>Web Terminology Quiz</i> —Matching internet terms like <code>\text{URL}</code> , <code>\text{WWW}</code> with their meanings.	<b>LO1:</b> Understand the historical evolution of the Internet. <b>LO2:</b> Explain and use commonly used Internet terms (e.g., <code>\text{web site}</code> , <code>\text{web page}</code> , <code>\text{e-mail}</code> ). <b>LO3:</b> Describe the use of Microsoft Edge.	Group Discussion on Internet usage, Multiple Choice Questions (MCQ) on terms.	<b>Social Science:</b> Impact of technology on communication. <b>Life Skills:</b> Information Literacy, Responsible Digital Usage.
6	Visual Processing	Computational Thinking	November	16	<b>Puzzle Solving:</b> Use picture puzzles to teach 'Directions and Maps'. <b>Activity:</b> <i>Code the Route</i> —Students give step-by-step directions	<b>LO1:</b> Develop spatial reasoning and visual processing skills. <b>LO2:</b> Apply concepts of directions and maps in problem-solving.	Hands-on activity (Picture Puzzle completion), Worksheet on following/giving directions.	<b>Maths:</b> Coordinate Geometry basics, Direction sense. <b>Life Skills:</b> Problem Solving, Logical Reasoning.



						LO3:		
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					(an algorithm) to move an object on a map/grid.	Understand algorithmic thinking through visual cues.		



7	More Blocks in Scratch	Coding World	December	18	<b>Guided Coding Session (Lab):</b> Introduce new Scratch blocks, focusing on <b>motion</b> and <b>looks</b> . <b>Activity:</b> <i>Sprite Challenge</i> —Students use code blocks to make the Sprite move to a specific position and change its appearance.	<b>LO1:</b> Identify and use new block categories in Scratch (e.g., Motion, Looks). <b>LO2:</b> Set the Sprite's position using coordinates. <b>LO3:</b> Understand the concept of programming to control a Sprite.	<b>Practical Coding Task</b> (Creating a short animation), <b>Periodic Assessment</b> 3.	<b>Art-Integration:</b> Designing a background and costume for the Sprite. <b>Life Skills:</b> Computational Thinking, Debugging, Perseverance.
8	Creating Shapes in Scratch	Coding World	January	18	<b>Project-Based Coding:</b> Focus on the <b>Pen Block</b> to	<b>LO1:</b> Explain the function of the Pen Block.	<b>Practical Coding Test</b> (Draw a polygon using a	<b>Maths:</b> Geometry (Angles and sides of polygons)

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					draw lines and shapes (square, triangle, polygon). <b>Activity:</b> <i>Geometric Art</i> —Students use loops and pen commands to draw different polygons.	<b>LO2:</b> Use repetition (loops) to draw shapes like a line, a square, or a polygon. <b>LO3:</b> Relate code to geometric principles (angles, sides).	loop), Peer-Coding and review.	<b>Life Skills:</b> Pattern Recognition, Creativity in Coding.
9	Evolution of Artificial Intelligence	Artificial Intelligence	February 16		<b>Discussion and Case Studies:</b> Discuss $\text{AI}$ 's history and simple applications in daily life. <b>Activity:</b> <i>AI Timeline</i> —Students create a visual timeline of $\text{AI}$ 's evolution (1950 to Present).	<b>LO1:</b> Understand the concept and phases of $\text{AI}$ evolution. <b>LO2:</b> Identify simple examples of $\text{AI}$ in use. <b>LO3:</b> Understand the timeline of $\text{AI}$ from 1950 to the present.	Chart/Poster Presentation on $\text{AI}$ 's uses, Periodic Assessment 4.	<b>Social Science:</b> Discussion on how $\text{AI}$ is changing society. <b>Life Skills:</b> Future Readiness, Ethical Understanding of Technology.
Project Work	Practical Application		February 4		<b>Independent</b>	<b>LO1:</b> Integrate	Project Report	<b>Life Skills:</b>



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	on of Skills				<b>Project:</b> Students choose one project (e.g., a PowerPoint presentation on \text{EVS} topic, a Scratch game) to showcase their cumulative skills.	skills from multiple chapters. <b>LO2:</b> Apply computational thinking to a real-world problem.	and Demonstration, Final Project Assessment.	Research Skills, Collaboration, Project Management.
March	Final Examinations		March	0	Fully occupied with Examination and Result Analysis.		Final Annual Examination (Written and Practical)	



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